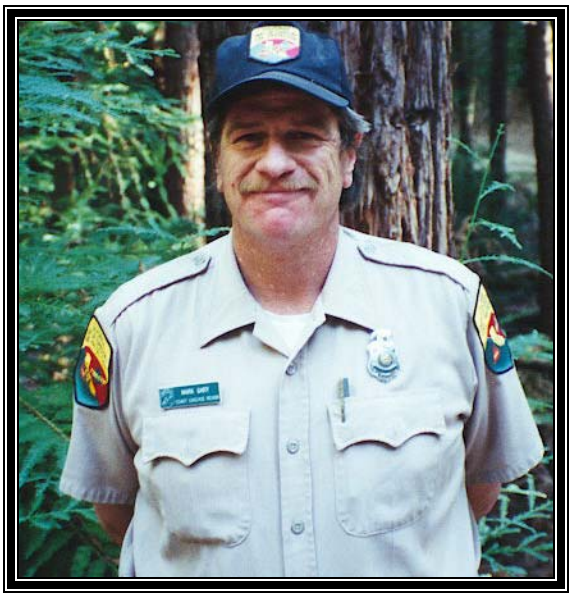
This report is dedicated to the memory of Mark Gary and Fritz Riddell ……



Mark Allen Gary
1950 – 2001

Francis A. ("Fritz") Riddell
1921 – 2002

History of the California Department of Forestry and Fire Protection Archaeology Program 1970-2004

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Cover Photo: CDF Archaeology Program team members posing for a group photo at the Arrowmakers Ridge Site in San Diego County - March 2002. From left to right: Chuck Whatford, Steve Grantham, Rich Jenkins, Dan Foster, Linda Sandelin, Lisa Hagel, and Gerrit Fenenga. Team members John Betts, Polly Tickner, Bill Rich, Lew Napton, Elizabeth Greathouse, and Brian Dillon were not present for this photograph

Preface

Having just perused through an advanced copy of the ***History of the CDF Archaeology Program 1970-2004*** I am thrilled to see that this volume has been completed. It reminds me how important it is to record our history as it happens. What seems to us as just "ordinary day-to-day bureaucratic stuff" becomes to future generations the "contributions of our elders." My husband Don has chronicled much of the history of Humboldt County through the lens of historic changes in environment and land use, so I can appreciate the importance of what the CDF Archaeology Program staff has created here for the legacy of this Department.

I believe that the ***History of the CDF Archaeology Program 1970-2004*** will be very much appreciated and recognized as important to CDF and the citizens of the state. Through our laws, regulations and sense of personal commitment we have recognized the dignity of our Native American cultures and early pioneers, and respect the meaning of their settlements and rituals as we conduct the business of today – whether during the critical few minutes before a wildfire sweeps through, or the more deliberate decisions on the construction of fire stations or sustainably managing our forests.

I express my personal sincere appreciation to Dan Foster and all of the many people that helped him complete this work. It will become part of CDF's history, and is a wonderful reflection of past events that led to the creation of the CDF Archaeology program.

Andrea E. Tuttle
CDF Director
May 25, 2004

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I. INTRODUCTION

The California Department of Forestry and Fire Protection (CDF) is responsible for the protection of resources over a vast portion of the state. Among the most fragile and vulnerable types of resources is cultural heritage resources. These consist of places where events occurred in the past and where material traces of these events can be found including archaeological and historical sites, structures, objects, and artifacts. Unlike renewable resources such as timber or wildlife, heritage resources are irreplaceable, and when damaged or destroyed, are lost forever. Agencies of the State of California have been directed to preserve and protect the heritage resources under their jurisdiction for the benefit and inspiration of the people of California. For CDF, the implementation of this directive is the responsibility of the Department's Archaeology Program.

The CDF Archaeology Program is just one small component of the Department, but one that has played an increasingly important role in CDF operations over the years. In 2005, CDF will be observing its 100-year anniversary as a state government agency. This event serves as an appropriate occasion to review and reflect on the accomplishments that have been achieved. The history of the inception and development of the CDF Archaeology Program and its impact on the larger organization is the subject of this study.

A variety of factors have motivated the preparation of this account. The history of this program is an interesting story that deserves to be recounted. Included in this study are many events that have been important in shaping public policy towards the preservation of heritage resources. Another consideration in the preparation of this history is simply the loss of the information. CDF has no systematic procedures for the preservation of internal historic documents related to the history of the program. If the events described here are not formally recorded in some way, this information might well be lost and forgotten. State government agencies formerly purged their files after twenty years, making them an unreliable repository of historic documents (Hata 1992). This study represents an attempt to preserve this information for those segments of California's public that may wish review the events that led to the creation of this program and the highlights of its record.

The purpose of the CDF Archaeology Program is to identify and manage archaeological, historical, and other cultural resources located within project areas under CDF jurisdiction, and to develop methods to protect these resources from project-related impacts. This is accomplished through assistance to landowners, implementation of regulations and policies requiring archaeological surveys of project areas, evaluation of potential impacts, and the implementation of protection measures. The program provides cultural resource surveys, technical assistance, project review, and archaeological training to CDF staff, Registered Professional Foresters (RPFs), and other resource professionals working in the private sector. One component of this study is to describe the policies and procedures employed by CDF to protect cultural resources and the events that brought them into existence.

In any discipline such as archaeology or forestry, a complex system of terminology or jargon has developed that can often be confusing to the outsider. What do all these terms and acronyms mean? What is the difference between archaeological, historical, cultural, or heritage resources?

Should they be considered "resources" or "properties"? In the various legislative and regulatory documents that relate to this study, these terms are often used inconsistently, or at best, interchangeably. Within this study the terms are used as they are found within the particular context that is being discussed. For example, the Forest Practice Rules use "archaeological and historical resources," so that term is adhered to in discussions of those regulations. The title of the "CDF Archaeology Program" has been retained over the years even though the activities of the program extend to include a range of cultural resources that would not be traditionally considered part of "archaeology." In addition to these considerations, it also seems as though we have lost our ability to communicate without a hefty quota of abbreviations and acronyms. While these can serve as helpful shortcuts for the writer, they can be meaningless to the uninitiated reader. For anyone who happens to be perplexed, a Table of Abbreviations and Acronyms has been included in this study.

The following presentation includes an overview of events leading up to the establishment of the CDF Archaeology Program including a brief history of CDF, federal legislation for the protection of cultural resources, and early state involvement in archaeology. The development of the environmental and cultural resource protection laws and regulations that mandate this program are briefly described. The early history of the CDF Archaeology Program is recounted with emphasis on important events and controversial issues that were encountered. Subsequent chapters discuss the various components of the program including the archaeological training provided, survey procedures employed, the project review process, recipients of the Golden Trowel Award, protection of cultural resources during fire suppression, and public outreach efforts. Partnerships with other agencies and organizations are discussed such as the California Historical Resources Information System (CHRIS), federal agencies, and Native American consultation efforts. The major accomplishments of the program are summarized including publications, a comprehensive management plan for historic buildings and archaeological sites under the administration or control of CDF, the inventory of CDF properties, major excavations, and the documentation of private artifact collections. Individuals that have contributed to the success of this program are mentioned including the archaeology staff, contract personnel who provide archaeological services, and volunteers. This study closes with a selection of contributions by individuals who have made significant contributions to the CDF Archaeology Program presented in their own Voices.

II. PROLOGUE

In order to provide a historical context for the CDF Archaeology Program, a brief review of the events leading up to the establishment of this program will be presented. This account reviews a few highlights in the history of forestry in California before cultural resources management was to become a concern for land managers. Federal environmental and cultural resource protection laws have created the institutions and established many of the concepts that direct the CDF Archaeology Program. The role of California state government in archaeology and historic preservation set the precedent for an archaeology program within CDF. These topics provide the background necessary for an appreciation of the need and purpose of the CDF Archaeology Program.

CDF History

During the nineteenth century, concern over the depletion of natural resources prompted a national debate on conservation issues. These deliberations led to the creation of a federal forest reserve system. In California, the state legislature established a State Board of Forestry in 1885. This was one of the first state-appointed forestry commissions in the nation. The Board was made up of a group of businessmen who were authorized to investigate, collect, and disseminate information about forestry. In 1887, the Board of Forestry members and their assistants were given the power of peace officers to enforce compliance with state laws regarding brush and forest lands. Interest in the conservation of natural resources had temporarily become a part of state government, but in 1893 a hostile political climate succeeded in abolishing the first Board of Forestry.

On March 18, 1905, the state legislature approved the Forest Protection Act. This legislation established a new Board of Forestry, created the position of State Forester, and placed Big Basin State Park under the authority of the Board. The State Forester was empowered to fight fires, plant trees, care for the state parks, hire assistants, and appoint citizens as fire wardens (Clar 1977). In this same year the Federal Forest Reserves were transferred to the Department of Agriculture and became the United States Forest Service (USFS). Concern over possible federal legislation to control logging on private lands motivated action at the state level. The passage of the 1905 Forest Protection Act resulted in the establishment of the state forestry organization that is known today as CDF. The conservation mandate of CDF grew out of these early legislative efforts.

In 1919, the Forest Protection Act was strengthened and the State Forester was given contracting authority. The Board of Forestry was reorganized to consist of the State Forester and four appointed members representing the timber industry, livestock, hay and grain, and the public at large. An early Board chairman and governor of California, George Pardee, worked tirelessly towards the conservation of forest lands and the protection of watersheds from fire. The legislature also appropriated funds for fire protection in 1919 and four District Fire Rangers were hired. In 1921 a lookout cabin was placed on Mt. Oso overlooking the upper San Joaquin Valley. The next year a steel lookout tower was built on Mt. Bielawski between Santa Cruz and Santa Clara Counties (Clar 1977). These early efforts established the precedent of state government involvement in fire prevention and suppression.

Legislation was passed in 1927 that reorganized state government. A Department of Natural Resources was created that included a Division of Forestry and a Division of Beaches and Parks. The Board of Forestry was restructured to include seven appointees of industry and the removal of the state forester. The Board lost its executive power and became a policy-making body (Clar 1977). A State Park Commission was created to oversee the new Division of Beaches and Parks. The State Park System had remained under the jurisdiction of the Board of Forestry up until this time. Throughout these changes, the state maintained a concern for timber management and for the protection of public recreation, watershed, and wildlife habitat areas.

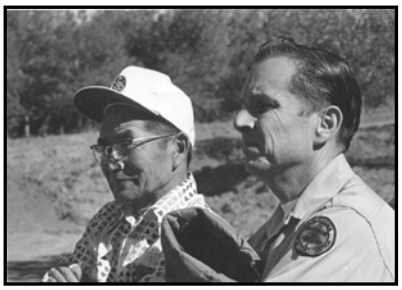
For many years, the California State Chamber of Commerce believed that the protection of forests represented an important economic consideration. Through their leadership they encouraged the citizens of California to actively support the official agencies responsible for forest protection so that losses from fire, insects, and disease could be kept to a minimum. As a result of this activism, thousands of citizens devoted considerable time and effort toward forest protection work.

During the 1930s, the state acquired several parcels of property by gift deed. These became the first state forests, beginning with Los Posadas in Napa County, Mt. Zion in Amador County, and Ellen Pickett in Trinity County. On September 28, 1930, the State Lands Commission exchanged 10,957 acres of lands administered by the state for 9,033 acres administered by the Lassen National Forest. This parcel would become Latour State Forest in 1946. After World War II, the idea of buying cut-over land and establishing a state forest system reached a receptive state legislature. On July 17, 1945, the State Legislature appropriated $100,000 so that CDF could acquire the lands that became Latour State Forest through purchase from the State Lands Commission. Appropriations for Mountain Home State Forest and Jackson State Forest followed in 1946 and 1947 respectively. Boggs Mountain State Forest was purchased in 1949 with additions in 1972. Additional properties have been added to the system that now includes nine units totaling 73,680 acres.

Public pressure over destructive logging practices prompted a need for regulations to control the harvesting of timber resources. Legislation passed in 1943 made it illegal to cut a coniferous tree less than 18 inches in diameter for commercial purposes. This law had little practical application, but it was the first mandatory regulation of its kind and demonstrated a growing public concern over environmental issues (Clar 1977). In 1945, the Forest Practice Act was passed into law to regulate commercial timber harvesting on nonfederal lands in California. Several regional committees composed primarily of industry representatives met to formulate rule proposals. The Board of Forestry was restructured once again, and in 1946 the State Forester began the registration of timber operators. After extensive public hearings, new Forest Practice Rules were approved by the Board of Forestry in 1947. These were the most comprehensive forestry rules in the nation at that time and gave CDF the responsibility for regulating forest practices on private land throughout the state (Arvola 1976:5-13). The primary purpose of the act was to protect the productivity of timberlands and gave no authority for the protection of other resource values. The Forest Practice Program was initially directed towards education and persuasion due to the philosophical orientation of its proponents. The lack of penalties or punitive measures made it difficult to enforce compliance (1976:16).

Over the years the general public has played an increasingly important role in the development of forestry policies. This concern was slow to materialize, however, and not until the 1950s did public interest in forestry issues begin to make itself felt through the advocacy of various conservation organizations. The Sierra Club and the Izaak Walton League expressed dissatisfaction with the Forest Practice Act and lobbied for the protection of resource values other than timber production, such as watersheds, wildlife, recreation, and aesthetics. Timber industry representatives, on the other hand, produced favorable reports on cutover lands and used Board of Forestry meetings as a forum to espouse their views. Logging regulations have been proposed in response to public outcry and have only been implemented to the extent that industry and private landowners were willing to accept these constraints. Revisions to the Forest Practice Act in 1951 provided enforcement powers for the first time (Arvola 1976:18-21). Actions by the Board of Forestry in 1957 were the first to recognize values other than forest regeneration and productivity (1976:33). Bills proposed in the California legislature during 1963 by fish and game interests to protect water resources failed due to the strength of the industry lobby (1976:48). During 1967, eleven bills were introduced in the California State Assembly to amend the Forest Practice Act to include protection for resources other than timber productivity, but all were unsuccessful (1976:27-28). CDF found little support in efforts to strengthen the regulations, but public perceptions began to change in the 1950s as aggressive logging operations were undertaken on both private and national forest lands (1976:31).

Conflict over the rights of counties to develop their own forestry regulations led to a court battle with profound implications. During this case, the court observed that "few, if any industries adversely affect the rights of others, and the public generally, as do timber and logging operations" and found that the Forest Practice Regulations were "decreed exclusively by persons pecuniarily interested in the timber industry." As a result of this complex litigation, the State Court of Appeal in 1971 ruled that the Forest Practice Act was unconstitutional. In the ensuing months there were virtually no controls on private timber operations in the state leading to a protracted struggle to formulate replacement legislation. A compromise was finally reached with the Z'Berg-Nejedly Forest Practice Act which was signed into law on September 26, 1973. Governor Ronald Reagan appointed a new Board of Forestry on February 5, 1974 (Arvola 1976:67-75). The new law had more stringent regulations on logging operations and contained provisions that timber harvesting plans for commercial operations must be prepared by Registered Professional Foresters (RPFs). Under this new legislation, RPFs had greater responsibility for protecting the resource values specified in the law and would therefore have greater public accountability (Martin 1989:64).



Board of Forestry Chairman Howard Nakae and CDF Inspector Ed Martin reviewing a THP in 1973.

A focal point of public concern over forestry issues has been the magnificent coast redwoods of northwestern California. The effort to preserve these spectacular trees has generated extensive public debate and controversy. The Save-the-Redwoods league was formed in 1918 by prominent individuals with the goal of preserving the remaining redwood forests. This organization carried out an aggressive fund-raising and public relations campaign as well as

lobbying for the creation of a state park system and state park commission (Hata 1992:11). A proposal in the early 1950s would have created a redwood national forest extending from Mendocino to Del Norte Counties (Arvola 1976:17-18). In 1963, the world's tallest tree was discovered along Redwood Creek in Humboldt County (Arvola 1976:24-25). This discovery was one of the factors leading to the establishment of Redwood National Park in 1968. Ever since the creation of this park, it has been surrounded by controversy. Proposals to expand the area of the park resulted in an accelerated effort by logging companies to harvest their properties in the Redwood Creek drainage. These actions incited considerable public outrage and led to allegations of damage to the park.

In 1974, the Natural Resources Defense Council (NRDC) filed a lawsuit against several timber companies conducting operations near Redwood National Park. On January 14, 1975, Judge Arthur B. Broaddus of the Humboldt Superior Court ruled that the 1973 Forest Practice Act came under the requirements of the California Environmental Quality Act and that Environmental Impact Reports were needed for timber operations. This decision stunned the timber industry and had a profound impact on the state's Forest Practice Program (Arvola 1976:79-81; Martin 1989:70). The far-reaching implications of this decision will be discussed in more detail in the following chapter.

In 1961, the Department of Natural Resources was abolished and the Division of Forestry was transferred to the new Department of Conservation. The Division of Forestry separated from the Department of Conservation and became the Department of Forestry on January 1, 1977. In 1987, the department name was changed to the Department of Forestry and Fire Protection (Martin 1989:273). The acronym "CDF" has persisted as a widely recognized designation through many of these changes.

As residential development has extended into the forested regions of California, local opposition to timber harvesting has steadily increased. The general public seems to be uncomfortable with logging operations in close proximity to where they live. This has been disparagingly referred to as the NIMBY (Not In My Backyard) syndrome, but has created real problems for project proponents (Martin 1989:182). As the mandate for natural resource conservation was being shaped by the political struggles during the early years of CDF history, the protection of cultural resources was probably not lurking in the most remote recesses of anyone's imagination. This would begin to change, however, with the passage of the California Environmental Quality Act (CEQA). Before the consequences of this legislation can be considered, a brief review of federal environmental and cultural resource protection laws and regulations will help set the stage for the events to come.

Federal Legislation

Throughout the course of the twentieth century, a number of federal laws have been enacted in an effort to preserve and protect cultural resources. Most of these laws are specifically intended to control the impacts of federal government actions on the natural and cultural environment. Some have wider implications and directly influence the activities of CDF. One example where federal regulations apply to CDF's programs includes all situations where federal funds are used for projects administered by CDF. Such projects constitute "undertakings" and compliance with

federal law and regulations is accomplished through programmatic agreements among the federal agencies providing the funding, CDF, and state and federal review agencies. Although other federal regulations have had a less direct impact on CDF, they have had important implications nonetheless. For example, the existence of the State Historic Preservation Officer and the California Historical Resources Information System results from federal mandates. The following discussion provides brief summaries of some of these federal laws and the implications they have for CDF procedures.

Concern over the removal of artifacts from archaeological sites on federal land led to the nation's first historic preservation law, the Antiquities Act of 1906. This law prohibited the excavation, removal, or defacement of "objects of antiquity" from public lands without a permit from the Secretary of the Interior. It also authorized the President to designate areas of public land as national monuments (King 1998:271). A ruling in 1974 by the Ninth Circuit Court of Appeals found this law to be "unconstitutionally vague" because it did not specify the age of an object in order to be considered an antiquity (1998:19). Although this law applied only to federal lands, it serves as an important legislative benchmark signaling the inception of public concern for the protection and preservation of cultural resources. Certain provisions of this law have only become common practice in the latter portion of the twentieth century (Hata 1992:74).

The Historic Sites Act of 1935 authorized the National Park Service (NPS) to implement a program to identify, register, describe, document, acquire, and manage places of importance to the history of the nation (King 1998:14). As a result of this act, the NPS became the preeminent federal historic preservation agency and began conducting archaeological research outside of the national parks. These activities led to the development of the Interagency Archeological Salvage Program. An important component of this legislation was that it emphasized the permanent physical preservation of cultural properties in place (Hata 1992:74).

Through the National Reservoir Salvage Act of 1960, Congress authorized appropriations to the NPS for the salvage of archaeological data from sites threatened by the reservoir construction projects being carried out by the Army Corps of Engineers (King 1998:14). This legislation set an important precedent within the archaeological community by recognizing that not all archaeological sites could be preserved and that many would be sacrificed to progress, but allowing archaeologists the opportunity to salvage a sample of the information contained in these sites before they were destroyed (Hata 1992:75). The difference in theoretical orientation between the Historic Sites Act and the Reservoir Salvage Act created a conflict between preservationists and the archaeological profession. The mandate of the Historic Sites Act emphasized the preservation of cultural resources because of their intrinsic importance while the Reservoir Salvage Act merely gave archaeologists the opportunity to extract data from sites on the verge of destruction (King 1978b:432; King and Lyneis 1978:874).

The National Historic Preservation Act (NHPA) of 1966 established a federally supported program for the identification, protection, and rehabilitation of historic properties (King 1978b:433; King 1998:15-16). The NHPA created the nationwide system that directs much of the historic preservation and cultural resource management activities that are being conducted to this day. This legislation established several institutions including the National Register of Historic Places, the Advisory Council on Historic Preservation, and the State Historic

Preservation Officers. The National Register of Historic Places (NRHP) is a list maintained by the NPS of districts, sites, buildings, structures, and objects determined to be of historic, cultural, architectural, archaeological, or engineering significance (1998:266). The Advisory Council on Historic Preservation (ACHP) advises the President and Congress on historic preservation issues and reviews projects under Section 106 of the NHPA. The council is made up of 20 members including presidential appointees, agency heads, and other people specified by the NHPA (King 1998:265). Section 106 of the NHPA stipulates that federal agencies must take into account the effects of their actions on properties listed on the NRHP and afford the ACHP a reasonable opportunity to comment on their actions (1998:59). The State Historic Preservation Officer (SHPO) is a state official appointed by the governor to carry out a variety of functions specified in the NHPA. These functions include the administration of federal grants to aid states in historic preservation, identification of historic properties and their nomination to the NRHP, preparation of state historic preservation plans, review of Section 106 compliance documents, and consultation with other agencies and the public on preservation issues (1998:30-31).

The passage of the NHPA had broad implications covering many government actions. At the state level, it necessitated the creation of a mechanism to implement the new provisions including a comprehensive state historic preservation plan, the administration of a matching grants program, a statewide inventory of historic sites, and nominations to the NRHP. In California this federal program was administered by the Department of Parks and Recreation (Hata 1992:111). Section 106 of the NHPA and its implementing regulations apply to CDF administered projects that utilize federal funds and those conducted upon federal lands. This legislation changed the direction of historic preservation throughout the nation, but many federal agencies were slow to respond. It would take some time before they were able to develop programs and demonstrate a strong commitment to preservation (1992:212).

In the years immediately following the passage of the NHPA, there was widespread concern that significant properties were being lost before they could be placed on the NRHP. In response to this possibility, President Richard Nixon signed Executive Order 11593 in 1971, which directed federal agencies to provide the same level of protection for sites that were eligible for listing on the NRHP as those that were actually listed. The provisions of this order were subsequently incorporated directly into the NHPA (King 1998:209).

Growing public concern over the deterioration of the environment led to a major legislative landmark with the passage of the National Environmental Policy Act (NEPA) in 1969. NEPA is primarily a natural resource management authority that requires federal agencies to consider the effects of their actions on the environment. It also contains provisions for the protection of cultural resources, stating that it is the responsibility of the federal government to "preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice." It further directs agencies to "insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations" (King 1998:35-36). This legislation caused federal agencies to begin developing cultural resource management programs by hiring staff and developing procedures to comply with its directives (1998:16-17). In California, the state legislature responded to this new federal statute and to growing public pressure to protect the state's natural and cultural environment by

passing the California Environmental Quality Act. This state legislation will be discussed in the following chapter.

The Archaeological and Historic Preservation Act, also known as the "Archaeological Data Preservation Act" and "Moss-Bennett" was passed by the U.S. Congress in 1974. This legislation amended the Reservoir Salvage Act to include all federal and federally assisted or licensed construction projects in addition to dams and reservoirs. This law directs federal agencies to report to the Secretary of the Interior if their projects may cause the loss of significant scientific, prehistoric, historic, or archaeological data. Efforts must be made to recover this data and up to one percent of project costs can be transferred to the Department of the Interior to conduct this work (King 1998:200). This legislation was strongly supported by the archaeological community because it provided a reliable source of funding for archaeological research. Unfortunately, it continued to emphasize the salvage of archaeological sites at the expense of preservation and became another "salvage statute, reflecting a traditional archaeological approach to the increasing widespread federally assisted destruction of cultural resources" (King 1978b:433).

The Archaeological Resources Protection Act (ARPA) of 1979 grew out of the court ruling that found the Antiquities Act of 1906 to be unconstitutional. This updated legislation prohibits anyone from excavating or removing archaeological resources from federal and Indian lands without a permit from the responsible land management agency. It also forbids the sale, purchase, exchange, transport, or receipt of any resources removed in violation of the previous provision, or any other law. Penalties include fines, jail terms, and the confiscation of objects removed and property utilized in the course of that removal (King 1998:197-198).

During the 1970s, tribal concern for the protection of ancestral remains, artifacts, sites, spiritual places, subsistence use of natural resources, as well as cultural and religious practices led to an increase of political activism by Native American groups and organizations. These efforts resulted in the passage of the American Indian Religious Freedom Act (AIRFA) in 1978 and eventually the Native American Graves Protection and Repatriation Act (NAGPRA) in 1990. AIRFA protects the rights of Indian tribes to the free exercise of their traditional religions and directs agencies to consult with tribes when actions might affect these religious practices. NAGPRA requires that federal agencies and museums that have received federal funds repatriate Native American ancestral human remains and cultural items to tribes that can demonstrate a genetic or cultural affiliation with these remains and items (King 1998:272-273). The efforts of CDF to respect Native American values and to comply with NAGPRA will be described in a subsequent chapter.

The USFS exerted a strong influence on CDF during its formative years through a relationship of cooperation and assistance between the two agencies. Motivated by the enactment of the NHPA and NEPA, the Forest Service began to implement a nationwide archaeology program, demonstrating an early commitment to preservation. In the early 1970s, the USFS was the principal federal agency with an archaeological program in California. With only one archaeologist to cover all of the national forests in the state, efforts were directed towards managing prehistoric resources and providing in-forest ranger training (Moratto 1973:7). By 1979, the USFS employed 22 full-time professional archaeologists and 90 seasonal student

archaeologists in California. This staff continued to provide paraprofessional training sessions to teach other Forest Service field personnel to survey, identify, and document cultural resources located in the course of their primary duties (Pesonen 1979). This may have been the original source of the concept to train foresters in archaeology later adopted by CDF (Marianne Russo, personal communication).

California State Government and Archaeology

The federal environmental and cultural resource protection statutes and regulations discussed above have directly affected the management of cultural resources in California. Before the federal mandates were enacted, however, state government had already taken a prominent role in historic preservation activities. The establishment of an archaeology program within state government would be the first step towards the implementation of a corresponding program within CDF.

The inception of concern for the preservation of historic resources can be traced to the very earliest years of Euro-American history in California. Initially concern was directed towards the preservation of objects and documents, but in the latter half of the nineteenth century efforts were undertaken to protect some of the sites and structures important in the state's early history. A combination of historically minded organizations, nativist groups, religious institutions, and government officials constituted this early preservation movement. These preservation activities were primarily motivated by religious beliefs, filial piety, patriotism, education, and economics (Hata 1992).

This early preservation movement in California did not include a similar concern for the protection of the state's archaeological resources. The remnants of Native American culture were virtually ignored by those working to preserve other components of California's heritage (Hata 1992:73). The lack of an impressive architectural tradition, or an elaborate ceramic industry brought about a decided disinterest in California archaeology (Riddell 1965). This disregard for the prehistoric past was just one example of cultural attitudes towards Native Americans. History texts often began with the arrival of Europeans and heritage preservation was usually directed towards sites and structures related to their occupation. The exclusion of minority groups, including Native Americans, perpetuated a distorted perception of the past (Hata 1992:74).

In spite of these attitudes, provisions were incorporated into the California Penal Code in 1939 that made it a misdemeanor to willfully injure, disfigure, deface, or destroy objects of historic or archaeological significance on public and private property. Additions to the California Public Resources Code (PRC) in 1965 specified that "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological or historical feature situated upon public lands, except with the expressed permission of the public agency having jurisdiction over such lands." The effectiveness of this law was limited by permissive wording and a provision which prohibited any delay in state construction projects. These and various other state and federal laws for the protection of cultural resources proved to be largely ineffective because of

incomplete statute coverage, public ignorance, inadequate enforcement, and the lack of a systematic management program. Even the State Penal Code did not prevent landowners from destroying their own sites (Hata 1992:76-77; Moratto 1973:4-6).

State government has demonstrated a long-standing involvement with the preservation of historic resources in California. In the late 1920s, the state began to take the lead in historic preservation through the creation of the State Park Commission, the implementation of a statewide survey of landscape and historic sites, and the passage of a bond issue for the acquisition of historic sites. The State Landmark Program was established in 1931 with the passage of Assembly Bill (AB) 171 which authorized the director of the Department of Natural Resources to designate both private and public properties as state landmarks. By 1934, the state owned eleven historic monuments (Hata 1992:11-17). In 1953, a History Section was established within the Division of Beaches and Parks with responsibility to formulate a program of preservation, development, interpretation, and public appreciation of California's historic sites (1992:43). The Division of Beaches and Parks continued with an aggressive acquisition program of important historic sites, and by 1960, the State Park System included thirty-five historic parks and monuments (1992:53).

Public interest in preservation activities intensified in the latter half of the twentieth century to incorporate many new approaches and communities throughout the state. In the early 1960s, the environmental movement sought to lessen the effects of rapid and unplanned development. The historic preservation movement became the unexpected beneficiary of increasing public concern over environmental issues. Alliances began to develop between conservationists and historic preservationists. The increasing concerns for historic preservation would also have implications for the protection of archaeological sites. Cultural resources began to receive consideration under environmental protection laws enacted by the legislature.

State government involvement in cultural resources management also began to intensify in the late 1950s. Passage of the Federal Aid Highway Act in 1956 allowed the U.S. Department of Transportation to use funds for protecting or salvaging archaeological resources. Under the stimulus of this legislation, the California State Division of Highways agreed to participate in an archaeological salvage program. This program got underway on March 6, 1956, when the State Highway Engineer sent a letter of understanding to the Chief of the Division of Beaches and Parks agreeing to provide information such as maps, plans, and construction schedules on proposed highway construction projects (Hata 1992:78). Funds were provided for the salvage excavation of archaeological remains within construction right-of-ways. No funds were provided, however, for preliminary surveys of project areas; the cleaning, cataloguing, or study of specimens; or the preparation of a manuscript or publication of a report (Riddell 1965:2). The State Department of Water Resources began an active archaeology program in 1960 through an interagency agreement with the Division of Beaches and Parks, indicating a recognition of the vast damage their program would have on archaeological resources. This program provided more adequate funding for completing archaeological research (1965:3).

The position of State Archaeologist was created in 1960. Francis A. Riddell, the curator of the State Indian Museum, was given responsibility for the administration of the various state archaeological programs, including those of the Division of Highways, the Department of Water Resources, and the Division of Beaches and Parks. This was the beginning of a statewide

archaeology program. The State Archaeologist Office served as the predecessor to the Office of Historic Preservation (OHP) by nominating sites to the NRHP. The office was also expected to administer the archaeology programs that any other state agency chose to undertake. Initially, the idea of state agencies being involved in archaeology was an innovation and it took some persuasion to get the concept accepted (Riddell 1965:2). The legislation at this time was discretionary and most state agencies chose not to consider cultural resources within their jurisdiction despite many meetings between department heads and the State Archaeologist. "In those days there was very little sympathy for the care and preservation of cultural resources by governmental agencies, although they would often give it lip service as long as they did not have to fund it or let it interfere with development" (Riddell 2001a). One state official, Director Fred Jones, anticipated that the modest archaeological programs of Caltrans and the Department of Water Resources could be adopted by the Reclamation Board, Fish and Game, Forestry, and other state agencies (Hata 1992:82). Riddell would later observe that "With no intent to minimize the importance of the several programs established and still operative, they do not have the legislative nor the popular mandate to do the job facing them" (Moratto 1973:8). Funding limitations and the directive prohibiting construction delays severely limited the ability of the state's archaeology programs to prevent the destruction of resources. Another example of attitudes held by some state officials during this period is indicated by the following incident related by Moratto (1973:19):

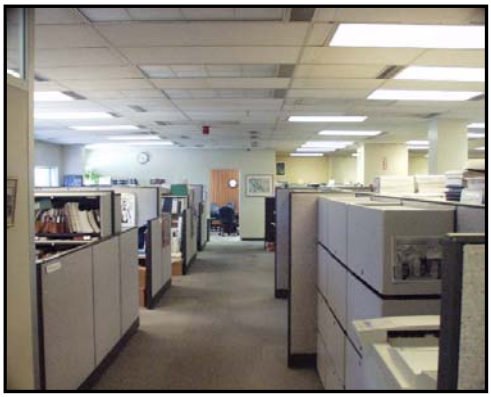
> In (Shasta) County, the Point McCloud site contained remains dating from historic times back to 3000 B.C. or earlier. Although this critically important site was on state property very near a State Forestry station, collectors from all parts of California and Oregon mined artifacts with impunity until nothing was left. In spite of protests from concerned archaeologists, State Forestry officials remained apathetic to the end (James D. Dotta, Treganza Anthropology Museum, San Francisco).

In 1961, Assembly Concurrent Resolution No. 25 was approved by the state legislature that called for a study of the state's historic resources and the formulation of a long-range plan to preserve, restore, and interpret the state's historic values and resources. The resolution specified that the Division of Beaches and Parks was to produce an inventory of marked and unmarked historical resources establishing a state-administered historical resources inventory. The statewide plan was to include a program for the preservation of sites representing the various geographic regions and historic periods of the state, and proposals for public and private acquisition, development, and protection of authentic historic sites with a strong emphasis on adaptive reuse of these properties (Hata 1992:57).

The passage of the National Historic Preservation Act in 1966 mandated the implementation of several programs at the state level including a state historic preservation plan, a statewide survey of historic sites, nominations to the NRHP, and the administration of a grants-in-aid program (Hata 1992:127). In California, the Department of Parks and Recreation (DPR)(formerly the Division of Beaches and Parks), was given responsibility for implementing the new federal program. Following the passage of the NHPA, some state agencies expanded or introduced preservation programs for areas under their jurisdiction (1992:187). Some agencies were slow to hire cultural resource staff or implement procedures, but soon found themselves facing mandates that required the identification and protection of cultural resources. One of the programs

mandated by the NHPA was the formulation of a state historic preservation plan. This plan contained specific recommendations for the protection of archaeological resources. Archaeological sites were to be identified and inventoried and the information computerized. Sites within the State Park System were to be protected whenever feasible although then Secretary for Resources Norman J. Livermore, Jr., objected to saving every site if the time period contained in a site was represented by other protected sites (Hata 1992:153).

DPR continued to function as the primary archaeological agency in state government throughout the 1970s (Hata 1992:147). From 1972 to 1975, the History Preservation Section administered the state historic preservation programs including the NRHP nominations, California Historical Landmarks Program, Points of Historical Interest, statewide preservation planning, and federal funding for grants-in-aid proposals. DPR was also responsible for reviewing environmental impact reports and studies to determine the effect of public works projects on cultural resources in compliance with Section 106 of the NHPA, NEPA, and CEQA (Hata 1992:147-148). With a staff of two archaeologists it became increasingly difficult to organize and coordinate all of the state's archaeological efforts (Moratto 1973:9). By the summer of 1974, it was obvious that the overworked staff could not keep up with the expanding numbers of reviews pouring into the office (Hata 1992:176-177). In October 1975, DPR Director Herbert Rhodes created the Office of Historic Preservation (OHP) headed by the State Historic Preservation Officer to serve as his staff to implement the federal preservation programs (1992:184). The archaeology program established at DPR has served as the basis for cultural resource management in most other state agencies, including CDF (Dillon 2003:2).



OHP is located on the 14th floor of the Resources Building in Sacramento.

In the 1970s, a proliferation of local ordinances, commissions, and preservation organizations demonstrated a strong community awareness and concern for historic preservation (Hata 1992:227). The concept of preservation as a quality of life issue became widely accepted (King 1998:14). The state legislature recognized the increasing environmental concern and approved the CEQA directly aimed at improving the quality of life for the citizens of the state. The rapid population growth in California following World War II had precipitated unprecedented development and construction activities. Widespread urban and suburban growth, land leveling, agriculture, mining, dredging, logging, railroad construction, industrial and recreational facilities, military exercises, and massive public works projects such as highway construction, dams, reservoirs, and aqueducts led to the wholesale destruction of vast numbers of archaeological sites. Members of the archaeology community became increasingly alarmed at the catastrophic loss of archaeological sites in California. Something had to be done before much of the record of California prehistory was swept away beyond recovery (Riddell

OHP Staff, March 2004

1965:1). A group of these concerned individuals formed the Society for California Archaeology (SCA) in 1966. One of the first major efforts of the new organization was to lobby for legislation to create an archaeological element in the state's general plan and a state archaeological survey. A bill was passed by the legislature, but vetoed by then Governor Ronald Reagan. One reason for the veto was that a somewhat weaker bill on cultural resources, Senate Bill (SB) 215, had already been signed into law on October 1, 1971.

That 1971 law created a task force to study the state's effort to preserve and salvage the archaeological, paleontological, and historical resources of the state and to develop a plan or recommend legislation to accomplish this goal (Hata 1992:195). The bill also provided for Native American participation on the task force and represented the first occasion in California law where Indians were given a role in protecting their own cultural heritage resources (Dutschke 1981:28). A small pamphlet published by the SCA presented the findings of the task force and documented a dismal state of affairs. It was estimated that nearly 50 percent of all archaeological sites in the state had been lost and many of those that remained had been badly damaged. As much as 80 percent of the large, deep, ancient sites were entirely gone (Moratto 1973:2). The task force prepared a list of factors detrimental to archaeology including the lack of systematic surveys; no centralized information repository; the destruction of sites through growth, development, construction, and vandalism; the ineffectiveness of cultural resource laws; the lack of accreditation for archaeologists; poor levels of coordination between institutions conducting archaeology; the absence of public interpretation and education about the archaeology of the state; and the lack of a central agency to provide guidance in the preparation of environmental documents (Moratto 1973:10-11). The task force was officially disbanded in 1976 with the passage of AB 4239 which repealed the sections of the Public Resources Code dealing with its functions and replaced them with new provisions to identify, catalog, and protect Native American historical, cultural, and sacred sites (Hata 1992:200).

The State Historic Resources Commission (SHRC) was created in 1974. Passage of AB 1991 in 1975 directed this commission "to develop criteria and methods for determining the significance of archaeological sites, for selecting the most important archaeological sites, and for determining whether the most significant archaeological sites should be preserved intact or excavated and interpreted." The commission was also "to develop guidelines for the reasonable and feasible collection, storage, and display of archaeological specimens" (Hata 1992:177-179). The commission consists of nine members appointed by the governor to four-year terms. The SHRC has a broad range of responsibilities and duties regarding the state historic preservation program that includes maintaining a statewide inventory of historic resources; establishing criteria for recording, evaluating, and preserving historical resources; and conducting public hearings to develop and review a statewide historical resources plan (OHP 1999:12).

In 1980, Governor Edmund G. ("Jerry") Brown issued Executive Order B-64-80. This order recognized that the cultural resources of California were unique and irreplaceable, that they provided the citizens of California with a sense of history and identity, and asserted that the state must provide leadership in preserving, restoring, and maintaining the historic and cultural environment, and suggested that the preservation of cultural resources would encourage education, recreation, craftsmanship, employment, protection of scarce natural resources, and energy conservation. Based on these observations, all state agencies were directed to initiate

procedures as soon as possible to preserve and maintain, when prudent and feasible, all state-owned sites under their jurisdiction eligible to be listed on the NRHP, and were directed to submit proposed procedures to the State Historic Preservation Officer (SHPO) for review and comment by January 1, 1982. State agencies were also directed to inventory all significant historic and cultural sites, structures and objects under their jurisdiction over 50 years of age which could qualify for listing on the NRHP by July, 1983, and to assure that any such property was not inadvertently transferred or substantially altered until this inventory was completed. The SHPO was directed to advise and assist state agencies in the identification and preservation of their historic properties and provide local governments with information on methods to preserve their historic properties (Edmund G. Brown Jr., Executive Order B-64-80, March 6, 1980, Executive Department, State of California, Sacramento). This was the first time in California that a specific mandate required state agencies to inventory lands under their jurisdiction other than on an individual project basis (Dutschke 1981:28). This executive order was passed into law when SB 1652 was approved by the legislature in September, 1980, becoming part of the Public Resources Code (Hata 1992:125).

The CDF response to this directive consisted of a one-page memorandum listing six facilities and sites under CDF control with the Historic Resources Inventory forms for these sites attached. The six properties included the Little Red Schoolhouse, the Hare Creek Railroad Trestle, a second railroad trestle at Jackson Demonstration State Forest, the Old Altaville School, the Mt. Bielawski Lookout, and the San Jacinto Fire Station (David E. Pesonen to Peter Dangermond, Jr., Memorandum, August 18, 1981, OHP, Sacramento). This modest response represented the first attempt by CDF to inventory the historic resources under their jurisdiction. CDF made a good faith attempt to respond to this directive, but obviously no one in the Department at that time had a complete comprehension of what was being requested. It was becoming apparent that CDF needed in-house cultural resource expertise.

Although preservation issues have received increasing public support, archaeological sites are still destroyed by unsympathetic developers, vandals and relic hunters, and many other causes. Of the thousands of archaeological sites in California, only a fraction have been adequately recorded, and many continue to disappear each year. The combined force of federal, state, and local laws has compelled government agencies at all levels to be more aware of preservation issues. Though it would take some time, the requirements of these mandates would eventually have their intended effect on most state agencies, including CDF. State government continues to be a leading force in heritage preservation efforts.

III. POLICY DEVELOPMENT

Agencies of the State of California are directed to manage heritage resources under their jurisdiction in accordance with several state laws, regulations, and directives. The primary legal mandates that require CDF to identify, evaluate, manage, and protect archaeological, historical, and other cultural resources are found in the following statutes:

- California Environmental Quality Act Statutes (PRC Sections 21083.2, 21084.1)
- California Environmental Quality Act Guidelines (14 CCR Sections 15064.5 and 15331)
- Native American Sacred Sites Act (PRC Section 5097.9)
- Native American Historical Resource Protection Act (PRC Sections 5097.995-996)
- California Native American Graves Protection and Repatriation Act (HSC 8010-8030)
- State Historic Building Code (HSC Sections 18950 - 18961)
- Forest Practice Regulations (14 CCR Sections 895.1, 929, 949, 969, 1035, 1037.5, 1038(b)(10),1052, 1092.14, and 1104.1(a)(3))
- California Executive Order W-26-92
- California Register of Historical Resources (PRC 5020-5024).

The inception of the CDF Archaeology Program can be said to emanate from the passage in 1970 of the California Environmental Quality Act (CEQA). This is the principal legislation requiring state agencies to consider the environmental consequences of their actions. It also establishes a legal mandate for the protection of archaeological and historical resources. The Native American Sacred Sites Act authorized the creation of the Native American Heritage Commission (NAHC), established its powers and duties, requires state agencies to consult with the NAHC, prohibits impacts to Native American cemeteries, and sacred or religious sites, and establishes procedures following discovery of Native American human remains. Enacted in 2002, the Native American Historical Resource Protection Act provides stiffer penalties for malicious destruction, looting, and other forms of damage to archaeological sites. The California Native American Graves Protection and Repatriation Act requires state agencies to conduct inventories of its artifact collections for sensitive items subject to provisions of the act, and to consult with local tribes to provide them with an opportunity to request repatriation. State agencies are required to use the State Historic Building Code providing alternative standards for the repair, restoration, and management of significant historic buildings. The Forest Practice Regulations specify archaeological and historical resource protection procedures within the scope of CDF regulation of forest management and timber harvesting. Executive Order W-26-92 directs state agencies to inventory properties under their jurisdiction for heritage resources and to manage these resources for the benefit and inspiration of the people of California. The intent of this directive goes beyond the project-specific impact assessments that are required by CEQA. The California Register of Historical Resources (CRHR) is a list of the state's historical resources that have been found to be significant and are, therefore, to be afforded protection. It also specifies the criteria against which historical resources are evaluated to determine if they should be considered significant.

The policies used to implement the protection of heritage resources under the jurisdiction of CDF have gradually evolved. The archaeological and historical resource protection requirements of CEQA were not uniformly recognized or agreed upon in the early years following its enactment.

Several court rulings were necessary to clarify the applicability of CEQA to archaeological and historical resources and to forest practices. It would take time for state agency officials to recognize their responsibilities towards heritage resources and to establish policies and procedures to fulfill these obligations. It would also take time for the regulatory authority of CDF to be accepted by industry and private landowners. The development of archaeological and historical protection policies has often entailed intensive internal discussions within the Department. These policies have also been shaped by public pressure that has resulted in legislation intended to protect of the environment, including heritage resources.

The California Environmental Quality Act

The California Environmental Quality Act was passed by the state legislature in 1970. This legislation is the state equivalent of NEPA and requires state and local government agencies to formally consider the effects of projects they propose or regulate on the environment. Agencies must evaluate potential environmental impacts, devise effective measures to mitigate those impacts, disclose that information to the public, and respond to public comment so that decisions are not made strictly between agencies and those whom they regulate. CEQA is not a resource protection law in that it does not specify penalties for resource damages. It is a public disclosure law and public recourse is the lawsuit. Before the passage of CEQA, there was no legal authority for the protection of archaeological and historical resources on private lands in California.

The goal of CEQA is the long-term preservation of a high quality environment for the citizens of California. CEQA states that it is state policy to "take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise" (Hata 1992:121). The intent of this legislation is to ensure that all state agencies which regulate private projects that may affect the quality of the environment shall give major consideration to preventing environmental damage, while sustaining a high-quality living environment for every Californian. The public has a basic right to a quality environment and lead agencies bear responsibility for its protection.

When first enacted, CEQA was thought to apply only to projects proposed and implemented by state or local government agencies. In 1972, the *Friends of Mammoth v. Mono County* decision by the State Supreme Court expanded the application of CEQA to include private projects that were regulated by state or local governments or received funding from state or local governments. This ruling stated that the act of issuing a building permit constituted a state action, extending CEQA coverage to virtually all development in the state. The ruling was also important because it did not restrict CEQA consideration to cultural properties listed on the NRHP (Hata 1992:210-211).

In the early 1970s, State Archaeologist Francis A. Riddell recognized that CEQA could have important implications for the protection of archaeological resources (King 2001). When first adopted, however, it was unclear to many whether or not CEQA applied to archaeological resources because the focus was on the "physical" environment. That uncertainty was settled in 1977 when the State Supreme Court ruled in *Society for California Archaeology v. Butte County* that CEQA did indeed apply to archaeological resource impacts. The term "environment" as

used in this act was defined to include "objects of historic or aesthetic significance" including archaeological sites. Implementing regulations were created for the purpose of protecting important archaeological resources because they are included within the CEQA definition of the environment (Foster 1992:1-5).

The CEQA environmental review process can be described as a series of five elements.

- Definition of the scope of the project.
- Identification of the potentially significant adverse impacts from a project.
- Consultation with the public and other agencies concerning the potential significant effects of a project.
- Assessment of the significant environmental impacts of the proposed project.
- Incorporation of feasible alternatives and mitigation measures to lessen project impacts.

The following discussion illustrates how these elements might relate to the protection of archaeological and historical resources.

Under CEQA, the lead agency is required to conduct an initial study to identify any significant adverse effects that the project may have on the environment. In some cases, CDF delegates certain tasks to the project proponent but ultimately these are responsibilities of the lead agency. The identification and documentation of archaeological and historical resources located within a project area is one component of this study. Lead agencies are then required to either prepare a detailed analysis of the environmental impacts of the proposed project in an Environmental Impact Report (EIR) or to file a "Negative Declaration" that describes why the proposed project would not significantly affect the environment (Foster 1992:2-3).

The next element in the CEQA process is consultation and public comment which is accomplished through public notification and interdisciplinary review. The CEQA Guidelines require agencies to use an interdisciplinary approach in impact analysis and decision making in order to ensure the integrated use of the natural and social sciences. Agencies evaluating a project's environmental impacts must consult with other agencies having jurisdiction over the affected resources. If a project has the potential to impact archaeological resources, professional archaeological review must be part of the review process (Foster 1992:4). When archaeological resources are known to be present within a proposed project, the lead agency must consult with the Native American Heritage Commission (NAHC), which has jurisdiction to identify sites of special religious and spiritual significance to Native Americans. Other provisions of CEQA reflect a strong legislative policy choice in favor of the preservation of archaeological sites, cemeteries, traditional cultural properties, and other sacred grounds.

CEQA also requires public disclosure and comment on environmental documents during the review process. A critical component of CEQA is the requirement that lead agencies must provide adequate notification about proposed projects to the public and allow a reasonable amount of time for public comment. After public review of project proposals, the lead agency reviewing the project must develop a good faith, reasoned analysis in response to the major environmental issues raised by the public and other agencies. Written comments received from the public by the lead agency are to be incorporated into the decision-making process. Comments can be addressed by changing the project design or mitigating potential impacts.

Other state policies must also be considered in the consultation process such as the release of confidential archaeological information that could expose sites to vandalism (Foster 1992:6).

Lead agencies must provide an assessment of the potential impacts a project would have upon the environment, which includes archaeological and historical resources. Significant effect on the environment means "a substantial, or potentially substantial, adverse change in any physical conditions within the area affected by the project." For evaluation of archaeological or historical resources, the lead agency must first determine if the resource itself is significant. This is predicated by the criteria specified in the CRHR. Then a determination must be made as to the extent of the impacts on the resource. CEQA provides for the evaluation of proposed project effects on archaeological and historical resources and provides for mitigation of damages that may be caused by the project (Foster 1992:8-9).

CEQA requires lead agencies not to approve projects as proposed if there are feasible alternatives or mitigation measures available which would substantially lessen the significant environmental effects of such projects. Should there be a potential effect, the lead agency is required to indicate the manner in which these effects can be avoided or mitigated. Under CEQA, lead agencies have a great deal of authority to require feasible mitigation of impacts or exploration of alternatives to the project which would lessen significant environmental impacts. Agencies may use their discretionary authority for purposes of mitigation or avoidance of significant effects on the environment subject to the expressed or implied constraints or limitations that may be provided in the law. A lead agency for a project has the authority to require changes in any or all activities involved in the project in order to lessen or avoid significant effects on the environment (Foster 1992:9).

Forest Practice Regulations

Working alongside, but not always in accordance with CEQA, are the Forest Practice Regulations. The Forest Practice Act (FPA) of 1973 provided California with the most stringent logging regulations in the nation. The rules and regulations that stem from this legislation have been constantly changing since their inception (Arvola 1976:1). The early history of the Forest Practice Act was briefly reviewed in the preceding chapter. This section is focused upon the actual function of the regulations, their application to archaeological and historical resources, and some of the important events that have shaped their development.

The FPA requires that a Timber Harvesting Plan (THP) must be prepared, filed, and approved for commercial timber operations. This plan must be prepared by a Registered Professional Forester (RPF) who is responsible for filing the plan with CDF. CDF is responsible for the administration of the regulations through project review and inspections during operations. The primary goal of the Forest Practice Act is to achieve the "maximum sustained production of high-quality timber products" while giving adequate consideration to environmental concerns and other resource values.

One component of the FPA is the establishment of the State Board of Forestry (now the State Board of Forestry and Fire Protection). Although composition of the Board is set by law, it has evolved over the years. It currently consists of nine members including three from the forest

products industry, one from the range and livestock industry, and five from the general public. The Board members are appointed by the governor to four-year terms with confirmation by the State Senate. The Board adopts and approves rules and regulations controlling forest practices as specified in the FPA, hears appeals of decisions by the director of CDF to deny THPs and certain law enforcement actions, conducts the licensing and registration of RPFs, and sets policy for the management of state forests (Martin 1989:44-46).

The Board of Forestry and CDF have a broad range of responsibilities with regard to forest management and fire protection including forestry services, fire prevention and control, range improvement, pest control, urban forestry, state forest management, forest practice enforcement, and numerous other functions. The FPA grants specific authority and duties to the Board of Forestry and to CDF. The Board of Forestry has a very limited staff and depends on CDF to implement the Forest Practice Regulations (Martin 1989:45).

CDF reviews THPs to determine if they are in conformance with the Forest Practice Rules and other regulations. These regulations are administered and enforced through project review and inspections during operations. Aspects of timber operations that are covered by the regulations include silviculture methods, stocking, timber felling, yarding, erosion control, watercourse protection, road construction, snag and slash hazards, fire prevention, insect and disease control, and other resource protection measures. CDF must conduct inspections of timber harvest operations to ascertain compliance and carry out any needed enforcement actions. Despite a high level of compliance, occasional unannounced inspections are necessary to insure that regulations are being followed (Martin 1989:228). The duty to conduct inspections also requires the authority to take law enforcement action (1989:210). Law enforcement options include criminal, civil, and administrative actions. Penalties for violation of the law and regulations can include misdemeanor citations, revocation or suspension of licenses, injunctions to stop operations, and the levying of charges to pay for corrective action (Arvola 1978:55). The fines and penalties that can be imposed are often small in comparison with the cost of compliance or the value of the timber that is at stake. A repeated pattern of abuse is usually necessary to justify licensing action (Martin 1989:219). CDF also issues Timber Operator Licenses and approves timberland conversion permits (1989:46).

Another responsibility of CDF is making rule recommendations to the Board of Forestry. The rule proposals that CDF has submitted to the Board have sometimes been met with hostility, and it has taken considerable persistence to see them adopted. The Board has long held the position that forestry practices cannot be bound by a rigid set of rules and that maximum flexibility is in the best interest of environmental protection and resource production (Martin 1989:10-11).

Under the FPA, a logging operation on privately owned timberlands cannot begin without the preparation and submission of a THP. The THP must be approved by the CDF Director, our agency's representative, or his/her designee.

The THP is a document that serves multiple purposes. It is an information document designed to be functionally equivalent to, but more abbreviated than an EIR, setting forth proposed measures to mitigate the potential adverse impact on the environment of the logging operation. It also provides the licensed timber operator (LTO), crew members, and others with specific operational

guidance on how the plan must be carried out. Once proposed, the THP is subject to review by an interdisciplinary review team and the results of that review made available for public inspection. The review and public comment process before THP approval is intended to ensure that adverse environmental effects are substantially reduced, particularly through the consideration of feasible, less damaging alternatives to the proposed project. The public's input to the THP approval process is mandated by law and supported by strong public policy.

When initially passed, the 1973 FPA was provided an explicit exemption from CEQA. This exemption expired on January 1, 1976. During this period it was widely believed that CEQA did not apply to timber harvesting. This perception was changed by the previously mentioned court decision in *NRDC v. Arcata National Corporation*. On January 14, 1975, Judge Broaddus ruled that the provisions and procedures of the Forest Practice Act came under the requirements of CEQA and that EIRs would be needed for timber harvesting (Arvola 1976:80-81). This ruling would have far-reaching implications for the application of CEQA to forest practices.

In 1975, the incoming administration of Governor Edmund G. Brown Jr. demonstrated greater concern for environmental protection than ever before. The Broaddus decision had put the timber industry in turmoil and set off a storm of public controversy with loggers demonstrating in Sacramento. The application of the full requirements of CEQA to timber harvesting met with stiff resistance from both industry and labor representatives. On February 16, 1975, Governor Brown issued Executive Order No. B-3-75 directing the Resources Agency to institute a streamlined process of THP review that would be the functional equivalent of a complete EIR (Arvola 1976:79-82). SB 707 added a new section to CEQA authorizing the approval of a review process that would be the functional equivalent of the EIR required by CEQA. This section required the Secretary for Resources to make a number of technical findings that the review process would provide a review of environmental impacts essentially equivalent to an EIR. These findings were duly made following extensive rule changes made by the Board of Forestry. Amended Forest Practice Rules were developed by three Technical Advisory Committees and approved by the Board of Forestry to provide for more environmental protection (Hastings 1985:29). On January 6, 1976, Secretary for Resources Claire Dedrick certified the THP review process as the functional equivalent of an EIR. The 1973 FPA became a Certified Regulatory Program that is considered equivalent to the EIR process. Under this certification a THP must meet the CEQA criteria for an EIR.

Tobe Arvola (front center) at the 1975 demonstrations regarding functional equivalency, State Capitol, Sacramento.

Contrary to widely held opinion, certification did not exempt the FPA from the full requirements of CEQA. Certification only precluded certain parts of the environmental impact reporting process. The fundamentals of CEQA continued to be fully applicable to timber harvest operations (Martin 1989:3). Industry, however, believed that the legal terms implied a lack of authority to approve or deny, making THPs immune from CEQA (1989:55). The timber industry initially opposed the certification of functional equivalency because they believed that they

would be granted a permanent and total exemption from CEQA either through the courts or through legislation. Several timber industry sponsored bills introduced in the late 1970s and early 1980s would have exempted the FPA from CEQA, but none of these bills were successful (1989:1-2).

For a regulatory program to be considered functionally equivalent to an EIR, the agency must use an interdisciplinary approach to ensure the integration of natural and social sciences in decision making (Foster 1992:5). This interdisciplinary review process is an important provision of CEQA. For THPs this review is accomplished by a multiagency review team headed by CDF. These review teams were established by executive order in 1975 but not formally recognized until 1983 (Martin 1989:3-5).

Multiagency review teams are composed of at least one CDF representative and include representatives of the Department of Fish and Game, the Regional Water Quality Control Board, and the California Geological Survey. Under certain circumstances, members of other government agencies and commissions may also be invited by CDF to serve on review teams. The NAHC is consulted by the RPF during preparation of every THP. Specialists such as geologists, hydrologists, or archaeologists participate in review team meetings, but only as advisors, not as official team members. Review teams meet initially to determine if a preharvest inspection is necessary and to identify possible problems in need of field examination. A second meeting is convened to analyze the results of the preharvest inspection. A preharvest inspection must be completed within ten days after a THP has been filed and the plan review must be completed within 15 days after the preharvest inspection (Martin 1989:5). Recent changes in the Forest Practice Rules extended the review period to within 30 days following the PHI.

A strong incentive for the expansion of the Forest Practice Rules has been the threat of decertification of functional equivalency. Many of the decisions of the Board of Forestry have been motivated by this threat (Martin 1989). If decertification was to occur, timber operators would be compelled to prepare a complete EIR for all timber operations, a costly and time-consuming process. In August 1979, Attorney Joseph Brecher, on behalf of the Sierra Club, petitioned the Secretary for Resources to decertify the functional equivalency of the THP preparation and review process. Some of the justifications for decertification were the lack of cumulative impact analysis, inadequate alternative proposals, inadequate interdisciplinary review, lack of public appeal of THPs, and inadequate public notice or opportunity for participation in the THP review process (1989:21).

The FPA allows certain timber operations to occur without a THP. Emergencies and certain other minor harvest operations are considered to be exempt. Timber harvesting can be conducted under a "Notice of Emergency" which must be certified by an RPF and can include timber damaged by fire or insects and the need for road repairs. Environmental critics have claimed that emergency notices are subject to abuse (Martin 1989:160-161) and some unfortunate archaeological resource damage has occurred as a result of such operations.

The FPA places considerable importance on the protection of resource values other than timber production, such as water quality, fish and wildlife, range and forage, recreation, and aesthetic enjoyment (Martin 1989:148). The regulations require the protection of resources such as

archaeological sites and endangered species. The protection of archaeological and historical resources under the FPA has undergone a slow transformation. The FPA originally contained no specific protection for archaeological and historical resources. Authority for the protection of these resources emanated entirely from CEQA. The FPA did provide for the protection of Special Treatment Areas, which by definition could include recorded archaeological sites. Unrecorded sites were given no formal protection in the act or the rules until 1991 (1989:39).

The first THP forms issued in 1974 were only two sides of one sheet with an attached map. Rule amendments in 1975 expanded the form to six pages with the necessary maps to show all required information. Questions on the form were designed to elicit information regarding the environmental consequences of certain actions, in direct compliance with CEQA provisions. The form expanded to ten pages by 1981 as the need to protect archaeological resources began to be recognized. A new form approved for use in 1986 included additional questions concerning the existence of recorded archaeological sites (Martin 1989:14-15). Archaeological and historical resources gradually received more consideration in the THP review and approval process, but it would take a series of events to bring about the establishment of comprehensive regulations for their protection.

THP Task Force (1975-1976)

In 1975, concerns over the effectiveness of the Forest Practice Rules resulted in the Resources Agency establishing a Timber Harvesting Plan Task Force. The implementation of the 1973 FPA resulted in changes in the Forest Practice Rules and changes in procedures such as the establishment of multiagency review teams. During discussions before the Board of Forestry, a point frequently discussed was the need to evaluate the effectiveness of the various operations and procedures. Therefore, Governor Brown requested that these practices and procedures be evaluated to determine the effectiveness of the THP Review Team process.

The objectives of this evaluation were to determine if the THP review procedures had provided adequate environmental protection pursuant to the statement of intent in the Forest Practice Act, and to determine what mitigation or protection measures might be needed to achieve the necessary protection. The Resources Agency established a Task Force with members from CDF, the Department of Mines and Geology, the Water Quality Control Board, the Department of Fish and Game (DFG), and the Department of Parks and Recreation (DPR). The chairman of the group was Frank Goodson, Projects Coordinator for the Resources Agency. CDF Forester III Brian Barrette served as the assistant chairman and directed much of the actual investigations.

Of the 2,152 THPs submitted to CDF during 1975, a one percent sample was randomly selected for review. An additional nine plans were chosen for examination based on extensive public comment during the initial plan review process. Controversial projects with significant environmental concerns were located in the Redwood Creek drainage surrounding Redwood National Park and at Hoxie Crossing on the Eel River in Trinity County. Of the 30 plans selected for review by the Task Force, 19 were in the North Coast District, 6 in the Northern Sierra District, 4 in the Southern Sierra District, and 1 in the Central Coast District. Following the field review of each plan, group members were to submit a written report detailing their assessment of the plan on aspects relevant to their particular discipline. These analyses were

considered confidential and not released to the foresters or timber operators while the study was underway. "The reasons for this are that we do not want industry to be tearing this study apart prior to its release, and that's exactly what will happen if it is given to them at this time" (State Forester L.E. Richey to All Regional Deputy State Foresters, Memorandum, November 25, 1975, CDF, Sacramento). One of the criteria used to evaluate the environmental effects of these plans was impacts to archaeological and historical areas. Archaeological expertise on the Task Force was provided by DPR. Ken Pierce, James Michael Doyle, John Foster, and Paul Nesbitt represented DPR during the inspection of at least 17 plans.

The first plan reviewed by the Task Force on October 30, 1975, was THP 2-75-330 in Nevada County. Ken Pierce represented DPR on this inspection and noted only that "No cultural sites are known to exist here but without an archeologist inspection of the pre-harvest condition, the non existence of a site cannot be assumed" (Ken Pierce to Brian Barrette, letter, December 18, 1975, CDF, Sacramento). Since this plan was located only one-half mile from the Red Dog-You Bet Diggings, it was difficult to imagine that no trace of historic activity would be located there.

The only plan included in the Task Force review that had been subjected to an archaeological survey was THP 5-75-22 in Santa Cruz County. Due to the more stringent timber harvest review required by certain counties at that time, a complete EIR was prepared for this plan. As part of this EIR, Joseph W. Morris conducted an archaeological reconnaissance of the property prior to timber harvest operations. Nothing of archaeological significance was found as a result of this investigation.

James Michael Doyle participated in three Task Force inspections, THP 4-75-114 in Calaveras County, THP 4-75-148 in Amador County, and THP 4-75-824, the Hoxie Crossing plan in Trinity County. Doyle noted that the Amador County plan may have included cultural resources but they were not impacted by the operations. The Hoxie Crossing THP along the Middle Fork of the Eel River was one of the most controversial plans of 1975 due to concerns over erosion and water quality issues. Doyle only seems to have been able to identify relatively recent historic items during his review. The report from DPR on his inspection includes the following statement: "There are no legally designated archeological sites on the project. However, there may be sites on or near this area that have not been identified. The Bureau of Land Management identified several sites in their Big Butte timber sale which is across the river to the west of this area" (James P. Tryner to Brian Barrette, Memorandum, July 26, 1976, CDF, Sacramento).

The Blue Ledge Mine property (THP 2-75-339) in Siskiyou County was examined by the Task Force on June 9, 1976. This plan was plagued by violations and landownership changes. Ken Pierce represented DPR and the following observations were provided: "The Blue Ledge Mine probably has historic interest, although it is not on the National Register of Historic Places or a California Historical Landmark. No archeological sites are recorded in that area and none are registered. A further investigation could reveal archeological finds. The previous mining activities could easily have destroyed any existing sites" (James P. Tryner to L. Frank Goodson, Memorandum, June 25, 1976, CDF, Sacramento).

On December 16-17, 1975, and January 7-8, 1976, John Foster of DPR participated in a series of Task Force inspections in Humboldt and Trinity Counties. At least eight plans were examined

during these four days. Four of the plans were adjacent to Redwood National Park and were selected because of extensive public protest against these operations. Foster's review consisted of "searching for artifactual remains within the operating area and by asking the landowner or operator who accompanied us for information regarding archeological sites in the vicinity." Although the results of these investigations were negative on all eight plans, Foster pointed out that "The surface disturbance, however, was so extensive as a result of tree felling, yarding, and road construction that all archeological evidence was probably erased" (John W. Foster to L. Frank Goodson, Memorandum, February 4, 1976, CDF, Sacramento).

A timber sale within Mountain Home State Forest (THP 4-75-115) was examined by the Task Force on May 18, 1976, but had no DPR participation. No archaeological issues were addressed during this review but subsequent surveys have indicated that at least one of the enigmatic "Indian Bathtub" sites (CA-TUL-1063) was probably located within this plan.

Pictographs (rock paintings) found on the Cannell Meadows THP.

The only plan investigated by the Task Force with a significant archaeological finding was THP 4-75-121/T-3 located at Cannell Meadows, then a private in-holding within the Sequoia National Forest northeast of Kernville, but now acquired by the USFS. The Cannell Meadows plan was selected by DPR due to the discovery of an archaeological site after the plan was approved by CDF. During an inspection in 1975, CDF Forest Practice Inspector Ken Delfino was shown a prehistoric site that contained an elaborate panel of prehistoric pictographs. Because of this finding, the plan was selected for review by the Task Force who visited the plan area on May 19, 1976. In his report on this review, Brian Barrette felt that no serious damage had occurred at the site and makes the following recommendations: "From a Forest Practice standpoint this was an excellent THP. The archaeological find might have been discovered prior to the THP being approved if Parks and Recreation had a larger staff to review the THPs before they are approved. A program by Parks and Recreation to educate the timber operators might also have some merit" (Brian Barrette to Frank Goodson, Memorandum, May 27, 1976, CDF, Sacramento).

Also present on this inspection was Dan Smith representing the Department of Fish and Game. He provided the following observations:

> The Indian rock paintings found in the area were not damaged by logging operations. Some archeological values adjacent to this site may have been lost as a result of heavy equipment operation and road construction. Several artifacts were found around the painting site where equipment had been operated... Guidelines for protection of archeological resources should be developed and made available to regional review teams (Eldon D. Smith to Dick Forester, Memorandum, June 24, 1976, CDF, Sacramento).

The DPR representative on the team, State Park Historian III Paul Nesbitt, observed what he considered to be significant damage to the archaeological site surrounding the pictograph panel. Two inspections of the site by a CDF archaeologist in later years confirmed Nesbitt's and

Smith's observations that destructive site impacts had indeed occurred during the 1975 timber operations, in spite of only limited soil disturbance in the area adjacent to the pictographs. The movement of grousers to propel a bulldozer, with repeated crossings over an archaeological site, can cause significant impacts to shallow midden deposits of this type, although these impacts may not be readily apparent. The shallow, dark midden near the painted rockshelter had been mixed with the surrounding tan-colored natural soil making the midden difficult to recognize. Determination of site boundaries, usually marked by an abrupt and distinctive change in soil color, was impossible to record with any accuracy. Artifacts had been displaced, scattered, crushed and buried with logging debris, and surface features such as possible housepits, if present before logging began, were erased. The area looked "clean" to the Task Force foresters because deep scouring did not take place here.

Foresters inspecting pictograph boulder in Cannell Meadows. A shallow cultural deposit surrounding it was damaged by logging and road grading in 1975.

Another plan with disturbing implications for archaeology was the "Papoose Timber Sale" (THP 2-75-250) in Shasta and Trinity Counties. This plan, which included 2,565 acres and the construction of 28 miles of new roads, was inspected by the Task Force on December 15, 1975, with no DPR participation. No cultural resource issues were addressed in the review of this plan. By today's standards of archaeological investigation, it is unlikely that a parcel of 2,565 acres or 28 miles of roads anywhere in California would not include some form of cultural resource.

Unfortunately, the lack of findings by DPR personnel on all but one of the plans they reviewed indicated to CDF that they did not have any archaeological problems to worry about. The actual comments and recommendations provided by the DPR reviewers suggested a different situation. Ken Pierce noted that archaeological investigations should be made previous to operations, but rules in place at that time did not require this. DPR's Chief of Resource Preservation and Interpretation recommended that "archeological inspection take place prior to timber harvesting in order to identify and prevent possible sites from accidentally becoming damaged or destroyed" (James P. Tryner to L. Frank Goodson, Memorandum, June 25, 1976, CDF, Sacramento). As a result of his participation in the Cannell Meadows inspection, Nesbitt offered the following recommendations:

> Although timber harvest plans may work well for other resources, they do not for cultural resources. What is necessary is a complete survey of the timber harvest area to identify cultural resources, a document showing where to avoid sites, and a check to make sure that the operators have avoided sites. I see this as being expedited on an individual basis: big business concerns can afford to fund such surveys, while small operators may have to rely on the State and universities for their surveys. In any case, inventories by field survey and regulation to avoid negative impacts are required to avoid the destruction of irreplaceable, non-renewable, cultural resources (Paul E. Nesbitt to L.F. Goodson, Memorandum, May

26, 1976, CDF, Sacramento).

A report prepared for the Task Force by John Foster included the following statement:

> If there was no damage or destruction of archeological resources, this was in spite of, not because of, the review procedures and rules concerning them. The system does not deal adequately with archeological and historical resources. The central problem is that only "legally designated" historical and archeological sites are considered. No provisions are made for the identification and evaluation of sites through the conduct of archeological surveys during the preparation of THPs. Because so little of California has been systematically studied, the proper management of cultural resources requires an active effort to identify those sites which may be present within any timber harvesting area (John W. Foster to L. Frank Goodson, Memorandum, February 4, 1976, CDF, Sacramento).

Foster went on to enumerate a set of recommendations for additional measures to be included in the Forest Practice Rules to ensure the adequate protection of archaeological resources. These recommendations were derived from an earlier communication from archaeologist Thomas King to CDF Secretary for the Coast Forest District, George Grogan. These recommendations specified that THPs include an archaeological field reconnaissance conducted by a qualified archaeologist to identify all observable archaeological phenomena subject to possible disturbance; archaeological findings and specified protection measures; and if archaeological protection was impossible, provisions for salvage excavations prior to site destruction. Foster closed his recommendations to the Task Force with the following observation:

> The Department of Parks and Recreation is the "conscience" of state government in relation to the identification, description, protection, preservation, and interpretation of significant archeological sites, deposits, and remains throughout California (Chapter 1.7, Public Resources Code). Our conscience is bothering us (John W. Foster to L. Frank Goodson, Memorandum, February 4, 1976, CDF, Sacramento).

The attitude of some state officials was demonstrated in a reply to Foster's report from a CDF Forest Practice Officer:

> If the Department of Parks and Recreation have a conscience that is bothering them, I suggest they release some of their "guarded" information on known archeological sites to concerned and qualified field personnel. The attitude that a landowner should pay for an archeological field reconnaissance to find something he views as insignificant and then make plans and take measures to protect the same from direct and indirect damage is strictly "ivory tower".
>
> The relative need for additional measures to the Forest Practice Act to protect archeological resources is summed up by Mr. Foster when he stated, "as far as I was able to determine, no archeological or historical sites were lost due to the timber operations conducted under the above plans" (Harold J. Johnson to C.L. Wagener, Memorandum, February 25, 1976, CDF, Sacramento).

The activities and findings of the Task Force are documented in a set of six notebooks on file at CDF Headquarters. The preliminary findings of the group suggested that on most of the plans reviewed there were no major environmental problems. The problems that were encountered were primarily concerned with erosion control measures such as ineffective waterbars. Loss of wildlife habitat due to the cutting of snags was also noted. These preliminary findings made a point of indicating that on several plans the landowner or forester had voluntarily taken steps beyond the requirements of the regulations to prevent potential problems. According to Barrette, "the problems aren't as serious as previously thought, and only in the actual carrying out of the installation practices for waterbars are there any serious problems" (Brian Barrette to L.E. Richey, Memorandum, June 3, 1976, CDF, Sacramento). Another revealing observation was that two large clear-cuts approved as "Negative Declarations" should have required EIRs. Barrette suggested that a longer review period of perhaps 30 days might be a solution to most of the problems identified by DPR. In a different location, however, he recommends that there should be provisions for a shorter review period for THPs with no streams, old growth, or low erosion hazard ratings such as flat plans. His perception that plans with a low erosion hazard rating should be subject to less stringent review was a common misperception throughout CDF at this time. It demonstrates a complete lack of understanding of potential archaeological sensitivity, because flat plans with watercourses are usually the ones containing more significant archaeological resources. Years of policies that allowed CDF to conducted abbreviated review of flat plans (such as skipping any preharvest inspection) doomed many archaeological sites before these flawed policies were changed. Barrette also advocated a screening process to prevent nuisance appeals with no basis other than an anti-logging attitude.

What may be more revealing than the actual findings of the Task Force (or lack thereof) are the comments made by some CDF personnel in response to this investigation. The extensive communications between participants in these investigations reflect the attitudes of some CDF staff members. One CDF forester made the observation that "The persons involved in this review process (other than CDF) have a poor knowledge of the current Forest Practice Rules, but a good knowledge of what they feel they should be" (Don Perkins to Gary Harlow, Memorandum, February 25, 1976, CDF, Sacramento). In a response to comments by one of the Task Force members, another CDF forester stated "If these reports are a representation of the entire project, I can see no greater way to waste money and time than to continue this project" (B.G. Richards to R.N. Withrow, Jr., Memorandum, February 23, 1976, CDF, Sacramento).

During the course of these investigations, the Board of Forestry also expressed concerns about the activities of the Task Force. These concerns included the perception that the Board was being left out of the loop, trespass on private property, and a strong concern expressed by industry that some members of the team were prejudiced and unable to be objective in their reviews. A report from the Resources Agency Task Force to evaluate the effectiveness of Timber Harvesting Plan Review Team procedures was slated to be discussed at the Board of Forestry meeting on January 14, 1976, but an examination of the Board minutes for this date do not indicate that this discussion ever took place. Curiously, no final report of the Task Force could be located in the Board's files. A final report may never have been prepared. After a review of the Board of Forestry minutes for the years 1976-1978, no references to the Task Force or its findings could be found. The attitudes and opinions of CDF staff members are demonstrated by the correspondence of the Task Force participants, and many of these

perceptions did influence CDF polices.

In hindsight, a number of problems can be identified with the methods used during the Task Force investigations as they applied to archaeology. The initial selection of plans was heavily represented by operations in the North Coast District because of the more extensive logging activity in that region, issues regarding Redwood National Park, and general public concern over logging old-growth redwoods. This was a very unfortunate selection, however, for the evaluation of archaeological protection issues. The dense forests of the North Coast region are notoriously difficult areas in which to identify archaeological sites, especially when Task Force review was attempted only after timber operations had already been conducted. Foster was unable to find any sites in the eight plans he reviewed. Only 17 of the 30 reviewed plans had the participation of DPR personnel and only 9 with an actual archaeologist. Eight plans were attended by DPR staff that were not archaeologists. Only one plan was selected on the basis of a known archaeological issue. Several of the plans with no DPR participation would have offered greater potential for archaeological findings than many of those that were actually inspected.

Of the THPs reviewed by the Task Force, only one plan was subjected to an archaeological survey before plan approval. None of the remaining 29 plans received a complete or systematic archaeological survey either before or after timber harvest operations. The archaeological reviews conducted as part of the Task Force evaluation consisted of brief inspections conducted over the course of a few hours and questioning of project personnel, hardly what could be considered even the most perfunctory archaeological survey. Several of the Task Force team members commented on the "hurried" or "cursory" nature of their investigations. Foster also observed that the fact that operations had already occurred most likely erased sites. A systematic archaeological survey prior to operations would have been the only means of determining if cultural resources were even located within these plans, much less if they had received any protection.

In spite of Barrette's recollections (See Voices) that "Overall the Task Force made only minor recommendations related to protection of the archaeological resources," because "the results showed that the current rules were working pretty well with no significant damage," subsequent events would suggest otherwise. It would take CDF nearly twenty years to recognize this misconception and take corrective action. In the years following the Task Force investigations, numerous instances involving destruction of archaeological sites on plans were brought to CDF's attention, but four specific THPs in particular would have a critical role in changing CDF policies on archaeology. These four plans all had a high degree of public visibility which drew attention to the inadequacy of existing rules for the protection of archaeological sites.

Georgia-Pacific THP# 1-79-224 M. A plan was submitted to CDF on March 26, 1979, by Georgia-Pacific Corporation (GP) covering 305 acres in northern Mendocino County near the Sinkyone Wilderness State Park. There were no questions on the THP form at that time directly addressing archaeological protection, but if sites were known to exist on a plan, they were considered a "Special Treatment Area." No "Special Treatment Areas" were identified in the original THP. During the public review period, CDF received several letters from concerned citizens urging them not to approve this plan. Their concerns included the environmental uniqueness of the area, watercourse protection, erosion control, wildlife, and cultural resource

protection. One of the persons submitting a comment letter to CDF was a graduate student at the University of California, Davis, Valerie Levulett, an acknowledged expert on the archaeology of this region. Her letter included the following recommendations:

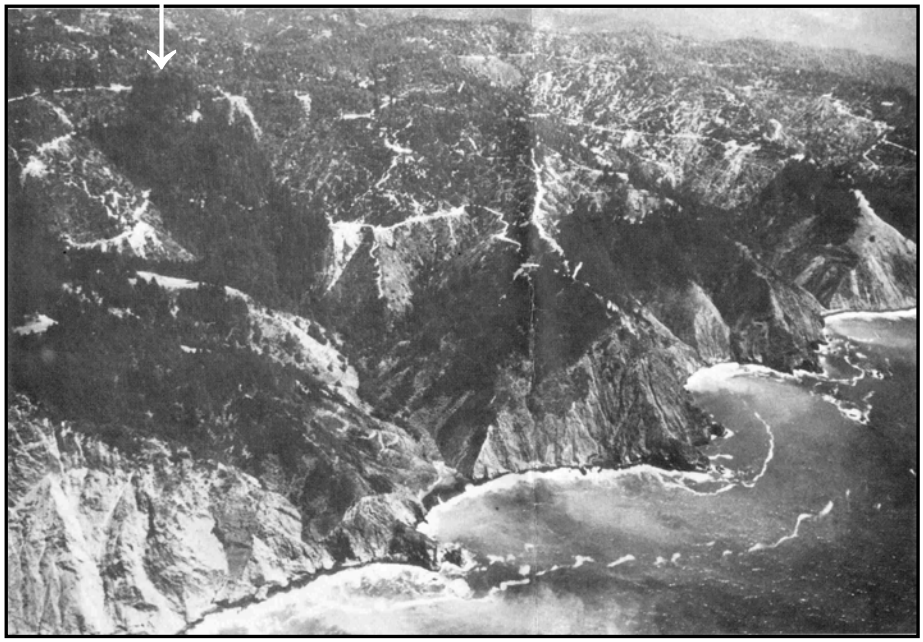
> I urge you and pertinent members of California Department of Forestry, as representatives of the people of the state and conservators and managers of its natural and cultural resources, to initiate a more thorough examination of your review procedure. Specifically, I request that prior to approval of Timber Harvest Plan # 1-79-224-M that a field examination of the proposed area, by a qualified archaeologist be conducted. If cultural resources are identified, measures should be initiated to preserve them or develop adequate mitigation measures.
>
> Secondly, it is suggested that an archaeologist be appointed to Board of Forestry review team. This action would help to eliminate senseless and oftentimes unknowing destruction of archaeological sites in the future. To aid in the review procedure for the north coast range counties, the Cultural Resource Facility at Sonoma State University is a valuable resource. I urge you to submit Timber Harvest Plans to their office. They will provide you with a record search for the area of all known sites and a sensitivity map indicating the likelihood of sites occurring within the area under question (Valerie Levulett to John Teie, letter, received April 19, 1979, CDF, Santa Rosa).

During a preharvest inspection (PHI), CDF Forester Jim Anderson observed a substantial deposit of marine shell fragments on a ridge approximately 3/4 to one mile from the coast, which he believed could be a significant archaeological site. As a result of the public comment letters and the observations during the PHI, an archaeological survey of the area was requested before plan approval. Working under contract to CDF, DPR Archaeologist John Foster conducted an archaeological field reconnaissance on May 15 and 16, 1979. He recorded two prehistoric archaeological sites, one consisting of a small lithic scatter, the other, discovered during the PHI, consisting of a large concentration of artifacts and shell remains. Both sites were determined to be highly significant and recommendations were made for the protection of the sites by establishing two "Special Treatment Areas." No excavation or tracked equipment operation was to occur within these areas. Two old-growth trees were located within the first site, but these were to be removed by rubber-tired vehicles. The GP forester, Jere Melo, insisted that the sites not be included on the THP map, and took full responsibility for insuring their protection. His professed rationale was that if the site locations were disclosed in the plan they would be subject to looting. The provisions for site protection were incorporated into the plan through a letter to CDF dated May 17.

During a follow-up inspection on August 8, Jim Anderson observed that company loggers had constructed layouts for the old-growth trees on the small lithic scatter site. This activity was considered a substantial deviation from the approved THP. On August 13, GP was issued a Notice to Appear in Long Valley Justice Court in Leggett. Foster returned to the project area to assess the damage and observed that the construction of the layouts had completely destroyed site CA-MEN-1631. Foster and Levulett testified for the state in the court proceedings. Foster recommended that remedial action for the destruction of this site should consist of a comprehensive ethnographic and archaeological study of GP lands in the Sinkyone area. This

recommendation was supported by the Native American Heritage Commission. Judge Joseph A. Orr found GP guilty of criminal charges and imposed a sentence of three years probation in which GP was required to conduct a professional archaeological survey on their property in the area prior to filing any additional THPs. This may have been the first criminal law enforcement case carried out by CDF as a result of damage to an archaeological site. The public comment letter from Valerie Levulett generated considerable interest at Sacramento Headquarters with its suggestion that CDF was not in compliance with the obligation to protect cultural resources. This case triggered a strong response from CDF and was instrumental in changing attitudes about the importance of archaeology within the Department.

Georgia-Pacific THP# 1-83-464 M. Controversy over GP logging operations in the Sinkyone area did not end with their conviction in the above case. In order to comply with Judge Orr's sentence, GP hired the archaeological consulting firm of Ann Peak and Associates to conduct an archaeological survey of their properties in northwestern Mendocino County. One of the resources identified during this survey has been called the Sally Bell Grove site. On August 1, 1983, GP submitted THP 1-83-464 M for a portion of the same ground involved in the previous court case. Under this new plan, GP proposed to clear-cut a 75-acre grove of old-growth redwoods, some of which were over 1,000 years old. This plan included the Sally Bell Grove site which was subjected to an archaeological excavation by Peak and Associates. This excavation, analysis, and detailed technical study was intended to capture information before damaging effects were to occur, and was offered as mitigation for these anticipated impacts.



Location of archaeological site on THP #1-83-464M along the Sinkyone Wilderness Coast.

A review of the THP by an interdisciplinary review team made a preliminary determination that the archaeological study did mitigate the site impacts that would follow, and found that the plan was in conformation with Forest Practice Rules. Concerned members of the public submitted at least 28 comment letters requesting that CDF not approve this plan. Issues expressed in the comment letters included the removal of one of the last remaining old-growth redwood stands in the area, damage to the aesthetic backdrop for the coastal hiking trail and the Sinkyone Wilderness State Park, ongoing negotiations for public acquisition of the property, the protection of the archaeological site, the high erosion hazard on the steep coastal slopes, and impacts to water quality, wildlife, and other resource values. The International Indian Treaty Council indicated their concern that the THP did not adequately protect the Native American

archaeological site from damage. CDF approved the plan on September 2, and then sent out the responses to environmental concerns on September 16, 1983.

On September 30, a group of environmental activists organized as the Environmental Protection Information Center (EPIC), filed a lawsuit to challenge the approval of the THP in court. EPIC sued for a Writ of Mandate against CDF, naming Ross Johnson in his official capacity as Resource Manager for CDF, and Georgia-Pacific Corporation. On December 6, 1983, the Superior Court ruled against the plaintiffs, refusing the Writ of Mandate. EPIC appealed the ruling and the case went to the First District Court of Appeals. On July 25, 1985, the Appeals Court ruled in favor of EPIC, finding that CDF was in error approving the THP and that its actions constituted a prejudicial abuse of discretion. The THP was voided and EPIC was entitled to an award of attorney fees. The court ruled in favor of the plaintiffs on five points, two of which were directly related to archaeology:

- Provisions of CEQA apply to the FPA.
- CDF did not provide written response to significant environmental objections within ten days of THP approval.
- CDF failed to send notification of the plan to the Native American Heritage Commission (NAHC).
- CDF did not provide an adequate response to public concerns for the protection of archaeological resources.
- CDF had failed to adequately address cumulative impacts.

The court provided extensive clarification on the application of CEQA to the FPA and Forest Practice Rules governing the timber harvesting industry. The defense attorney in the case had suggested that a section of the FPA rendered CEQA inapplicable. The court clearly stated that the section in question did not preclude CDF from compliance with CEQA and that CDF is not always limited to the Forest Practice Rules when reviewing THPs (Martin 1989:33-34). Once the application of CEQA had been established, several procedures became necessary. Under CEQA, the presence of an archaeological site within a project requires the lead agency to consult with the NAHC. The court ruled that CDF had failed to comply with the law by not consulting with the NAHC when it was known that the project included Native American cultural resources.

The two points regarding public response and NAHC notification were relatively easy to correct. The issue of response to public concerns over archaeology was more problematic. This results from the general policy of keeping all archaeological site information confidential. The court recognized a need to resolve the conflict between confidentiality and public information. The court observed that the public is entitled to be informed on potential environmental impacts and therefore must receive enough information to understand the basis for decision making. Public objection was prompted by dissatisfaction with the description of the efforts to mitigate damage to the archaeological site as specified in the THP. The Official Response of the Director of Forestry to Significant Environmental Points Raised During the Timber Harvesting Plan

Evaluation Process stated that: "The archaeological site has been addressed. A private archaeologist was hired by Georgia-Pacific. The site has been excavated and a report is forthcoming. The Department of Forestry's archaeologist has reviewed a draft of the report and has visited the site and concurs with the protection measures imposed by Georgia-Pacific."

EPIC was unable to obtain a copy of the draft archaeological report during the evaluation process, and was unable to assess the mitigation efforts of GP, or the precise vulnerability of the site to logging operations. Neither the draft or final report was ever released to EPIC or, evidently, to any member of the public. CEQA provides for evaluation of proposed project effects on archaeological resources and provides for mitigation of damages that may be caused by the project, but neither CEQA nor the FPA expressly requires the preparation of a written report. The CDF response to the objection to the proposed THP, addressing sufficiency of measures to mitigate damages to the Native American archaeological site, was found to be inadequate. The official response contained no analysis of the issues of protection of the archaeological site and contained no specific information to communicate the basis for the rejection of the objection. The court ruled that although a report is not specifically required, neither the logging company nor CDF can simply cite a report and fail to provide substantive, detailed responses to environmental objections regarding the report's subject matter. CEQA states that lead agencies must specifically respond to the most significant environmental questions raised in opposition to projects. The purpose of this requirement is to provide the public with a good faith, reasoned analysis why a specific comment or objection was not accepted. Responses that are unsupported by empirical information, scientific authorities, or explanatory information have been held insufficient to satisfy the requirement of a meaningful response.

The *EPIC v. Johnson* decision had two important consequences for archaeology. One informed CDF that in response to public comment it must not refer entirely on protection measures described in a report not available to the public. The public has a right to receive justification and explanation for decision made by the lead agency. This finding resulted from CDF's reference to a confidential report prepared by an archaeologist under contract with the landowner. This problem could be corrected by quoting the site protection measures portion of the report while withholding the sensitive site location information. The other important point was related to CEQA compliance. Up to this time, only sites that had been formally recorded were given protection. According to CEQA, however, there is no distinction between recorded and unrecorded sites. In order to comply with CEQA, it became necessary to establish a program where unrecorded sites would be identified and protection measures specified prior to plan approval (Martin 1989:40-41).

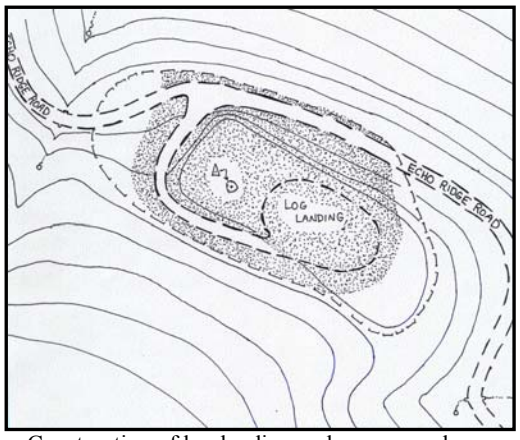
The final point in the court ruling was that CDF had failed to adequately address cumulative effects. The impact of the cumulative effects from past logging activities combined with the proposed timber harvesting on the ecology of the grove was inadequate, or the consideration of such effects was based on an erroneous conception of cumulative impacts. This issue has yet to be resolved and according to Martin (1989:39): "The final chapter on cumulative impacts may never be written."

The *EPIC v. Johnson* decision had significant repercussions on the practice of forestry in

California and on archaeological policy in particular. This decision is considered precedent-setting case law and several subsequent court decisions have upheld the ruling. This may have been one of the first environmentally based lawsuits resulting in a ruling against CDF and provides an example of public concerns shaping state policy. Officials at CDF were shocked to lose a major lawsuit on these issues. After this decision, CDF quickly began to develop procedures to correct these problems and adhere to the court's ruling. Additional archaeological training sessions were implemented to enhance archaeological awareness. RPFs were encouraged to conduct record searches to obtain information on recorded sites and the Information Centers were induced to provide this information to nonarchaeologists (Martin 1989:40-41). In 1986, the Board of Forestry approved questions on the THP form concerning review of cumulative impacts and archaeology (1989:14-15). This case provided considerable incentive for the development of an archaeology rules package that was approved by the Board in 1991.

In 1985, GP submitted yet another THP for the area involved in the *EPIC v. Johnson* case. CDF approved the new plan on December 20, 1985. On January 17, 1986, EPIC filed suit again, but this time the suit never went to trial. The property was purchased by the Trust for Public Lands on December 30, 1986, with the intent of turning portions over to the Department of Parks and Recreation (Martin 1989).

Westbrook Land and Timber Company THP# 5-83-64M. Timber operations conducted in the early 1980s damaged a small prehistoric village site within the headwaters of Williams Canyon, located some 10 miles inland from Carmel in Monterey County. The site, named "Two Springs" by the CDF archaeologists who later recorded it, consists of a dark, rich, and deep shell midden containing abundant shell, bone, and stone artifacts. Since the Forest Practice Rules did not, at that time, require an archaeological survey, the site was not identified in the plan or afforded any protection. A haul road was cut into the edge of the hillslope which passed through the northern portion of the site. More extensive damage resulted during the construction of a short road segment through the heart of the midden providing truck access to the top of the knoll, where a log landing was constructed. Curiously, although this plan received intensive public review which demanded consideration for impacts to the watercourses, the possibility that damage to archaeological sites was not considered during plan review.



Construction of log landing and access road damaged the Two Springs Site on THP # 5-83-64M.

From 1979 to 1990, the timber and land on this property was owned by Westbrook Land and Timber Company (WLT) of Smith River, California. In 1979, WLT was denied a permit to log redwoods in Williams Canyon by the Monterey County Planning Commission. In 1983, AB 865 was passed. This bill gave the state sole permitting authority for timber operations in Monterey County. In 1983, RPF Charles Barber, a company forester for WLT, submitted a new THP for CDF's review. This was THP#5-83-63M. Public review of the proposed plan invoked many

comments and concerns, and after considerable review by CDF, the public and Monterey County, many additional protection measures were incorporated into the plan. CDF approved the THP on January 25, 1984. The area was logged in 1984 and 1985. The only information in the plan pertaining to archaeological site protection indicated that there were no recorded archaeological sites located in the area to be harvested, and that no archaeological survey was made.

CDF archaeological survey crew assessing site damage and preparing a detailed record of the Two Springs Site.

This property was purchased in 1990 by Big Sur Land Trust (BSLT) from WLT utilizing funds donated by Harriott Mittledorf. The parcel, encompassing 1057 acres in the Williams Canyon watershed, is named the Mittledorf Preserve. The Two Springs Site was discovered by BSLT Property Manager Steve Bachman who notified CDF, and participated in an archaeological survey to visit the site, assess the damages, and prepare a detailed record. CDF's review indicated this unique site would easily have been found if an archaeological survey was conducted prior to logging or if the plan review by CDF included careful consideration for archaeological resources. Tremendous damage occurred during timber operations when a log landing and access road were built directly upon the site. CDF also determined this to be a significant site. The considerable depth of shell midden at the Two Springs Site suggests considerable time depth, possible extending from Archaic to Protohistoric times. The abundant cultural remains, wide range of materials, and environmental setting suggest this is a permanent village, associated with a major trending ridge that served as a primary transportation corridor from interior valleys to the coast.

Bowen Ranch THP# 4-87-120/TUL-3. Another plan that resulted in a significant impact on the development of CDF archaeology policy was the Bowen Ranch THP of 1987, located at Tobias Meadow in the southern Sierra Nevada of Tulare County. A significant archaeological site was located within the THP area but was not identified prior to plan approval. A record search by the CDF Archaeology Office did not find any recorded archaeological sites in the area, but indicated that the area was highly sensitive for archaeological resources and recommended a careful inspection by the RPF before logging operations. An archaeological site had been recorded on adjacent Forest Service land, and the focus of CDF's review centered on making sure that this known site was entirely outside the THP area. Unfortunately, another site – a small village or campsite with bedrock mortars and black midden – existed on the private parcel. Since the site was not identified prior to operations, no protection measures were implemented and it got hammered. Following the logging operation, the CDF Archaeology Office was notified by the USFS district archaeologist that archaeological resources may have been impacted by this THP.

On July 13, 1989, the CDF archaeologist conducted an investigation of the area to determine if any archaeological resources were present within the project area. The archaeological site that was encountered consisted of three bedrock milling stations, an obsidian flake scatter, and a

midden deposit. Three large rock basins, the so-called "Indian Bathtubs" that occur in this portion of the Sierra Nevada, were also observed. The site was heavily damaged by heavy equipment operation resulting in extensive ground disturbance in the form of skid trails, excavations, earthen mounds, and large piles of slash and logging debris. It was apparent that in this case, CDF procedures had not been adequate to identify the archaeological resources within the plan area.

Archaeologist Mark Q. Sutton of California State University (CSU), Bakersfield was hired by CDF to conduct an evaluation of the site damage, prepare a record of the site, and make recommendations concerning possible restoration activities. Sutton observed that most of the information potential of the site was lost and that data recovery work would not be profitable. He did recommend that CDF strengthen the requirements for archaeological inventory prior to timber harvesting, pointing out that "It is apparent that the present system of inventory and monitoring by semi-trained nonarchaeologists is sometimes inadequate to identify and protect archaeological sites that may be impacted by CDF projects" (Mark Q. Sutton to Ken Delfino, letter, August 22, 1989, CDF, Sacramento).

The Tobias Meadow incident caused considerable concern for CDF officials regarding archaeological resource protection responsibilities. The importance of this incident was not that a site was overlooked prior to plan approval or damaged by operations. These types of incidents were fairly commonplace during this period. In this case, however, the message that there were major problems with the procedures was carried to the highest levels of decision making. An internal CDF memorandum pointed out the difficulties that were being encountered in trying to protect archaeological sites without any changes in the Forest Practice Rules (Norman W. Cook to Ross Johnson, Memorandum, August 29, 1989, CDF, Sacramento). This memorandum proved to be a powerful supporting influence leading to an increase in archaeology staff and changes in the Forest Practice Rules. Although this incident resulted in the destruction of a significant unrecorded archaeological site, it brought about important policy changes within the Board of Forestry and CDF.

Forest Practice Archaeology Rules In 1988, CDF and the Board of Forestry began working on a package of rules to improve the identification and protection of archaeological, historical, and cultural sites. This rule package was developed by Dean Cromwell, the Executive Officer of the Board of Forestry, Doug Wickizer of CDF, and CDF Archaeologist Dan Foster. The archaeology rules package was slated to be adopted in 1990 but met with opposition from the Native American Heritage Commission. After a series of meetings with the NAHC, additional rules were incorporated to include consultation with local Native American tribal groups. The Board of Forestry approved the archaeology rules package for inclusion in the Forest Practice Regulations in 1991. These rules went into effect on December 25 of that year, causing some RPFs to jokingly refer to them as the Christmas Day rules. These were the first comprehensive archaeology rules included in the Forest Practice Regulations. In order to ensure archaeological and historical resource identification and protection prior to plan approval, these rules require that all THP applicants complete a number of tasks including the following:

- Conduct a current archaeological records check at the appropriate CHRIS Information Center.

- Provide written notification to Native Americans of the THP location with a request for information concerning the existence of any archaeological or cultural sites within the THP boundaries.

- Perform a field survey for archaeological and historical sites within the THP area by a professional archaeologist or a person with Board-certified archaeological training.

- Report the results of archaeological investigations in a Confidential Archaeological Addendum (CAA) that is not available to members of the general public. This document is required even if there are no archaeological findings.

The authority for site identification and protection was increased and clarified as a result of these rules, but there was room for flexibility. The rules did not require that all sites be protected, but gave CDF the authority to develop mitigation measures to lessen the severity of impacts to a threshold below significant. The NAHC was charged with developing a list of local Native American contacts who must be notified in writing to determine if they know of any sites of concern.

The sections of the Forest Practice Rules that identify the procedures for protecting cultural resources were revised in 1994, 1997, and 2003. Initially, site recording was a controversial issue because the Board of Forestry was not convinced that it was necessary to insure site protection. The rules on site recording were vague to begin with, but have been strengthened in later revisions. Provisions approved in 2003 require that research be conducted prior to the field survey including a review of appropriate literature and contact with knowledgeable individuals. Additional Native American notification was also required if Native American archaeological or cultural sites were identified within the plan. This change provided local Native American tribes with notice of each plan that could affect archaeological or cultural resources and afforded them the opportunity to provide comments during plan review. The adoption of the comprehensive archaeological rules package in 1991 marked a major milestone in the development of the CDF Archaeology Program, but it was just one stage in the efforts to enhance the protection of archaeological and historical resources.

Appurtenant Roads There has been a long-standing debate, both within CDF and the forestry community at large, regarding whether CEQA or the FPA takes precedence. Even though several court rulings have been handed down on this subject, it continues to be a topic of discussion. An issue that serves as an example of the disparity between the two statutes results from the question of archaeological surveys along appurtenant roads. Appurtenant roads are roads that are maintained and used in the course of timber harvesting operations but that are not located directly within the timber harvest boundary. One of the most important components of a timber harvest is the road system, but no other part of logging operations can cause as much ground disturbance as the construction and maintenance of roads. These construction activities can result in up to 90 percent of the erosion and watershed damage associated with timber operations (Arvola 1978:149-150).

A problem has been recognized on numerous THPs where archaeological sites have sustained significant damage along appurtenant roads, and other plans where damage would have occurred

if CDF staff had not identified sites during preharvest inspections. On some THPs, extensive road reconstruction can be necessary to facilitate the proposed operations such as road widening, stream crossing repairs, and other types of ground disturbance needed to improve roads for use by haul trucks and logging equipment. Archaeological oversight of these construction activities has been inconsistent. On some plans, the RPF has not included these roads in the area covered by the records check, Native American notification, or the archaeological survey conducted for the plan. The Forest Practice Rules explicitly state that only those segments of appurtenant roads that will have trees removed must be covered by the archaeological survey.

Construction and maintenance of logging roads can cause significant impacts to archaeological sites.

In its role as lead agency, CDF is required by CEQA to consider the full range of project activities and make sure that significant environmental impacts do not occur before permitting a THP. This results in a conflict of legal requirements. Although the Forest Practice Rules seem to allow the exclusion of areas where excavation will occur along appurtenant roads from their archaeological survey, this practice is not supported by CEQA statute or regulation. State law defines a project as "the whole of an action" which has a potential for resulting in either a direct physical change or a reasonably foreseeable indirect physical change in the environment. There is no question that operations along roads which are initiated to facilitate the transport of logs are part of the project that lead agencies are required to review. Timber operations that include construction and maintenance of roads requiring the disturbance of soil have the potential to affect the environment, particularly with regard to archaeological sites. The exception to conduct archaeological survey on appurtenant roads unless commercial wood products are proposed for harvesting along those roads, can result in nonconsideration of activities associated with project operations. Consequently, a THP that does not take into account the full scope of timber operations, such as the reconstruction of roads, could result in a significant effect on the environment. CDF is required to evaluate potentially significant impacts to cultural resources that might occur as a result of project approval (Grantham et al. 2003). On this particular issue at least, CDF has adopted the position that the general authority of CEQA to address potentially significant effects of a project supersedes the Forest Practice Rules.

Executive Order W-26-92

CEQA and the FPA are not the only state mandates directing the heritage resource protection efforts of CDF. In recognition of the importance of heritage resources to the people of California, in 1992, Governor Pete Wilson issued California Executive Order W-26-92. This order directs state agencies to administer the cultural and historic properties under their control in a spirit of stewardship and trusteeship for future generations; to initiate measures necessary to direct their policies, plans, and programs in such a way that state-owned sites, structures, and objects of historical, architectural, or archaeological significance are preserved, restored, and maintained for the inspiration and benefit of the people; to ensure that the protection of significant heritage resources are given full consideration in all land use and capital outlay decisions; and in consultation with the OHP, to institute procedures to ensure that state plans and

programs contribute to the preservation and enhancement of significant non-state owned heritage resources.

In addition to these general considerations, specific directives were also stipulated in the Executive Order. Each state agency was to designate an Agency Preservation Officer responsible for ensuring that state policies regarding the protection of heritage resources were carried out. Each agency was directed to develop and institute a management plan to preserve and maintain its significant heritage resources. Inventories were to be completed that would take into account the kind, quantity, location, and development risk to properties within the ownership and control of the agency, and each agency was directed to report annually to the OHP on their progress towards the completion of inventories, management plans, and policies (Pete Wilson, Executive Order W-26-92, April 8, 1992, Executive Department, State of California, Sacramento).

As a result of these directives, several major actions were accomplished by the CDF Archaeology Program. CDF Archaeologist Dan Foster was appointed Agency Preservation Officer in 1992. Inventories of historic buildings and fire lookout stations were completed (Thornton 1993; 1994). Inventories were conducted on seven state forests (Betts 1995a; 1995b; Dillon 1992a; 1995; Gary and Hines 1993; Hamilton and Neri 1997; Jablonowki, Martin, and Toriello 1995). These inventory efforts were incorporated into a comprehensive Management Plan for CDF's historic buildings and archaeological sites (Foster and Thornton 2001). These accomplishments will be described in more detail in a subsequent chapter. An important component of this Executive Order, and most other heritage resource protection statutes, is the concept of significance. The criteria for determining significance are codified in the final statute discussed in this chapter.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is an authoritative guide used by state and local agencies, organizations, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change. On January 1, 1993, AB 2881 went into effect creating the CRHR, which is administered by the SHPO under the oversight of the State Historical Resources Commission. Properties listed on the CRHR include State Historic Landmarks, Points of Historical Interest, and properties in California that are listed on or eligible for listing on the National Register of Historic Places (NRHP). Additional resources can be nominated to the CRHR by individuals, organizations, and government agencies through an application and public hearing process. Before historical resources can be added to the CRHR, property owners, the local government where the resource is located, local agencies, and members of the general public must be notified to allow for comment on the nomination. Historical resources cannot be listed on the CRHR without the approval of the property owner (OHP 1999:16-17).

In order for historical resources to be included in the CRHR they must be determined to be significant by meeting any one of the following criteria:

- Association with events that have made a significant contribution to the broad patterns of

local or regional history, or the cultural heritage of California or the United States.

- Association with the lives of persons important to local, California, or national history.

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

These criteria were adapted from the NRHP with modifications to include a range of historical resources which better reflect the history of California. The categories of properties eligible for nomination include buildings, sites, structures, objects, and districts, all of which have been defined in detail. Historical resources must also retain a level of integrity to be eligible for listing. Integrity is determined by the authenticity of characteristics that have been retained by a property from the period of its significance. Integrity is evaluated on the basis of location, design, setting, material, workmanship, feeling, and association (OHP 1999:69-71).

The primary relevance of the CRHR to the historical resource identification and protection activities of CDF is the establishment of legal criteria for the determination of significance. These criteria have broader applications than simply determining if properties are eligible for listing on the CRHR. They are used to make a preliminary evaluation of all historical resources identified during project planning and implementation to determine the level of protection that will be afforded to these resources. The sustained effort on the part of CDF to develop and implement successful protection measures for historical resources will be the subject of the next chapter.

IV. PRIMARY DUTIES OF THE CDF ARCHAEOLOGY PROGRAM

The Early Years

Although archaeology is a relatively small component of CDF, and got a relatively late start in the 100-year history of the Department, it has come to play a leading role in heritage resource management within state government. In the years since the consideration of impacts to archaeological and historical resources has been mandated by CEQA, the CDF Archaeology Program has developed a system of policies and procedures to accomplish this mission. Important factors leading to the development of an archaeology program within CDF include public pressure, regulatory compliance, and economic incentives. Public concern for resource protection and the resulting legislation has been reviewed in the preceding chapters. An event that demonstrated the potential economic consequences of archaeological issues is described below.

Up until the 1970s, DPR was the lead agency for most archaeological and historic preservation activities within state government. As a result of the NHPA, DPR was assigned several important functions that included the development of a statewide historic preservation plan, the role of official clearinghouse for archaeological information, and the review of projects for compliance with state and federal cultural resource protection mandates. Because of this leadership position, officials at CDF believed that DPR was responsible for CEQA compliance on the part of other state agencies, and ultimately for all archaeological protection. Whenever a site was damaged as a result of a CDF project, officials somehow believed that it was the responsibility of DPR. CDF officials did not feel that they needed to be concerned about archaeology. Unfolding events would begin to demonstrate the erroneous nature of this assumption.

The earliest archaeological work conducted by CDF began in 1975 when the Department entered into an interagency agreement with DPR for archaeological services. John Foster, Glenn Farris, and Jim Woodward were some of the DPR archaeologists that performed work for CDF under this agreement. John Foster was the first DPR archaeologist to conduct work for CDF which included numerous surveys and THP reviews, the first cultural resource training for CDF foresters, participation in the THP Task Force, and testimony in an important law enforcement action. Archaeological surveys were conducted by DPR Archaeologist Glenn Farris for timber sales on Jackson and Mountain Home Demonstration State Forests (Farris 1980a, 1980b, 1992). DPR Archaeologist Jim Woodward worked at CDF for seven months during 1981 conducting surveys for forest management projects, surveys on several state forests, and numerous THP reviews. Interagency agreements with DPR continued to provide CDF with archaeological services through the 1980s and into the early 1990s.

Following the certification of functional equivalency in the late 1970s, CDF worked out an informal arrangement with OHP to do nominal THP reviews. Nick Del Cioppo, the staff archaeologist at OHP assigned to this work, would evaluate the available information to determine if recorded archaeological sites existed within plans, make generalized recommendations, and identify plans requiring a field inspection by a professional archaeologist. Protection measures usually consisted of avoiding heavy equipment operation within site areas,

but rarely entailed restrictions on logging. This review was performed with limited input from THP applicants. At that time the THP form had no questions regarding archaeology. In 1985, OHP informed CDF that due to a loss of federal funding, it could no longer perform THP reviews, causing CDF to expand their program of archaeological review on THPs (Martin 1989:39-40).

A major turning point in the perceptions of CDF officials regarding the importance of archaeology came in the late 1970s. During this period, timber sales were being conducted each year at Jackson State Forest and every other year on the smaller forests. Complete EIRs were prepared for each sale. In 1977, a THP called the "Headquarters Sale" was being planned at Mountain Home State Forest. The EIR prepared by CDF Forester III Cliff Fago included a discussion of potential environmental impacts and how such effects would be mitigated. This EIR was submitted to the OHP for review while CDF proceeded with contract preparation. The sale included three million board feet of pine and fir that was valued at approximately $600,000. OHP commented on the lack of any discussion of impacts to archaeological sites, but CDF countered by stating that if any archaeological sites were found, work would be stopped. OHP rejected this stipulation and insisted that an archaeological survey be conducted. The survey was contracted to CSU Fresno for $500 through a sub-purchase order, and conducted under the supervision of Dudley Varner. The survey crew found a previously unknown archaeological site within the sale area. They recorded the site, identified its boundaries, and recommended that it be protected by avoidance. The specified site protection was amended into the EIR which was then approved by OHP. The delay resulting from the archaeological survey and correction of the EIR caused the cancellation of the timber sale. When the sale was offered the following year, timber values had dropped dramatically, and CDF received only $285,000 for the same timber. Essentially, $315,000 in revenues were lost to the state because of the absence of a $500 archaeological survey. CDF officials were surprised to discover that archaeological issues could have such a dramatic impact on a timber sale project. This event had a direct influence on the initiation of an independent archaeology program within CDF and the hiring of the first staff archaeologist.

In 1980, a Budget Change Proposal (BCP) was written to add one State Archaeologist II position to the CDF Resource Management staff for the fiscal year 1981-1982. The proposal was approved and Daniel G. Foster was hired on December 14, 1981, as the first full-time staff archaeologist at CDF. Duties and responsibility for archaeological protection covered the entire state and consisted of a variety of programs and projects. The majority of efforts were directed in support of forest management programs. Fallout from the Headquarters Sale made surveys of the state forests a top priority. Forest Practice related work was very limited with field inspections occasionally requested by CDF foresters.

One of the primary duties of the new CDF archaeologist was to provide support for the various forest and wildland management programs administered by CDF including the California Forest Improvement Program (CFIP) and the Chaparral Management Program (CMP). CFIP was established in 1978, creating additional demands for archaeological review. In the early years, CFIP was well funded with revenues from timber sales on the state forests, and consequently received comparatively good archaeological treatment. CDF recruited private landowners into this cost-share program of projects which had been developed by private RPFs. The state

contributed up to 75 percent of the funds for improvements to these private timberlands. The Chaparral Management Program was established in 1981, requiring additional archaeological review needs. This program was later designated the Vegetation Management Program (VMP), and consists primarily of the application of prescribed fire and other mechanical fuels treatments.

In the first few years of the CDF Archaeology Program, THP review was so infrequent that it was not even listed as an official duty. Occasionally someone would stumble into an archaeological site and the CDF archaeologist would be asked to go out and make some recommendations. In 1981, a question was added to the THP form asking the submitter if they had any knowledge of recorded archaeological sites. Three check-the-box responses were provided on the form: Yes, No, or Unknown. Nearly all RPFs checked "Unknown", because to answer "Yes" or "No" would have required an archaeological records search at an Information Center which charged a small fee for this service. CDF did not believe it had sufficient authority to require THP submitters to obtain record searches due to the resulting costs to landowners.

In its role as an archaeological information repository, in 1980 OHP established an initial, extremely limited, electronic database of all recorded archaeological site locations (Hata 1992). CDF contributed $35,000 of funding to encode site locations into this primitive database (in the hope that the database would have statewide coverage – which it never did), and became one of its first users. During the 1980s, the CDF Archaeology Office began conducting record searches for projects through the OHP computer system. A check of this database at Sacramento Headquarters on some plans was an early attempt to consult existing archaeological information during THP review. The CDF Archaeology Office acquired a computer which could be connected with the central database to allow the staff archaeologist to perform a record search. In August 1985, CDF began providing RPFs with information about recorded sites so that plans could be designed to avoid sites before they were submitted. This service became so popular that by the following Spring the staff archaeologist was overwhelmed with requests (Martin 1989:40).

The increasing workload of forest practice review helped to justify a second staff archaeologist position at CDF. Part-time assistance was provided by DPR beginning in 1984 and a second full-time position was created in 1986. With approximately 1,500 plans per year being submitted at this time, THP review became a mounting problem. THPs were reviewed for known sites, but the sheer volume of plans and limited review time available made this a hit-or-miss operation. Many recorded sites were slipping through the cracks and unrecorded sites were rarely identified. There were certainly hundreds of sites within the many plans that were being approved each year, but there were no policies in place to ensure their identification or protection. CDF did not have the authority to require archaeological surveys, record searches, or site recording; and archaeological training for RPFs was voluntary. There were no rules to prevent even the proposed destruction of sites. Copies of THPs were not readily accessible to the public for review or comment. CDF policy stipulated that if an archaeological site was legally designated, it was declared a "Special Treatment Area" and restrictions were placed on the THP to avoid adverse impacts to the area. Legal designation was regarded as a site having been formally recorded and issued a permanent state trinomial.

Throughout the 1980s, it was the legal responsibility of CDF to ensure the approval of a THP

would not result in preventable damage to significant cultural resources. In the early 1980s, fewer than 75 sites were being found each year during the review of CDF projects, and approximately half of these were on THPs. Unfortunately, many of these discoveries took place after the sites had been damaged by logging operations or other project activities. Many requests came in to look at sites damaged by logging, some of which were recorded sites that were not identified by the limited project review procedures in place at that time. Through the course of this period, requests to review THPs gradually increased and Forest Practice work became dominant over other archaeological responsibilities, largely because CDF was so vulnerable in this area. Environmental groups began using archaeological shortcomings as a means to promote their anti-logging agendas.

During this period, the CDF archaeologist investigated many cases of sites damaged by logging operations that were reported by neighboring property managers. These reports were sometimes made by adjacent landowners, but more commonly by agency personnel responsible for public lands such as archaeologists from the Forest Service or the Bureau of Land Management (BLM). Archaeologists from the Modoc, Plumas, Tahoe, Eldorado, Sequoia, Mendocino, Shasta-Trinity, and Six Rivers National Forests frequently notified CDF when sites were damaged on adjacent private lands. Charla Meacham, Mike Boynton, and Greg Greenway of the Mendocino National Forest were particularly aggressive about alerting CDF to site damage. The common element in all of these incidents was that the CDF archaeologist was contacted after the damage had already occurred. These incidents provided a growing body of evidence that sites were not being adequately identified and protected prior to THP approval. As these reports of site damage became more frequent, CDF could no longer ignore their obligation to consider archaeological resources and was forced to develop policies to better address these problems. The Tobias Meadow incident was a major embarrassment and the destruction of a site on Louisiana-Pacific lands near the Mendocino National Forest led to criticism by the Forest Service. The public began to realize that archaeological sites were not being protected and started to put pressure on CDF to do something about it.

Following the *EPIC v. Johnson* decision, the CDF Archaeology Office began to receive many more requests for THP review, particularly if there was a good chance of a challenge. This led to a paradoxical situation where plans with limited archaeological potential were carefully scrutinized (because of the likelihood of legal challenge), while plans with high archaeological sensitivity received minimal review if they were in a region with no environmental activists. Numerous plans were carefully reviewed in the Whitethorn area because EPIC was looking over CDF's shoulder, even though these plans had relatively low archaeological sensitivity. By contrast, a 500-acre plan in eastern Lassen County with considerable archaeological potential was often not examined well at all. During this time it was learned that decisions on conducting preharvest inspections were based, in part, on the steepness of the plan area. The steeper the plan, the more erosion and watershed issues that could be expected. Flat plans, even if they contained perennial streams, were considered low risk for environmental impacts. From an archaeological perspective, this sensitivity model should be completely reversed. This realization provides an indication of the low priority given to archaeology as an environmental concern. Eventually, CDF policymakers began to recognize some of the flaws in assumptions regarding THP review, and archaeology began to receive more consideration.

An incident that provides an example of the type of emergency situation that frequently arose, and the unbridled enthusiasm with which they were approached, is illustrated in the following account. Early one morning an urgent call came into the CDF Archaeology Office regarding a VMP project in Shasta County. Firelines were being constructed by bulldozers across an extensive field of lava rocks. The CDF project manager observed rocks disturbed by operations that contained small circular holes. He thought these holes might be cupule petroglyphs, which would represent a highly significant archaeological discovery. Project operations were brought to a halt awaiting expert consultation. The CDF archaeologist was needed immediately, but was too far away to drive to the project area in a timely manner. A flight was available from Sacramento to Redding on a commuter airline, so off went the intrepid archaeologist. On arrival in Redding, the only rental car available was a red Pontiac Firebird with approximately three inches of ground clearance. CDF Forester Bob Brown provided directions and flagging at the turnoff point. Access to the project area was on a newly created dozer track over extremely rocky ground. Inching along at a snail's pace, every rock a potentially lethal blow to the low-slung sports car, the project area finally came into view in a broad open meadow area. The project manager, equipment operators, and inmate crews were all anxiously awaiting the arrival of the CDF archaeologist. Their incredulous expressions were more befitting the visitation of an extraterrestrial than a functionary from Headquarters. Fortunately the rocks in question contained only natural depressions and no archaeological disturbance had occurred. The project was able to proceed unabated to the great relief of everyone involved. Field personnel often view officials from Sacramento with contempt, not believing that they have the common sense or practical knowledge to get things done. Their suspicions were confirmed by the selection of transportation on this particular occasion.

Many additional cases shed light on difficulties encountered during early project reviews. Ever since its creation, Redwood National Park had been surrounded by controversy. Proposed expansion of the park led to increased logging of the Redwood Creek watershed. A 1982 THP adjacent to the park boundary raised several difficult issues. A portion of a highly significant archaeological site (CA-HUM-441) was located within this plan. National Park Service Archaeologist Ann Smith recommended mitigation measures to protect the site, but a dispute arose with the landowner, Mr. Henry Harding of the Orick Lumber Company. Mr. Harding asserted that the mitigation measures stipulated by Smith constituted a taking of private property for public use without compensation for this use. The CDF staff archaeologist conducted a field inspection of the project and successfully negotiated a level of site protection agreeable to the landowner. This large and very rich site held considerable research potential. An archaeological investigation was proposed as mitigation and an arrangement was worked out with Sonoma State University for a limited test excavation. This project was cancelled at the last minute due to liability concerns raised by the landowner's legal council. This incident demonstrated the extremely limited authority of CDF to require any site protection and the difficulties encountered trying to facilitate any sort of archaeological investigation on private property.

A less contentious project carried out by the CDF archaeologist in 1982 was the survey of a 164-acre parcel of undeveloped land in South Lake Tahoe that was the proposed site of a new community college campus. This project was a coordinated effort between CDF, college officials, and the Tahoe Regional Planning Agency to show that a large construction project could be compatible with resource protection in a forest setting. The survey identified three

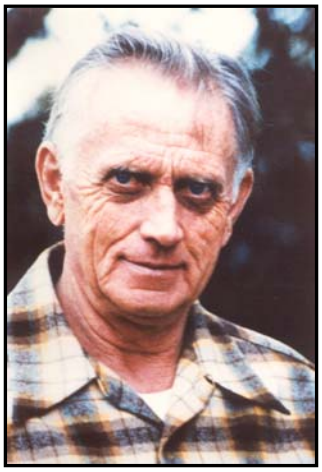
archaeological sites and three isolated artifacts. Management recommendations were formulated to protect the archaeological sites (Foster 1982).

In 1984, logging operations in San Mateo County on the property of Mr. George Pope resulted in serious damage at two archaeological sites. One of these sites was considered to be highly significant. The operations were being conducted under a Section 1038 Exemption which allowed harvesting of dead, dying, or diseased trees in amounts less than 10 percent of the volume per acre, where it will have only a minimum impact on the timberland resources. The CDF archaeologist determined that the damage to the previously recorded and highly significant site constituted a major impact. He urged that all logging operations be halted and a THP be submitted. This beautiful property was being heavily logged, including the harvest of numerous healthy redwood trees exceeding six feet in diameter. This was clearly a misuse of a Section 1038 Exemption which is limited to dead and dying trees. This Exemption covered over 2,000 acres of green timberland and bypassed the involvement of an RPF or development of a THP. Although CDF eventually halted these timber operations and required the landowner to file a THP, this action came far too late for the significant archaeological site on the property that was horribly mangled during these unsupervised timber operations. This incident serves as an example of the inadequacy of certain segments of the Forest Practice Rules, especially Exemptions. Preparation of a THP would have required the involvement of an RPF and more stringent CDF review. Under Exemptions there is very little opportunity for pre-project oversight and limited enforcement action. Exemptions continue to be one of the most serious inadequacies in the Forest Practice Rules regarding archaeological protection. CDF has pursued a nonregulatory solution to this problem by using persuasion and cooperation to achieve compliance. Attempts to educate logging operators and landowners about their responsibilities and obligations have been made through publications and video presentations given at initial LTO environmental training sessions.

The effectiveness of the persuasion technique was demonstrated during an inspection on a CFIP project on the Prather property in Siskiyou County. The consulting RPF described the various treatments that were planned for the property. During the inspection, the CDF archaeologist identified a small but well-preserved prehistoric campsite. The RPF was completely opposed to providing any form of protection for this site. The landowner, who was the founder of the Ralph's Supermarket chain, was also present during the inspection. When the archaeological site was brought to the landowner's attention, he showed considerable interest and insisted that it be fully protected, in spite of the protestations of the RPF.

During these early years, the authority to conduct archaeological work, or enforce archaeological protection, was extremely limited. It was a continuous struggle to implement even the most basic archaeological investigation. CDF was strongly committed to protecting property rights, and any issue that could result in economic loss to a landowner was construed as a taking of private property. The profound weakness of enforcing archaeological protection manifested itself on several revealing issues in terms of the constraints placed on archaeological efforts. One of these issues was the recording of archaeological sites. CDF believed that landowner permission was necessary in order to conduct any site recording. During inspections, if sites were found, the CDF archaeologist would take out his or her notebook to begin compiling information to prepare a site record. Oftentimes, foresters would admonish the archaeologist that

this activity was not going to be allowed. They would typically be supported by the CDF inspector. Complaints from foresters and landowners made their way back to CDF Headquarters and the CDF archaeologist was instructed by the program supervisor (Tom Randolph) that he was not to attempt site recording without landowner approval, and CDF really didn't want to spend limited staff archaeologist time filling out site record forms. This directive was tacitly overruled by Randolph's supervisor, CDF Staff Chief Audley Davidson who advised the archaeologist to continue to record sites if such activities were expected by the public as part of completing professional work.



Audley Davidson, Staff Chief over Archaeology during the early years of the program.

A controversial issue arose in 1980 over the use of cameras during preharvest inspections. A member of the multiagency THP Review Team representing the Regional Water Quality Control Board was refused permission to use a camera during a preharvest inspection by the plan submitter, Masonite Corporation. The Review Team member insisted that the photographs were necessary in conferring with others in his agency about the THP. Masonite argued that such photos had been used in a pejorative manner in the past and that they could be employed in future law enforcement actions in violation of unlawful search and seizure statutes. CDF Director David Pesonen denied the THP and the Board of Forestry upheld his decision. Masonite took the case to court and received a favorable ruling on a technicality. The court found that the Board of Forestry had failed to show specifically how the lack of photographs had prejudiced their ability to make an informed judgment and ordered the approval of the plan (Martin 1989:8-10). In the early years of the CDF Archaeology Program, permission to bring a camera during archaeological inspections was denied on many occasions. The CDF archaeologist eventually refused to participate on inspections or submit plan approvals without the aid of a camera, and without the ability to record site discoveries as stipulated by state policy.

Another area where the CDF archaeologist struggled to gain professional credibility was in the effort to acquire a CDF uniform. In the course of many early meetings, it was recognized that the lack of a uniform was a handicap in presenting a professional and authoritative image for the Archaeology Program. At least one CDF official was incredulous that the Department even employed an archaeologist. During an inspection on the Lassen-Modoc Ranger Unit in 1983, the CDF archaeologist was invited to meet Unit Chief Lloyd Keefer. In the course of a thorough interrogation, it became apparent that Chief Keefer did not recognize the CDF archaeologist as an official member the CDF's staff, inquiring if he was actually a DPR employee because he was not wearing a CDF uniform. It became apparent that, in many situations, it would be preferable to have a CDF uniform in order to present the appropriate image necessary to accomplish the goals of the newly established Archaeology Program. Consultation amongst CDF officials supported the contention that a uniform would be beneficial to presenting the image of an official CDF representative, and all CDF staff archaeologists are now official uniform wearers.

Over the years, CDF, due to a perceived lack of authority, public pressure to reduce regulatory burden to private landowners, or inadequate assessment of potentially destructive impacts, has

occasionally shortchanged cultural resources. Many ground-disturbing projects were approved without adequate archaeological review, sometimes resulting in significant resource damage. These incidents of resource damage resulted in embarrassment for the Department and the diminishment of credibility for the Archaeology Program. One of the objectives of the CDF Archaeology Program has been to reduce the number of these poorly planned projects that resulted in resource damage. The preceding incidents do not begin to cover the full spectrum of situations encountered during the early years of the CDF Archaeology Program. They only serve to highlight a few of the controversial events and problematic issues that have been confronted along the way.

Archaeological Training

One of the most important components of the CDF Archaeology Program is archaeological training given to RPFs and other resource professionals responsible for environmental review work supporting CDF projects. A substantial commitment of time and energy has been given to the development and delivery of this archaeological training program. The purpose of the training program is to provide archaeological resource recognition and management abilities to CDF staff, private sector RPFs, and other resource professionals that are responsible for conducting environmental impact assessments for projects as required by CEQA. This program has been certified by the California Board of Forestry and Fire Protection and incorporated into the California Code of Regulations. Archaeological training was initially developed in response to Forest Practice requirements but has come to have broader applicability for the full range of managers with cultural resource management responsibilities.

The archaeological training program is currently delivered in partnership with the California Licensed Foresters Association (CLFA) and has been for the past 15 years. CDF is not adequately staffed or budgeted to provide this training, so the costs for delivery of these courses is funded through the collection of registration fees paid to CLFA by the students. Course costs include speaker fees, travel expense for instructors, printing costs, facility and equipment rentals, lunches, and refreshments. At the present time, Hazel Jackson of CLFA administers the participant registration and logistics for the training program, while CDF develops course curriculum and delivers the training.

Through this training, students learn to recognize, record, and devise adequate protection measures for prehistoric and historic sites located throughout California, with emphasis on the specific types of cultural resources found within forest and rangeland environments under CDF's jurisdiction. Students that satisfactorily complete this training are considered qualified to conduct basic archaeological surveys for CDF projects, supported by professional archaeologists on staff at CDF, and provide assistance to CDF in meeting its responsibility to identify and protect significant cultural resources. The archaeological surveys, reports, records, and protection measures submitted by these archaeologically trained resource professionals are reviewed by CDF staff archaeologists to ensure compliance with regulations, conformance with professional standards, and adequacy of protection measures.

The advent of concern for the protection of archaeological and historical resources necessitated that foresters and other resource professionals acquire an ability to recognize cultural resources

and an understanding of issues regarding their preservation. A program developed by the USFS to train nonarchaeological personnel in cultural resource management activities may have provided the initial inspiration for the training implemented by CDF, but its implementation was guided by the need to achieve a balance between the cost to landowners and CDF's limited archaeological resources on staff. A program to provide archaeological education to timber operators by DPR personnel was being discussed within CDF as early as 1976 (Brian Barrette to Frank Goodson, Memorandum, May 27, 1976, CDF, Sacramento).

Classroom session at the four-day archaeological training course.

The CDF archaeological training program was inaugurated in 1979 when DPR Archaeologist John Foster, under contract to CDF, provided three training classes to CDF foresters. The next three classes were given during 1982 by CDF Archaeologist Dan Foster at the CDF Siskiyou Ranger Unit in Yreka, the CDF Tehama-Glenn Ranger Unit in Red Bluff, and Sierra College in Rocklin. These one-day classes were attended mainly by CDF foresters with a few RPFs sitting in if they had happened to hear about the classes. In the late 1980s the training sessions became very popular and many RPFs made a deliberate effort to participate. Attendance was voluntary at that time but almost every hall was filled to capacity. One huge class in Redding had over 200 students. Nearly all RPFs that wrote or reviewed plans attended one of these sessions. By the end of 1987, CDF archaeologists had conducted a total of eight training sessions. Only one class a year was provided for the next several years until the adoption of the Forest Practice Rules requiring archaeological training.

Artifact recognition workshop at CDF training class.

The archaeological training program has gradually evolved over the years. Initially it was directed primarily towards CDF staff, but soon expanded to include RPFs on a voluntary basis. Eventually, training became a requirement for anyone conducting archaeological investigations on CDF projects. The current format and curriculum of the archaeological training program was established in 1990. In 1991, the Board of Forestry approved a comprehensive set of archaeological rules that included provisions requiring archaeological training for persons preparing THPs. Following the adoption of these regulations, the demand for training sessions greatly increased. From three to seven classes were provided each year between 1991 and 1995. Six classes were given each year from 1996 to 2001. Class size is now limited to 46 students for the four day class and 32 students during the one day refresher class. These class limits ensure

the effectiveness of the instruction and enable CDF to carefully review student's abilities to identify and protect heritage resources prior to issuing certification.

Presently, the CDF archaeological training program is presented in two stages. Students must first complete an intensive four-day training course. Then they must attend a one-day refresher course every five years to renew their certification. The initial course is a full four-day program offered to those who have not previously received archaeological training, or who attended a course before 1990 when the current curriculum was implemented. This course consists of illustrated slide lectures, group discussions and workshops, assigned reading, and archaeological field surveying exercises. These activities familiarize students with the kinds of archaeological materials they are likely to encounter, their legal obligations towards them, and how to best achieve compliance with current state cultural resource protection laws and regulations.

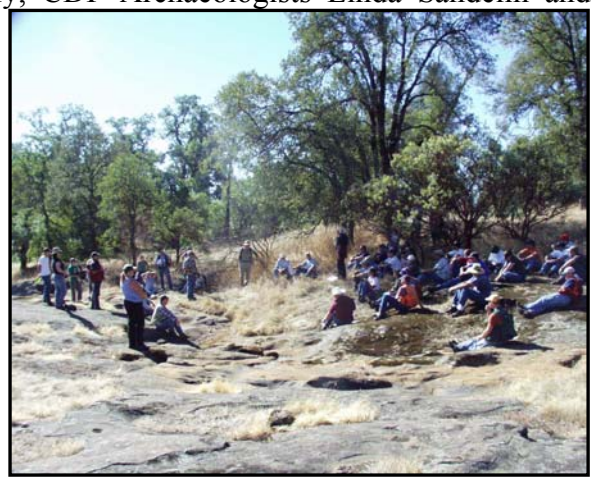
Cadre for CDF Archaeological Training Course #71, Redding 2001.

For those who have completed the initial four-day course, a one- day refresher course is offered. This course is held entirely in the field where students work in small group settings to renew artifact recognition skills and develop appropriate management strategies for sites located in mock project areas. In addition to refresher training, this course also serves as a performance evaluation. In small group settings, professional archaeologists evaluate each student's skills, knowledge, and ability to conduct the archaeological tasks required by the Forest Practice Rules. Students must also complete a homework assignment consisting of the preparation of an archaeological site record that meets current professional standards. Students who satisfactorily complete the training courses receive an archaeological training certificate that entitles graduates to conduct archaeological survey work for CDF projects. The certificate is valid for five years. Every five years another refresher course must be taken. Graduates also receive credit towards continuing education requirements recognized by the Society of American Foresters.

Instructors for the archaeological training program include state, consulting, and research archaeologists, RPFs, and Native American representatives. Over the years, some of California's most distinguished archaeologists have served as instructors. Francis A. Riddell, the first State Archaeologist, was an instructor from 1986 to 2002. Professor Thomas N. Layton of San Jose State University provided instruction over the course of a decade. Brian D. Dillon has been an instructor since 1990, participating in over 70 classes. Other prominent archaeologists that have provided instruction include Eric Ritter, Franklin Fenenga, Dave Fredrickson, Mark Kowta, Mark Raab, Roy

Training class conducting site mapping exercises at Flat Iron Ranch near Ukiah.

Sahls, and William Wallace. Dan Foster has organized or supervised all of the training classes since 1982. CDF staff and other individuals that have taught classes include Ron Berryman, Patricia Murphy Brattland, Mark Fleming, Dan Foster, Mark Gary, Lucky Gillett, Blossom Hamusek, Mark Hylkema, Ted James, Richard Jenkins, Jim Purcell, Bob Rynearson, and Kathleen Schori and Chuck Whatford. Currently, CDF Archaeologists Linda Sandelin and Gerrit Fenenga serve as lead instructors.



Brian Dillon instructing students at Church Rock Site near Redding.

The archaeological training program includes educational materials that are approved by the CDF Director. These materials are provided in the *Reference Manual and Study Guide for the California Department of Forestry and Fire Protection Archaeological Training Program* (Foster, ed. 2003). This manual started out as a few stapled copies of relevant articles, but has now grown to a hefty two-volume set of over 1,400 pages. These volumes contain an extensive compilation of information that may be useful to anyone conducting investigations for CDF projects including pertinent articles on the ethics of archaeological preservation; California prehistory, historical archaeology, and ethnography; extracts of legal requirements and regulations; procedural requirements; site impact evaluation and protection measures; survey and site recording techniques; artifact recognition information; and many additional reference materials.

One part of the curriculum consists of field trips to representative archaeological sites in the vicinity of the class that is being given to conduct survey, site management, and site recording exercises. The first two classes organized by John Foster included field trips to JDSF and the Forest Experimental Station in Tulare County. Some of the sites that were visited during Dan Foster's earliest years of archaeological training courses include a housepit village site on Orel Lewis's property (SIS-184), sites near Redding (Pine Grove, Oasis Road #1, and Church Rock), fours sites on JDSF (MEN-790, 1362, 365, and 1371), sites near CDF's Whiterock Fire Station (MRP-1, 2, 275, and 898), and sites along the shore of Bass Lake. In the middle years the following sites were visited: PLU-668, SIE-391, sites on the Holstrom property, in Scott Valley, the Pope property, Ano Nuevo State Park, and sites in Thousand Oaks, Topanga Canyon, and Malibu. Since 1991 the following sites have been utilized for field exercises at CDF archaeological training courses: DNO-20, HUM-461, Harding Site, MEN-1946, -1914, Layton's

Brian Dillon and Linda Sandelin leading site recording exercises at the Salt Creek Site near Redding.

sites at Albion, PLA-689, -694, -706, sites at the Hopland Field Station, MEN-2859 (Indian Huts), Church Rock, Salt Creek Village, sites near Burney Valley (SHA-404, -2202, -2219), MEN-610, -2203, Sugar Pine Conservation Camp, Carlson Site, Jack June Site, Pond Site, Salt Creek, Tuolumne Camp 9, Chuck's Chert Quarry, Glittering Rock, Indian Huts, Grass Lake, Keystone, Flat Iron Ranch, Two Barn, Ukiah area, and several sites in Cuyamaca Rancho State Park.

The archaeological training classes are offered to three main groups: CDF staff with archaeological review responsibilities required by CEQA; CDF fire protection personnel; and private sector personnel who are responsible for completing archaeological surveys, impact evaluations, and site recording requirements as specified in the Forest Practice Rules. CDF staff that are offered the training include Forest Practice inspectors, environmental coordinators, state forest managers, forestry assistance specialists, VMP coordinators, prefire engineers, project planners, and others with responsibilities for archaeological review work supporting CDF projects. Fire protection personnel that are encouraged to attend the training include Battalion Chiefs, Station Captains, Crew Captains, Strike Team Leaders, Heavy Equipment Operators, Field Observers, Fire Suppression Repair Team Members, and personnel working in the Planning Section. Private sector personnel who are expected to complete the training include RPFs who prepare THPs and their supervised designees, forest technicians, timber operators, and others who participate in cultural resource survey and reporting work supporting THPs. The training courses are also open to private timberland owners, Native Americans, and other resource professionals who work on or review CDF projects. Members of the general public are allowed to attend when space is available. The personnel that have received this training provide a large work force to assist CDF in accomplishing its mandated cultural resource responsibilities.

The CDF archaeological training program has become recognized as one of the most successful programs of its type in the country. Foresters from other states such as Nevada, Washington, and Montana have sought to attend these classes for the introduction it provides to cultural resource management. In particular, at least 13 employees of the Nevada Division of Forestry (NDF) have attended these CDF-sponsored training sessions. Many NDF projects receive federal funding and require compliance with federal cultural resource protection regulations. The training received from the CDF program helps NDF employees recognize and protect cultural resources during the implementation of these projects.

The archaeological training provided by CDF has proven to have wider application than strictly to achieve compliance with mandated archaeological and historical resource protection requirements. Individuals from professions as diverse as a county planning department and the director of a local museum have benefited from this program. The CDF archaeological training has given them the ability to identify sites, better understand archaeological issues, and provide site protection during project development, demonstrating how cultural resource protection can be enhanced beyond the basic needs of regulatory compliance.

The CDF Archaeology Program has been criticized for its efforts to train and utilize foresters and other resource professionals for archaeological investigations. When the archaeological training program was initially developed, it was not intended to replace professional archaeologists with foresters, but was designed as an educational tool to train foresters in site recognition, use of the

state archaeological inventory system, and to recognize when a professional archaeologist was needed. The training course was never intended to turn foresters into professional archaeologists.

Criticism of the archaeological training program may have been partially motivated by a perceived loss of economic benefit to the archaeology community. At the inception of this program, consideration was given to the possibility of requiring professional archaeological involvement in THP preparation. However, several important drawbacks to this approach were identified. One problem is the highly variable size of THP areas which can range from only a few acres to thousands of acres in size. On very small plans, there is often not enough economic benefit to pay for a professional archaeological study. Another consideration is the fairness doctrine which dictates that various industries be treated equally. Some agricultural industries, such the farming of vegetable crops, are usually not required to perform archaeological surveys or protect sites. There was also concern that the archaeological community would not be able to provide the numbers of qualified personnel necessary to respond to the extent of the forestry-related surveys that were needed at the time.

Another factor leading to criticism of archaeological training may be a lack of awareness of the level of professional oversight that is an important component of the CDF Archaeology Program. All findings that result from investigations conducted by participants in the CDF archaeological training program are carefully reviewed by professional archaeologists on the CDF staff to ensure that the analysis and conclusions made by a nonarchaeologist are in compliance with regulations and conformance with professional standards. CDF utilizes recognized criteria for evaluating the qualifications of archaeological review personnel, such as state archaeologist civil service classifications, the guidelines of the Society of Professional Archaeologists, and the Secretary of the Interior's Professional Qualifications Standards. An assumption that archaeological investigations conducted for CDF projects are not subjected to thorough professional oversight would be an inappropriate characterization of the program.

Archaeologists have long been concerned about the level of professionalism within their own discipline. Questions regarding educational credentials, experience, competency, and ethical standards have a long history in archaeology and continue up to the present day (King and Lyneis 1978; Lynott and Wylie 2000). These considerations have led to the formation of organizations such as the SCA, the Society of Professional Archaeologists, and the Registry of Professional Archaeologists. One purpose of these organizations has been to provide a level of oversight for the discipline, but these efforts have had limited effectiveness. It has recently been suggested that a state-administered licensing program be implemented for the archaeology profession (Sutton 2003a, 2003b).

It is interesting to recognize that the procedures employed by the CDF Archaeology Program provide just the form of professional licensing and oversight that has been called for. The majority of the participants of the archaeological training program and the personnel most likely to be performing archaeological investigations under the jurisdiction of CDF consist of RPFs who are licensed by the State of California. RPFs are subject to disciplinary action for unacceptable conduct and may have their licenses suspended or revoked for deceit, gross negligence, incompetence, and material misstatement of facts (Martin 1989:65). CDF also has

several law enforcement options at its disposal including criminal, civil, and administrative actions to ensure compliance with cultural resource protection statutes.

Ultimately, it is not the credentials a person has, but the quality of the work they perform, that matters. Anyone conducting archaeological studies should follow the commonly accepted methods and ethical standards of the discipline. It is the responsibility of the lead agency to verify the capabilities and expertise of the persons conducting archaeological investigations and the quality of the work produced. CDF relies on the observations of these professional resource managers that have received archaeological training to identify and evaluate impacts to archaeological resources in order to meet its cultural resource protection responsibilities.

During the 1990s, a system of course evaluation was established for the archaeological training program. Questionnaires were provided to participants at the conclusion of each class. These questionnaires solicit comments on the quality of the information presented, the performance and expertise of the instructors, an overall course rating and evaluation, and suggestions for improvement. Comments are compiled by CDF staff into a comprehensive report that is submitted to the Board of Forestry, the CDF Director, and CLFA. The information received from these questionnaires is used in the planning and development of subsequent training sessions. For the most part, the comments received have been positive, and the critical comments have been extremely helpful in designing improvements to the program. Despite the best efforts of those who organize and deliver the archaeological training program, a few RPFs fail to appreciate the value of archaeology and steadfastly cling to negative attitudes. While these foresters may recognize their legal obligations towards cultural resource identification and protection, they refuse to do any more than is absolutely necessary to comply with the regulations.

CDF maintains a list of all training classes that have been given and a roster of all students that have satisfactorily completed the training. As of 2003, eighty-two classes had been provided with over 2,700 students completing the program since 1982. In 2003, over 400 CDF employees received archaeological training through the CDF Academy in Ione. Recently, it has been recognized that the training program might be more successful if it was segregated into separate sessions so that instructors could focus on issues that are most relevant to target audiences. Training directed at private sector RPFs could emphasize site identification, recording, protection, and other issues related to THP preparation. Training for CDF fire personnel could concentrate on developing site recognition skills so that sites could be avoided during fire suppression efforts whenever possible. Sessions tailored for CDF staff could address certain archaeological issues in greater detail than is possible within the current format. The delivery of the one-day refresher course entirely in a classroom setting has also been considered.

Graduates of the CDF archaeological training program are required to demonstrate their ability to identify archaeological sites in the field. As a result of this program, hundreds of foresters are now actively searching for and documenting archaeological and historical resources that previously might not have been found. Typically these efforts are on private lands that would ordinarily not be readily accessible to academic archaeologists. This training program has demonstrated that when given adequate guidance, the professional forestry community can make a highly beneficial contribution to archaeological and historical resource protection and

management activities. The training program has also noticeably improved the quality and reliability of archaeological surveys, project reviews, and inspections made by CDF personnel. The skepticism expressed over whether forestry professionals could adequately address cultural resource issues has been answered by the hundreds of sites that are identified and protected each year as a result of this program.

Survey Procedures

One facet of the archaeological training program that receives particular emphasis is cultural resource survey procedures. Archaeological sites are extremely vulnerable to damage from logging operations, fire suppression, construction projects, and other forestry-related land management activities. These resources are both fragile and easily overlooked during project planning. A cultural resource survey must be conducted to determine if sites are located within a project area. The vast forest and range regions of California contain untold numbers of undiscovered prehistoric and historic archaeological sites. In fact, they represent a significant repository of archaeological information because so much has been destroyed in heavily developed urban areas.

A major problem in implementing a successful cultural resource protection program is that archaeological sites can be easily missed during resource inventories. Many sites and features can only be identified and their significance recognized after the completion of background research on a project area. Careful surveys must then be made by individuals trained to recognize these resources in the field. California law stipulates that significant cultural resources must be protected whenever possible. It is imperative to know what resources are located within a project area before potential effects can be evaluated.

Cultural resource surveys are accomplished through a series of steps. These tasks include an Information Center records check, background research, consultation with knowledgeable individuals, notification of Native Americans, on-the-ground survey, development of protection measures, site recording, and report preparation. The first step in performing background research usually consists of a current archaeological records check at the appropriate CHRIS Information Center. The procedures for conducting a records check are specified in a Memorandum of Agreement (MOA) between CDF, the Board of Forestry, OHP, and the CHRIS Information Centers (Foster, ed. 2003).

In conjunction with the records check, the investigator working on a cultural resource survey conducts appropriate levels of background research. This research includes the review of archaeological, ethnographic, and historical literature; archaeological records and reports; and current and historic maps relevant to the study area. Consultation with knowledgeable individuals such as Native Americans, historical societies, previous landowners, and neighbors can also provide important information. The purpose of this research is to prepare for an on-the-ground survey by becoming aware of the resources known to exist within an area; to become familiar with the types of resources likely to be encountered; and to be ready to record, interpret, and evaluate these findings within the context of local history and prehistory. For CDF projects, staff archaeologists are available to review findings and help determine appropriate survey strategies.

Another component of prefield investigations is to provide written notification of the proposed project to the appropriate Native Americans listed on the current Native American Contact List. This notification is intended to solicit information on the existence of any resources of concern to Native Americans that may be located within the project area. In the event that Native American archaeological or cultural sites are identified within a project area, notification of these findings and the proposed protection measures must also be submitted to these Native American contacts.

Once prefield investigations have been completed, an intensive on-the-ground cultural resource survey is conducted of the project area. This survey is performed by either a professional archaeologist or persons that are certified to perform investigations through the CDF archaeological training program. The objective of this survey is to identify the specific locations of all cultural resources located within a project area including prehistoric and historic archaeological sites, features, and artifacts; historic landscapes, buildings or structures; and traditional cultural properties such as cemeteries, gathering areas, and sacred sites.

CDF Archaeologist Richard Jenkins demonstrating technique for intensive archaeological survey.

Survey methods and techniques employed to achieve adequate coverage can vary depending on the results of the prefield research and the physical characteristics of the property, such as environmental attributes and topography. The four levels of archaeological survey coverage intensity are complete, general, intuitive, and cursory. Complete coverage consists of individuals systematically traversing an area at intervals of 10 meters or less while looking carefully for all evidence of prior human activity. General coverage is similar to complete coverage but with transect intervals spaced up to 30 meters apart because of observational constraints such as heavy brush, forest debris, or steep slopes. Under intuitive coverage, inspection is given primarily to areas that exhibit previously identified characteristics that serve as indicators for the potential occurrence of cultural resources. Transects can be spaced from 30 to 50 meters apart with more intensive inspection given to selected landscape features such as watercourses, springs, benches, ridges, or low rises within flat plains. Cursory coverage consists of the surveyor walking quickly through a project area checking locations where cultural resources are likely to occur.

When the cultural resources within a project area have been identified, specific protection measures are developed for each site. Protection measures are designed to avoid or prevent substantial adverse change to significant archaeological sites within the site area and within 100 feet of the site boundary. These measures must be written in clear, enforceable language and can include adjustments of project location, changes to project design, or modifications of project activities so that damaging effects do not occur.

With the completion of the cultural resource survey, site recording and report preparation are the next responsibility. All archaeological or historical sites identified within a project area during the survey are recorded in accordance with the policies specified by OHP (1995). Although the

current Forest Practice Rules only require the CDF to ensure that all archaeological or historical sites determined to be significant and located within the site survey area on THPs and Emergency Notices, are recorded, CDF has implemented policies and procedures which result in more widespread recording. In most instances, all archaeological and historical sites located within any type of timber operation or CDF project are recorded and protected, and research investigations necessary to determining significance are usually bypassed. Additional guidance for the preparation of site records has been developed for CDF (Betts 2001). An archaeological survey report must be completed for every cultural resource survey conducted for CDF projects. This report is prepared using the *Archaeological Survey Report Form for CDF Projects* or an equivalent format that must meet professional reporting standards (OHP 1989). A complete copy of this report is then submitted to the appropriate CHRIS Information Center for permanent retention. This information is added to the state's database of cultural resources for use during future management activities or research on the property.

Project Review

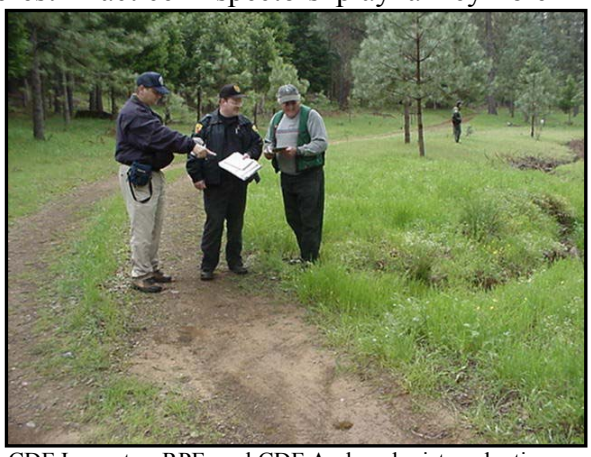
CDF staff archaeologists review all archaeological survey reports prepared for CDF projects that have the potential to impact cultural resources. This includes the Confidential Archaeological Addendum (CAA) that is part of the THP preparation process. CDF projects include any type of activity where CDF acts as lead agency pursuant to CEQA. CDF projects include forest management activities under CFIP, VMP, FLEP, Forest Stewardship, Urban Forestry, and other programs; state forest management; capital outlay, engineering, and facility improvement projects on CDF properties; purchase of conservation easements; and all commercial timber operations.

The CDF archaeological reviewer evaluates the adequacy of the work that has been performed including survey results, site impact assessments, and site protection measures. This review addresses elements of completeness, accuracy, content, and professional adequacy. The reviewer then makes specific recommendations to correct any deficiencies. If necessary, a field inspection is conducted to examine cultural resource discoveries, spot-check areas to test adequacy of survey coverage, review site records in field settings, and make recommendations for follow-up work, if needed. Most importantly, this review includes a careful evaluation of the proposed protection measures to ensure that the project has been designed to be in conformance with applicable state laws and regulations.

An important provision of CEQA is the multidisciplinary review process. For commercial timber operations, this is accomplished through a multiagency review team. THPs are subject to a review and evaluation process by a regional review team consisting of representatives of CDF, DFG, the Regional Water Quality Control Board, and the California Geological Survey. Members of other government agencies and commissions are also represented under certain circumstances. Specialists such as geologists, hydrologists, and archaeologists participate in review team meetings, but only as advisors. Review teams are presented with findings by the CDF staff archaeologist on each THP regarding professional adequacy of archaeological investigations, site protection measures, and conformance with state regulations.

At an initial review team meeting, a decision is made about whether a preharvest inspection is

necessary to examine possible problems in the field because not all archaeological sites are discovered by THP applicants during plan preparation. Some sites are found during preharvest inspections. These inspections provide CDF with an opportunity to check selected areas to evaluate the adequacy of archaeological survey coverage and proposed protection measures prior to project approval. CDF archaeologists and Forest Practice inspectors play a key role in determining if projects conform to archaeological protection mandates. Field inspections are conducted on at least ten percent of projects surveyed by resource professionals with archaeological training to ensure that cultural resources have been successfully identified on these projects.



CDF Inspector, RPF, and CDF Archaeologist evaluating road reconstruction across an archaeological site.

The role of CDF archaeologists in overseeing the work conducted by archaeologically trained resource professionals is specified in a series of Memoranda of Understanding and Programmatic Agreements that bind CDF to these procedures. These commitments are crucial to the acceptance of the CDF Archaeology Program as an adequate supplement to the use of professional archaeologists in the survey of every THP. CDF is the only state agency in California to use archaeologically trained resource professionals to conduct cultural resource management work. The fact that all projects are reviewed by a professional archaeologist on the CDF staff is a fundamental element contributing to the success of this program.

On all CDF projects, the project manager is responsible to ensure that archaeological review procedures have been satisfactorily completed before project initiation. A key component of these procedures is direct coordination between the CDF staff developing the project and the appropriate CDF archaeologist responsible for support and assistance. The project manager is also responsible to monitor and evaluate the effectiveness of any plan used to protect cultural resources upon completion of the project by inspecting sensitive areas to determine if desired objectives have been met.

The first step in the process of conducting an archaeological review of a CDF project is the completion of a Preliminary Study. The purpose of the Preliminary Study is to determine if impacts to cultural resources are possible. If the Preliminary Study reveals the potential to affect cultural resources, an intensive cultural resource survey must be conducted. In general, any project that includes ground-disturbing practices is considered to have the potential to affect cultural resources and, consequently, requires an archaeological survey. A comprehensive list of exempt practices has been developed to assist project managers in the preparation of their Preliminary Study and to expedite the review process (Foster 2003).

Archaeological review of CDF projects under the CFIP and VMP programs has been well established since the beginning of the CDF Archaeology Program. Personnel conducting these projects are accustomed to regular consultation with staff archaeologists. These relationships are

not as well developed in other programs such as state forest management, engineering, or prefire. Efforts are underway to reach out to these branches of the Department to enhance awareness of their cultural resource protection responsibilities.

In the late 1990s, CDF began to experience problems in two CDF units in the southern portion of the Northern Region. The regional archaeologist at Santa Rosa was unable to make regular inspections south of the San Francisco Bay area. The unit foresters would usually conduct archaeological reviews without the assistance of a professional archaeologist. Several projects were approved by CDF that failed to identify important sites. These failures were noticed by local agencies and the general public, causing a loss of confidence in the archaeological review process. For a period of two years, the CDF archaeologist from Fresno was assigned to support these two units and made more frequent inspections resulting in a greatly improved level of archaeological review. Recently, this workload was reassigned to the archaeologist position in Santa Rosa.

Currently, the typical annual project workload assigned to the CDF Archaeology Program includes review of approximately 800 THPs, 200 projects on CDF managed lands and 250 cost-share projects on private lands. CDF staff archaeologists review the archaeological reports supporting these 1,250 projects and conduct field inspections or participate in the actually filed survey on about half, which results in approximately 600 field inspections per year. The team assists project personnel in the completion of archaeological site records for all new discoveries – numbering about 1000 each year. All members of the team are fire-trained and regularly get called out on major wildland fires to help protect cultural resources, an activity which recently has become a significant portion of the workload. In 2002, for example, CDF staff archaeologists spent a total of 49 person days on firelines. Another major element is the delivery of training. CDF staff delivers Board-certified archaeological site recognition training to RPFs, CDF staff, and other resource professionals in the form of about 4-6 classes per year. CDF archaeologists also deliver archaeological awareness training to fire protection personnel at courses at the CDF Academy and in field locations throughout the state. Activities for the Board of Forestry, such as the Golden Trowel Award and review of rule and policy development, maintenance of the web site, administration of the Native American Advisory Committee and the CDF Native American Contact List. And several public outreach efforts round out the annual workload assigned to the program.

CDF currently has established a comprehensive set of policies and procedures for cultural resource review on all CDF projects which are described in the document entitled *Archaeological Review Procedures for CDF Projects* (Foster 2003).

Golden Trowel Award

In 1990, CDF and the State Board of Forestry and Fire Protection established the Golden Trowel Award to recognize outstanding achievements in the identification, documentation, and protection of cultural resources and to call attention to CDF's Board-certified archaeological training program for resource professionals. This award was created in the tradition of the Francis H. Raymond Award which honors individuals and groups that have made outstanding contributions to forestry (Martin 1989:63).

Perpetual Golden Trowel Award at the Board of Forestry and Fire Protection office in Sacramento.

Each year, nominations for the Golden Trowel Award are provided to a selection committee consisting of the CDF Archaeology Program Manager and the Executive Officer of the Board of Forestry. These nominations are recruited from the CDF archaeology staff and the forestry community. A selection is made by the Board of Forestry with the assistance of the CDF Archaeology Office. Persons eligible to receive the Golden Trowel Award include foresters, timber operators, timberland owners, biologists, soils scientists, firefighters, and other forestry personnel. In some years, multiple nominations of worthy individuals have resulted in more than one recipient of the award. Once recipients are named, CDF prepares a report to the Board of Forestry to justify the selection which includes biographical information and a detailed description of the accomplishments leading to the award. This information is included in an award presentation ceremony. Presentation of the award is made during a public meeting of the Board of Forestry. Recipients are given an engraved plaque with a mounted Marshalltown trowel, while a perpetual plaque bearing the name of all previous award recipients is displayed at the Board of Forestry office in Sacramento. The State Historic Preservation Officer has recognized the contributions of the recipients at several of these award ceremonies.

Since its inception, over 20 individuals have received the Golden Trowel Award in recognition of their outstanding efforts in cultural resource management. Recipients have included CDF foresters, private sector RPFs, fire officials, and other resource professionals. Information about the recipients of the Golden Trowel Award and their accomplishments is summarized below.

In 1990, CDF Battalion Chief Bill Johnson was the first recipient of the Golden Trowel Award in recognition of his efforts to identify and protect archaeological sites in the Coalinga area of western Fresno County. Bill was also instrumental in the formation of the Coalinga Archaeological Research Group (Betts and Foster 2001). Dan Ward received the award in 1991 for his work as a Forest Practice inspector. During inspections, he routinely identified archaeological sites that had been overlooked by RPFs. He was also successful at negotiating site protection measures even before they were required by the Forest Practice Rules. CDF Forester Leonard Gwinn received the award in 1992 for identifying a highly significant housepit village during an inspection, saving the site from certain destruction.

Brian Bishop, an RPF working in northwestern California, received the award in 1993 for the discovery and recording of an important Coast Yuki village site on Lincoln Ridge near Westport. He also facilitated an archaeological excavation by serving as an intermediary between Louisiana-Pacific Corporation and San Jose State University which conducted an archaeological field school at this site in 1992. Larrie Mason, an RPF from Burney, also received the award in 1993 for the consistent high quality of his survey reports and site records. His discovery of prehistoric village sites, housepits, rock rings, midden, and surface artifacts in previously surveyed areas demonstrated the level of effort put forth on his THPs. In 1994, CDF Forester Dave Drennan received the award for his survey efforts that resulted in the relocation of CA-

TRI-1, Slakaiya Rock, a spectacular petroglyph site along the Eel River (Foster and Foster 2002).

Four separate individuals received the award in 1995. Private RPF, Steven Heckman, was recognized for his archaeological investigations that resulted in the identification of an extensive complex of historic sites and features including the townsite of Moody. His archival research and interpretations provided a valuable contribution to the history of the Mendocino County coast. Lee Susan, a consulting forester from Fort Bragg, discovered and recorded an impressive number of both prehistoric and historic sites on the THPs he prepared. Thomas Shorey, an RPF employed by Fruit Growers Supply Company, was recognized for his outstanding work in archaeological site identification and management. Becky Robertson was given an award for her work as a CDF Forest Practice inspector and VMP coordinator. Her ability to influence others regarding the importance of archaeological resources has resulted in heightened awareness of cultural resource issues throughout the Sierra Nevada and Central California regions.

Dave Dulitz, forest manager at Mountain Home Demonstration State Forest, received the award in 1996 for his outstanding efforts to inventory, protect, and interpret the prehistoric and historic resources on the forest. His ability to obtain funding for archaeological research was particularly noteworthy.

In 1997, the award was presented to the members of a forestry consulting firm and two additional individuals. David Levy Forestry was recognized for their combined contributions to archaeology through the large number of sites identified and the high quality of their survey reports and site records. Staff members David Levy, Jeff Calvert, and Lucky Gillett worked together as a team during THP preparation. Mark Stewart was recognized for his exceptional survey skills which resulted in the discovery and recording of over 100 sites on THPs throughout California. James Gamble, a private RPF working in northwestern California, was given the award for his many years of significant findings in that region.

Two individuals were given the award in 1998. Nicholas Kent operates a private consulting firm serving timberland owners primarily in Mendocino and Sonoma Counties. He received the award in recognition of his archaeological advocacy with his clients and fellow foresters. His ability to demonstrate effective site stewardship techniques has resulted in the identification and protection of many highly significant sites. Gordon Ponting, a professional biologist from Susanville, received the award for his efforts to identify and document cultural resources while conducting biological investigations during THP preparation.

Board Chairman Stan Dixon presents the Golden Trowel Award to RPF Ted James in 2000.

Tom Francis, a CDF forester in Tuolumne County, received the award in 1999 for his ability to negotiate solutions to archaeological problems and his diligence in conducting background research, survey, site recording, and protection during project review and impact evaluation. RPF Ted James received the award in 2000 while working for Sierra Pacific Industries where he prepared THPs in Shasta and Tehama Counties. Ted was recognized for his personal interest in the

past that was demonstrated by his field methods, background research, and the high quality of his site documentation, particularly his efforts to record historic linear resources. CDF Forest Practice Inspector Jim Purcell received the award in 2001 for his ability to locate unrecorded sites during THP inspections and his advocacy of archaeology with RPFs and landowners. He has also helped to facilitate archaeological investigations on private lands in Mendocino County.

Kern County Fire Department Captain Jack Ringer received the Golden Trowel Award in 2002.

Jack Ringer of the Kern County Fire Department received the award in 2002 in recognition of his archaeological survey work to support VMP projects. Jack has found over 100 archaeological sites including bedrock mortars, midden deposits, lithic scatters, burials, historic foundations and mining sites, and numerous spectacular pictograph sites. He was also recognized for his advocacy of archaeology with private landowners and his efforts to protect archaeological sites from vandals and looters engaged in illicit excavations. The presentation of the award to Jack featured a series of power point images shown through an audiovisual system recently installed in the Resources Building Auditorium in Sacramento.

One of the spectacular pictograph sites discovered by Jack Ringer.

Rich Wade, an RPF with Sierra Pacific Industries, received the award in 2003 for the consistent high quality of the archaeological work that he has completed. Rich confronted many challenging and controversial issues in the plans that he prepared and continuously demonstrated a high degree of competence and professionalism.

The presentation of the Golden Trowel Award to these individuals is a well-deserved recognition of their outstanding contributions to archaeological site stewardship in the course of forestry. Through their work, CDF is able to demonstrate how significant archaeological and historical resources can be identified and protected during forest management without major changes in project activities or undue costs to landowners. This award provides an opportunity to give positive recognition and publicity to archaeological protection efforts and symbolizes the effective integration of cultural resource management into the practice of professional forestry.

Fire Suppression and Archaeology

Fire is an extremely destructive force in California, killing vegetation, damaging soil and watershed values, destroying property, and threatening the lives of people. Over 90 percent of fires are human caused, primarily through carelessness with smoking and the use of fire (Arvola 1978:107). CDF is responsible for the control of wildland fires over what is classified as the State Responsibility Area (SRA) which encompasses 31 million acres of privately owned wildlands, or nearly one-third of California. During emergency response, the primary mission is to protect human lives, property, and forest resources. In the course of fire suppression activities, CDF also has a responsibility to protect resources such as archaeological sites,

whenever such protection is possible. Archaeological sites are extremely vulnerable to damage from firefighting operations, particularly ground-disturbing activities. In the past, since emergency situations are exempt from the provisions of CEQA, little emphasis was placed on protecting archaeological sites during fire suppression.

CDF first began statewide wildland fire protection in 1943, and has since grown into one of the largest firefighting agencies in the world. The Department is divided into two regions with 21 administrative units statewide. Within these units, CDF operates 806 fire stations (229 state and 575 local government), and 41 conservation camps. The Department has responsibility for the protection of over 31 million acres of California's privately-owned wildlands, and for emergency services of all kinds in 35 of California's 58 counties through contracts with local governments. The heart of CDF's emergency response capability is a force of approximately 3,800 full-time fire professionals, resource management personnel, and administrative employees; 1,400 seasonal firefighters; 5,600 local government volunteer firefighters; 2,600 Volunteers in Prevention; and 4,300 inmates, wards that currently provide 198 fire crews. Equipment includes 1,095 fire engines (336 state and 759 local government), 215 rescue squads, 63 paramedic units, 12 Hazmat units, 38 aerial ladder trucks, 58 bulldozers, five mobile communication centers, and 11 mobile kitchen units. The Department funds, via contract, an additional 82 engines, and 12 bulldozers used in six counties – Kern, Los Angeles, Marin, Orange, Santa Barbara, and Ventura. From the air CDF operates nineteen 1,200-gallon airtankers, four 800-gallon airtankers, 9 Super Huey helicopters, and 13 airtactical planes out of 13 air attack bases and 9 helitack bases, allowing aircraft to reach any fire within 20 minutes. CDF responds to an average of 6,700 wildland fires each year. In 2002, this figure rose to over 7,600 fires that burned nearly 118,000 acres.

A resource at considerable risk from wildfire is the recreation value of forests and rangelands. Nature appreciation has been identified as one of the most popular recreation activities and research suggests that visitor use in burned areas is diminished, probably due to the degradation of the aesthetic qualities of the landscape. Recreation use is also affected by wildfires due to damage and closure of facilities, resulting in lost revenues. Direct costs can include the repair and replacement of facilities, removal of hazard trees, and the cleanup and rehabilitation of campgrounds and trails. The potential economic value of recreation lost each year to wildfires has been estimated to be over seven million dollars (Foster 1995).

Archaeological and historical sites also contain values that are particularly vulnerable to damage from wildfires and the suppression activities necessary to contain them. One unique aspect of this vulnerability is that cultural resources are sometimes more at risk from fire suppression activities than from the fire itself. As of 1995, there were over 100,000 recorded archaeological sites in California, and it has been estimated that at least that many more sites remain undiscovered. California also has approximately 85,000 recorded historic buildings situated in rural areas that are at risk from escaped wildfires. The destruction of these archaeological and historical sites during wildfires represents a significant depletion of scientific, educational, and aesthetic values. For Native Americans and other ethnic communities, cultural resources possess traditional, religious, and spiritual qualities that can be lost due to fire (Foster 1995).

The CDF Archaeology Program provides assistance in the protection and management of

cultural resources which may be affected by wildfires within the SRA. Staff archaeologists are periodically requested through the Incident Command System (ICS) to respond to fire incidents in order to review the environmental effects of wildfire and suppression activities on archaeological resources. The first priority is the identification of known sites so they can be avoided during fireline construction and other ground-disturbing activities. More typically, however, the Archaeology Program gets involved in assessing damage to archaeological sites after a wildfire is extinguished or contained. This can include recording sites revealed or affected by the fire, and the development of appropriate stabilization or data-recovery plans during the suppression repair activities. Due to the perception that archaeological site protection was not required during emergencies, the Archaeology Program had limited interaction with the fire protection branch of the Department in the past, but this has begun to change in recent years.

One method used to prevent wildfires is to reduce the amount of accumulated fuels through prescribed burning, mechanical fuels reduction, and other forms of fuels reduction treatments. By conducting prescribed fires in restricted areas with favorable weather conditions, firefighters can control the size, intensity, and movement of the fire to protect surrounding trees, structures, and wildlife. During a controlled burn near Jackson in Amador County, CDF conducted an experiment to determine the effects of prescribed fire on archaeological artifacts. An archaeological site containing bedrock mortars, a flaked stone artifact scatter, and several historic features was selected for the study. The site was situated in a grassy area surrounded by oak trees along a small creek. After a survey of the site, two artifacts were photographed and marked with pin-flags. The burn strategy resulted in the fire burning at various intensities over the site area. Following the fire, the two marked artifacts were relocated and photographed again. One of the artifacts was burned almost beyond recognition while the other was not visibly changed. The undamaged artifact was located in an area that burned very hot but the fire passed over quickly. The heavily damaged artifact was in an area where the fire burned less intensely, but for a longer period of time. This study demonstrated that both duration and intensity are important factors in the damage caused to archaeological specimens from fire (Waechter 2003b).

In August 2001, a small fire burned 20 acres along State Route 88 near the town of Ione in Amador County. Following the fire, CDF Forester Phyllis Banducci and Fire Captain Dave McLean located a previously unrecorded archaeological site that had been damaged by fireline construction. The site contained several large boulders containing bedrock mortars that had been displaced by dozer operations. Far Western Anthropological Research Group, an archaeological consulting firm, was hired by CDF to investigate this finding to determine the extent of site damage. In addition to eight boulders with bedrock mortars, the site was found to contain a large and deep cultural depression representing the location of a ceremonial "round house." The site was carefully surveyed, mapped, and recorded as partial mitigation for the damage that had

A CDF dozerline was cut through a bedrock mortar and midden site on the Highway 88 fire.

occurred. Additional research was proposed in the form of a limited test excavation, but legal stipulations by the landowner for access to the property proved to be unacceptable, eliminating the possibility of further investigations (Waechter 2002).

Archaeologist stands inside a ceremonial roundhouse depression discovered on the Highway 88 fire.

Many CDF activities constitute projects as defined in CEQA, and therefore, require mitigation for negative impacts to cultural resources. Emergencies, such as wildfire response, are exempt from CEQA because public safety is a recognized agency priority over environmental protection. That exemption, however, does not release CDF from the professional obligation to protect wildland resources whenever possible. Although CDF may not be always be required to do so by law, the wise management of cultural resources is expected by the public and avoidable damage can be costly and embarrassing to the Department (Foster et al. 2003).

The Pines Fire of 2002 burned nearly 100 square miles of eastern San Diego County. CDF Archaeologists Richard Jenkins, Steve Grantham, and Linda Sandelin responded to this incident conducting site protection and recording work during rehabilitation after the fire. Of 49 sites inspected by CDF archaeologists, 8 sites were burned over and damaged by bulldozer operations, 8 sites were damaged by bulldozers but not burned, 8 sites were burned over but not damaged by bulldozers, and 25 sites were not impacted by the fire. CDF also hired Far Western Anthropological Research Group to inventory portions of the burned area for cultural resources. Through a review of previous surveys and records, and a cursory survey of portions of the burned area, 299 cultural sites were identified including 249 sites within or adjacent to the fire, and 50 sites outside the fire zone but within the area of bulldozer activity. Of the 61,690 acres burned, 570 acres were surveyed, resulting in the discovery of eleven new sites. Seven previously known sites were also revisited. Site types included prehistoric villages, hunting camps, milling features, artifact scatters, rock shelters, rock art, historic can dumps, homesteads, trails, and a gold mine. Of the 18 sites investigated by Far Western, 6 sites sustained serious damage from the effects of the fire including damage from bulldozing. Twelve sites were burned over but not significantly damaged (Berg 2003; Waechter 2003a).

CDF Archaeologist Steve Grantham discusses site damage on the Pines fire with a member of the local Native American community.

Archaeological site damage from fire suppression activities on the Pines Fire was recognized by a number of people including members of the local Native American community who observed that CDF contract bulldozers had cut firelines through many sites miles ahead of the fire. CDF began a major effort to assess the extent of

damage and to reevaluate its approach to archaeological site protection during fire suppression activities. Effective procedures and actions to protect cultural resources are expected by the public who view CDF as a steward of California's natural and cultural resources (Foster et al. 2003).

The CDF Archaeology Program has begun to develop and implement procedures to protect cultural resources during wildland fire suppression. CDF archaeologists, provided with Firefighter I Academy and Basic ICS training, are taking a more active role in firefighting operations and suppression repair work. The systematic documentation of the types of damaging impacts that can occur during fire suppression has provided the information to make proposals to avoid these impacts. Opportunities exist to identify and protect cultural resources during wildland fire suppression efforts within the ICS structure, particularly during major campaigns that extend over a period of time. In these types of situations, CDF may have opportunities to collect information about known cultural resources, survey for additional resources, and give consideration to site protection measures.

The CDF Archaeology Program has recently proposed a set of recommendations for cultural resource protection during wildland fire suppression operations. This proposal has been distributed to the fire protection program for review and feedback. Specific procedures have been developed for initial attack, extended attack, major wildland fires, and suppression repair efforts. Recommendations in this proposal include procedures for intensive cultural resource surveys in areas subjected to ground disturbance such as dozer lines, bladed safety areas, helipads, and new roads, which can be particularly destructive to archaeological sites. Other facility locations that can damage cultural resources include incident command posts, incident base camps, staging areas, and portable water tank locations. The goal of these protection proposals is to avoid the damaging impacts of construction to cultural resources whenever possible (Foster et al. 2003).

One aspect of these fire-related proposals that has already been put into practice is the education of firefighters to recognize and report archaeological sites encountered during fire suppression activities. CDF has begun an active program of providing archaeological training to the firefighting personnel that are in the best position to protect cultural resources during emergency situations. Key staff in fire protection and resource management capacities have been encouraged to complete the archaeological training courses offered by the Department in order to heighten awareness of cultural resources and to facilitate the implementation of protection procedures.

When responding to wildland fires, CDF is committed to the protection of cultural resources, if such efforts can be accomplished without delay or hindrance to emergency response operations. The Pines Fire represents a significant event in the development of the CDF Archaeology Program. A formalized relationship is now being developed that will facilitate archaeological input on all major fire incidents. Before the Pines Fire, CDF did not have systematic procedures for the identification and protection of cultural resources during major emergencies. Because of this incident, CDF is beginning to develop a more comprehensive system for protecting cultural resources during wildland fires. Another positive outcome of the Pines Fire is an increased interest and awareness of cultural resources by CDF firefighting units in southern California.

These recent attempts to reduce the damage caused by fire suppression are just one example of the continuing efforts to improve the CDF Archaeology Program.

Public Outreach

It has long been recognized that successful cultural resource management ultimately depends on public advocacy and outreach to accomplish long-term goals. These efforts are necessary to educate the public on the importance of archaeology, provide interpretation through the dissemination of information, and build a constituency that will provide continuing political support. The CDF Archaeology Program has engaged in a variety of public outreach efforts that include education, interpretation, and advocacy.

CDF archaeology staff members have participated in numerous public presentations throughout the state. They regularly attend professional conferences such as the annual SCA meetings, and have made contributions through articles and research papers. This participation supports CDF's standing in the professional community through the establishment and continuance of contacts with other archaeologists and cultural resource managers. Since 1995, CDF archaeologists have periodically provided training and information to the staff and docents of the Maidu Historic Site Interpretive Center in Roseville. CDF Archaeologist Richard Jenkins has been particularly active in his region through programs such as Project Learning Tree, school and historical society presentations, and California Archaeology Month.

A major form of public outreach of the CDF Archaeology Program has been through publications. The CDF Archaeological Reports series represents a major contribution to archaeological research. The individual volumes in this series will be described in a subsequent chapter. In addition to these reports, a number of papers and pamphlets have been prepared to disseminate results of investigations and provide technical information to specific interest groups. One example is a pamphlet directed at private landowners and Licensed Timber Operators to apprise them of their responsibilities and obligations towards cultural resource protection (Foster 2000).

Over the years, CDF has approached many of its regulatory functions from a position of landowner assistance, persuasion, and cooperation, rather than through punitive measures. Particular emphasis has been placed on archaeological advocacy with private landowners and timber operators. An attempt has been made to demonstrate that through careful planning and well thought-out project design, archaeological and historical resources can be protected while allowing industry to achieve management objectives without an excessive burden on landowners. There are specific skills necessary to communicate challenging archaeological issues to apprehensive landowners. Successful archaeology can depend on a degree of salesmanship to persuade landowners of the value and importance of the cultural resources on their property. When approached in the right way, landowners can become allies, instead of adversaries, in the effort to protect cultural resources. If a landowner considers the archaeological resources on their property an asset, rather than an impediment, they are much more likely to ensure their preservation. This approach can result in the most effective form of resource protection, protection that is initiated by the landowners themselves, not enforced by government

regulations. Enlightened landowners will give consideration to cultural resources during all types of land management activities over the long term, and not simply on projects with agency oversight.

One form of public outreach implemented by CDF is a series of training videos designed to inform timber operators about the Forest Practice Rules. These films combine practical on-the-ground instruction with a positive message (Martin 1989:62). In 1999, an archaeology video was added to this series. This program features CDF archaeology staff and logging industry personnel presenting information on the identification and protection of archaeological sites during logging operations.

One public outreach effort initiated by the CDF Archaeology Program was the formation of the Coalinga Archaeological Research Group (COALARG). In the late 1980s, CDF was engaged in an active controlled burn program in western Fresno County. During one of these projects, an archaeological site was damaged by fireline construction. An archaeological excavation sponsored by CDF at this site stimulated considerable local interest. Several individuals including CDF Battalion Chief Bill Johnson, CDF Archaeologists Dan Foster and Richard Jenkins, and a number of volunteers and local residents formed an organization to promote the identification, study, and protection of the archaeological resources of the region. During its existence, COALARG made a substantial contribution to archaeological research by documenting nearly 100 archaeological sites, conducting test excavations at the Corral Site, facilitating the transfer of private collections to a local museum, providing a variety of public presentations, publishing several research papers, and encouraging an appreciation for the archaeological resources of the Coalinga region. These accomplishments have been compiled in a report published by CDF (Betts and Foster 2001).

Another form of public outreach is the CDF Archaeology Program website. This website serves as a convenient means to provide information to the public about CDF's commitment to protecting cultural resources. It provides news on recent discoveries and events, and makes available current information and other assistance to CDF staff, private sector RPFs, and other personnel involved with the program. Information provided on the website includes the current Native American Contact List, a list of the CHRIS Information Centers, the policies and procedures governing records checks, a schedule and enrollment instructions for archaeological training courses, survey and site recording forms, instructions for site recording, and the CDF Management Plan for Historic Buildings and Archaeological Sites. The CDF Archaeology Program website has been developed and maintained since 1997 through a contract with the Underwater Science Program at Indiana University. Anyone interested in the Archaeology Program can go to http://www.fire.ca.gov, Resource Management, and Archaeology.

The CDF archaeology staff is continuously exploring ways to reach out to the public. The intent of these outreach efforts is to hopefully instill a greater awareness and appreciation for cultural resources that will lead to support for preservation efforts in the future.

V. PARTNERSHIPS

CDF has been directed by the Board of Forestry and Fire Protection to consult with and solicit the cooperation of state colleges and universities, public agencies, and private organizations when conducting studies that require special knowledge and to enter into cooperative agreements with these entities for investigating forest management problems of mutual interest. It is considered to be particularly desirable to make the state forests available to educational institutions and other agencies for research projects (CDF 2002:154). In accordance with this directive, the CDF Archaeology Program has developed a number of partnerships in order to accomplish its objectives.

The CDF archaeological training program, described in the preceding chapter, is delivered in partnership with CLFA. CDF prepares the course content, provides the training materials, and delivers the actual classes, while CLFA conducts course planning, registration, and other administrative functions. The assistance and support of the Forest Fire Lookout Association, a private organization devoted to the protection and restoration of historic fire lookouts, has contributed to the implementation of a management plan for the historic lookouts under CDF jurisdiction. A well-developed program of contracting for archaeological services with various branches of the California State University system is a long-standing component of the CDF Archaeology Program that will be described in a subsequent chapter. The CDF Archaeology Program could not function without the existence of the California Historical Resources Information System (CHRIS) which is administered by the OHP. Relationships with state government agencies, such as the OHP and the California Department of Corrections (CDC) through the conservation camp program, have resulted in substantial contributions to archaeology. A formal relationship with federal agencies including the USFS and the BLM is implemented through a programmatic agreement. Consultation with Native Americans is accomplished through interaction with the NAHC, the Native American Advisory Council, and use of the CDF Native American Contact List. These are just a few examples of partnerships that contribute to the CDF Archaeology Program. Three of the most important relationships, those with CHRIS, federal agencies, and the Native American community, will be described in more detail below.

California Historical Resources Information System

From the beginning of historic preservation activities in California, the critical importance of developing an inventory of properties in order to make informed decisions regarding preservation priorities has been recognized. The first step in any archaeological investigation is to determine what is known about the area under consideration and what has been revealed by previous investigations. Archaeologists have long recognized the necessity of maintaining repositories of archaeological information to facilitate this stage of archaeological research, and have struggled with the problem of where to store their records and documents. The effort to establish and maintain an archaeological information system in California has been a complex and arduous process.

The first attempt to form a comprehensive repository for archaeological information was initiated in 1948 with the establishment of the California Archaeological Survey at the University of

California, Berkeley. Archaeological documents were being compiled at several institutions at the time, but there were no systematic procedures for recording sites and no coordination between the various institutions. The primary objective of the California Archaeological Survey was the collection and preservation of prehistoric remains and records concerning them with the hope of learning everything possible about the prehistory of California. The program was directed by Robert Heizer with fieldwork conducted by Archaeologist Franklin Fenenga, aided by Assistant Archaeologist Francis A. Riddell. The scope of the Survey was statewide, and collaboration with other institutions and organizations was established through an Advisory Board (Heizer 1948).

Among the objectives of the Survey was the organization of a master data file. Information on the nature and contents of archaeological sites was recorded on printed forms and site locations were plotted on maps to create this file. A standardized site survey recording form was patterned after one used by the Smithsonian Institution with a few minor adaptations. A manual was prepared with directions on how to fill out these records. A system of site numbering was employed based on county designations followed by a sequential number, instigating the current trinomial system. Site locations were plotted on the available USGS Topographic Quadrangle maps or on maps published by the State Division of Highways. A publication series entitled *Reports of the California Archaeological Survey* was inaugurated that included reports of Survey progress, excavations, bibliographies, and discussions of methodology and technique. At its inception, the activities of the Survey were to be carried out by university staff members on the Berkeley, Los Angeles, and Santa Barbara campuses. Site files were initially compiled at Berkeley and by the Archaeological Survey Association of Southern California operating out of the Southwest Museum (Heizer 1948). In 1954, UCLA began compiling the records for southern California. The California Archaeological Survey provided an important service to agencies coordinating the numerous surveys and excavations being conducted for the many development projects that were underway, but the limited staff and budgets of the Survey could not keep up with the demands of the times (Riddell 2002a).

Many of California's state parks were created to preserve the historic and prehistoric resources of the state. In addition to the inventories that were being compiled at the university campuses, the Interpretative Services Section of DPR had, over the years, been compiling an inventory of cultural resources within the state park units (Riddell 1965:4). In the early 1960s, State Archaeologist Francis Riddell, formerly of the California Archaeological Survey at Berkeley, also began compiling archaeological site records resulting from the multitude of projects that were being coordinated through his office in Sacramento (Riddell 2001a).

The absence of a comprehensive state policy on historic preservation prior to 1960 was recognized as an impediment to the protection of archaeological resources. The state had no centralized repository of archaeological information and no standardized site records or report formats. With several different state agencies implementing archaeological programs, various site numbering and data filing systems began to be used. As time went on, the proliferation of archaeological research resulted in documents, maps, and notes being scattered among scores of institutions and private libraries (Moratto 1973:9-10). Additional problems arose because of the fact that archaeological site records were housed at university campuses where faculty could dictate who would be allowed access to them. Academic archaeologists generally regarded

avocationalists, and even archaeologists outside the university system, with disdain, and restricted use of the archaeological records. Many of these early records were also of limited usefulness, containing limited information beyond a basic site location (Hata 1992).

In 1961, the California legislature approved Assembly Concurrent Resolution No. 25 to formulate a long-range plan to preserve, restore, and interpret the state's historical resources. The Division of Beaches and Parks was directed to produce an inventory of marked and unmarked historic resources. A Historical Information Resources File was established to identify repositories of significant historical information. An inventory form was developed and field-tested, and criteria were established to determine what should be considered historic and significant. Archaeological sites were accepted into the system if they contained important scientific information. An emphasis on volunteer support for the statewide inventory was established through the assistance of local historical societies. Preparation of the state inventory proved to be problematic. Many counties lacked the funds and personnel to conduct local surveys and many volunteers found the inventory forms too complicated (Hata 1992). Substantial time would elapse before a comprehensive statewide inventory of historic resources would emerge.

Passage of the NHPA in 1966 created additional impetus for the development of a statewide inventory of archaeological and historic resources. This federal legislation directed states to designate a SHPO and to compile a statewide inventory of historic sites. In California, these duties were delegated to DPR. In 1969, AB 1213 added revisions to the Public Resources Code that directed the State Historical Landmarks Advisory Committee to maintain a comprehensive record of all archaeological sites in California by obtaining data from all appropriate sources (Hata 1992:142).

During the late 1950s, in an attempt to parcel out the increasing demand for archaeological surveys, Francis Riddell divided the state into 12 regions and assigned an institution or qualified individual in each area to conduct the needed site surveys (Riddell 1965:2). This effort to establish regional centers of archaeological expertise provided the model for the state system that would eventually emerge. Initially, this system was criticized because it detracted from the coordination of archaeological research. In 1966, a statewide committee was formed to develop plans for the coordination of archaeological site records and "to study the feasibility of establishing through legislation a central agency or system of regional centers for the compilation and maintenance of archaeological site records." This committee would eventually become formally organized as the SCA. The new organization lobbied for the protection of archaeological sites and developed legislation that would have established a central agency or system of regional centers for the compilation and maintenance of archaeological site records. By 1973, the SCA had facilitated the establishment of eleven district clearinghouses to maintain, review, and store data. These clearinghouses also provided archaeological consulting referral services (Hata 1992:217-219).

In 1975, DPR signed a Memorandum of Agreement (MOA) with the eleven clearinghouse coordinators and four other institutions to establish fifteen regional offices that became the California Archaeological Sites Survey. OHP assumed responsibility for the regional offices and DPR's site documents in 1976. Executive Order B-64-80 and the passage of SB 1652 in 1980,

made additions to the Public Resources Code directing the SHPO to maintain a master list of all inventoried resources. The regional offices had become the primary element in the state's effort to manage archaeological data, but they depended on persuasion and cooperation to accomplish this mission, having no legal coercive powers. At this time, OHP Archaeologist William Seidel began to computerize the archaeological and historical sites inventory (Hata 1992). As a result of this unique history, few other states have systems anything similar to the archaeological information system that has developed in California (King 2001).

At the request of state and federal agencies, contract archaeologists, and the Information Centers, in 1982, OHP distributed a set of standardized site record forms and a draft handbook explaining their completion. The site record forms had been developed primarily by the North Central Information Center at CSU Sacramento with contributions from the USFS, BLM, DPR, and with review by the other Information Centers and individual archaeologists. The effort to develop standardized forms grew out of a perception that this would enhance efficiency in review, filing, trinomial assignment, and future use. A second draft was issued in 1986 that included modifications addressing some concerns that resulted from the utilization of these forms. In 1989, the State Historical Resources Commission formally approved the *Handbook* as the standard which the OHP would require for site documentation and acceptance into the California Archaeological Inventory (OHP 1989a).

The CDF Archaeology Program has maintained a long and intimate partnership with OHP and the Information Center system. This relationship is established through a Memorandum of Understanding (MOU) for the identification, evaluation, and recording of historic and prehistoric archaeological resources; and an MOA that specifies procedures for conducting historical resources record checks. In compliance with Executive Order W-26-92, the CDF Archaeology Program manager was also appointed the CDF agency preservation officer, constituting another partnership with OHP.

Cooperation with the Information Centers goes back to the early days of the CDF Archaeology Program. Staff at the Information Centers would often provide information over the phone with no charge in order to help resolve pressing issues. In exchange, CDF would submit site records and other forms of information to correct basic data problems. When OHP began to computerize the site record files, CDF was one of the first agencies to regularly utilize this system. Being one of the first computerized databases of archaeological information, the system was slow to develop and had many problems. Many of the counties were not fully entered and others were not entered at all. The computer record searches by the CDF Archaeology Office represented an early effort to consult existing information during THP review.

As part of THP development, a record search is conducted and survey reports and site records are submitted to the appropriate Information Centers. While CEQA does not specifically require the preparation of archaeological site records, there is strong legal justification for this procedure on all projects reviewed by CDF. It is state policy that documents prepared pursuant to CEQA be organized and written in such a manner that they will be meaningful and useful to decision makers and to the public; and that information developed for EIRs can be incorporated into a database which can be used to reduce delay and duplication in the preparation of subsequent EIRs. The preparation of site records fulfills this policy because they are standardized forms

which make data useful to decision makers, landowners, developers, and future researchers. The information contained in site records can be incorporated into the statewide database which can be used for significance evaluations and future EIRs. By completing archaeological site records, project proponents are complying with this legislative policy. They are also fulfilling an ethical and professional obligation. It is the standard practice of all archaeologists working in California to submit copies of their survey reports and site records to the appropriate Information Center for permanent retention.

A recurring issue in the protection of archaeological sites is the need for confidentiality. Information concerning specific site locations must be safeguarded to protect sites from looting, vandalism, relic hunting, and nonscientific excavation. There is a certain group of people who actively seek out this information with the intent of damaging archaeological sites. When CDF began conducting record searches in the 1980s, OHP became concerned that nonarchaeologists would gain access to site location data. This problem came up again when RPFs began requesting site records from the Information Centers. Confidentiality was also an important issue in the *EPIC v. Johnson* decision where a conflict arose between the need for site record confidentiality and the CEQA mandates for public disclosure. There has been an ongoing struggle to balance these contradictory needs. Current state policy stipulates that archaeological site locations are exempt from the Public Records Act and must not be included in any public document. By requesting archaeological data from the Information Centers, RPFs and CDF assume the professional responsibility for this information. RPFs are required to sign a statement that they will ensure that all information regarding specific site locations is kept confidential.

One of the most substantial contributions that CDF has made to the Information Center system has been through revenue enhancement. During the 1980s, many of the Information Centers were struggling financially. The annual budget received from OHP would fluctuate dramatically from year to year, leaving the host institutions to provide much of the operating expenses. A large center such as the Northwest Information Center at Sonoma State University had lots of projects to review, but few paying clients. CDF made a proposal to the Board of Forestry to require Information Center record searches by all THP applicants. When this proposal was adopted, these record searches provided a significant revenue source for several of the Information Centers. In the mid-1980s, CDF also provided $35,000 to OHP specifically to conduct site record entry into the database. On another occasion, CDF provided a complete set of 7.5' Quadrangle maps to the Northeast Information Center at CSU Chico so that an updated cultural resource atlas could be prepared.

Another area of interaction between CDF and the Information Center system has been in the development of the actual site record forms. In 1991, the CDF Archaeology Office spearheaded an effort to revise the site recording handbook (Foster 1991:6). Archaeologists actively involved in site recording had long felt that, if strictly interpreted, the *Handbook* (OHP 1989a) restricted the site recording process in several ways. Problems included the perception that it was extremely difficult for anyone other than an experienced field archaeologist to prepare a site record, excluding many other potential contributors from the process; too much emphasis was placed on the needs of the archivist at the expense of the individual producing the record; a single site mapping technique was required to the exclusion of other appropriate methods; and

the policies specified in the *Handbook* did not take into consideration the cost and expenditure of time required to meet all of the site recording requirements. CDF was having considerable difficulty justifying the level of effort needed to prepare complete site records on the part of THP applicants. In an attempt to increase flexibility and allow a wider variety of site recording methods, an ad hoc committee of archaeologists and other interested parties developed a series of recommendations and revisions to the *Handbook* which were then submitted to the SHPO for consideration. This effort was overshadowed by a comprehensive revision of the entire inventory system that was already underway.

In 1990, the National Park Service (NPS) conducted a review of the OHP historical resource information management program to evaluate its compliance with the NHPA. In order to receive federal funds from the Historic Preservation Fund, OHP was required to report each year on the number of properties added to the statewide inventory system and the amount of acreage surveyed. These figures had to be derived from investigations conducted in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The NPS identified several problems in the OHP inventory system including public accessibility; conformance with the Secretary of the Interior's Standards for Identification and Evaluation; potential conflict of interest in Information Center activities; the integration of historic archaeological resources into the inventory; the integration of archaeological and historic resources inventories; and standardization of the Information Center operations. In response to the NPS review, OHP adopted a goal to develop a comprehensive plan for the collection, maintenance, and dissemination of information relating to the state's historical resources. One component of this plan was to develop systematic procedures for classifying and recording the full range of historical property types in order to facilitate a more complete and consistent level of data collection in future surveys (OHP 1991). This effort resulted in a complete overhaul of the site recording system.

The SHPO proposed to develop a comprehensive scheme for classifying historical resources and to develop specific recordation requirements and polices for all types of historical resources. OHP entered into a cooperative agreement with Caltrans to provide technical assistance in the development of the new system, and a committee was formed to review the entire site recording process. CDF Archaeologist Dan Foster served as the chairman of this committee for two years. The goals of this effort were to integrate the Historic Resources Inventory and the California Archaeological Inventory; encourage the collection of information about all types of historical resources; permit more flexibility in the way information was collected; and improve access to information about historical resources (OHP 1993). The system was to be designed to facilitate the integration of the state's historical resource inventories. Examples of site records from other states were examined and a broad range of issues was considered in the development of new recording forms. A primary consideration in these deliberations was the importance of collecting information on all types of historical resources. The existing forms were not well suited to recording certain types of properties with the result that information about some resource types was collected inconsistently or not at all. A hierarchical classification scheme was proposed to address issues of association between various resource types through a recording system consisting of a universal cover page and a series of specialized schedules or attachments.

After protracted discussions over the structure and content of the new recording system, a series

of forms were developed and a draft instruction book was prepared. A system finally emerged that consisted of a Primary Record for the initial documentation of all resource types, and then a series of ancillary forms including a Building, Structure, Object Record; an Archaeological Site Record; and a District Record. Optional attachments to these forms included a Linear Feature Record, Milling Station Record, Rock Art Record, Artifact Record, Photograph Record, and Continuation Sheet. Forms were also developed for the required Location Map and site Sketch Map. A preliminary version of the new forms and instructions for their completion was widely distributed for public comment (OHP 1993).

In 1993, the State Historic Resources Commission agreed to allow use of the newly revised recording forms and procedures for a two-year trial period. At the request of OHP, CDF agreed to serve as a test agency to evaluate the effectiveness of the new forms. CDF staff, RPFs, and archaeological contractors were instructed to utilize the new recording forms on all impending projects. Approximately 700 records for newly discovered sites were submitted to the Information Centers under this test program. The new recording forms were also employed during the CDF archaeological training courses. Contractors were asked to submit evaluations of the new recording process. CDF submitted quarterly reports to OHP on the application and effectiveness of the new system.

Two advantages of the new recording system were immediately apparent. The use of the Primary Record reduced the time and expense associated with the recording process enabling greater compliance with recording obligations. The set of resource-specific forms facilitated the compilation of more detailed information. Beyond these immediate advantages, a host of problems were encountered. The format of the forms did not provide adequate space for necessary data entry. Several data fields solicited recondite and esoteric information that baffled even highly experienced field-workers. Problems stemming from the attempt to merge the Historic Resources Inventory Form and Archaeological Site Record resulted in the use of terminology and data fields more appropriate to urban settings and the built environment, to the exclusion of important information in rural and wildland settings. Difficulties with computer compatibility were also encountered. As a result of the CDF testing program, a number of improvements were incorporated into the new recording system and in 1995, a final version of the forms and instructions was issued (OHP 1995).

In the final analysis, while the Primary Record provided a convenient shortcut for basic recording needs, filling out the complete Archaeological Site Record and the other resource-specific forms proved to be a much more complicated and time-consuming process than the previous system. Ultimately, the attempt to integrate the Archaeological Site Record and the Historic Resources Inventory Form resulted in compromises between the two disciplines that detracted from the quality and usefulness of the Archaeological Site Record. Nevertheless, CDF continues to encourage the utilization of this recording system and has provided detailed advice and information on completing these forms (Betts 2001).

With the merging of the California Archaeological Inventory and the Historic Resources Inventory, the California Historical Resources Information System (CHRIS) was established. This system currently consists of twelve regional Information Centers administered by the OHP and located at various host institutions throughout the state including three UC campuses, six

CSU campuses, one community college, one county museum, and one tribal OHP. Each Information Center is responsible for a specific region that is divided along county boundaries. The Information Centers receive, maintain, and disseminate the archaeological and historic site records and other forms of data, and provide information and recommendations regarding archaeological and historical resources on a fee-for-service basis. The advantage of the system of dispersed locations is that it facilitates access to the historical resource records by those who most frequently utilize this information. OHP has created an advisory group to develop procedures for expediting access to the Information Center data by project proponents. CDF has continued to play an active role in CHRIS. It is a longstanding member of the Information Center Procedural Advisory Committee (ICPAC) and has offered considerable input to shape state policies concerning the use of CHRIS.

This digression into the history and operation of the archaeological inventory system in California was motivated by the premise that, from an information standpoint at least, the CDF Archaeology Program can be said to begin and end with CHRIS. In so far as all archaeological investigations must begin with some form of background research, on CDF projects, that research is usually initiated through a record search at the appropriate Information Center. While project proponents are required to conduct background research beyond the basic record search, the data provided by the Information Centers usually serves as the starting point for additional inquiry. At the opposite end of the spectrum, when archaeological investigations are completed, all records and reports are submitted to the Information Centers for permanent retention. Archaeological data have little value unless they are retained in a repository for future use. Without an information system such as CHRIS, archaeological investigations, whether for management purposes or for pure research, would largely be an exercise in futility.

Programmatic Agreement

The CDF Archaeology Program has established a partnership with federal agencies that is implemented through a Programmatic Agreement (PA). CDF receives funds from several federal agencies to administer programs implementing land management activities located on nonfederal lands in California. The federal agencies distributing these funds have determined that individual undertakings have the potential to affect properties either included in or eligible for inclusion in the NRHP. These undertakings must, therefore, comply with Section 106 of the NHPA as well as CEQA. As a result of consultation with the California SHPO, ACHP, and various Tribal Historic Preservation Officers (THPOs), it has been agreed that technical assistance, environmental planning, contract administration, project review and approval, and other tasks necessary to deliver these federally funded programs are most efficiently implemented by CDF. The PA contains a comprehensive set of procedures to ensure that these projects are implemented in accordance with the NHPA.

In order to comply with the PA, CDF has developed a plan for the identification and management of cultural resources. For each project, a Preliminary Study is made to determine which undertakings have the potential to affect historic properties. If a potential effect on historic properties is identified, the project is subjected to an intensive cultural resource survey prior to implementation. Cultural resource surveys and recommendations are documented in a report meeting the applicable professional standards specified by the OHP (1989).

Consultation with applicable THPOs, Indian tribes, Native American tribal groups and individuals, and the Native American Heritage Commission is initiated during the planning and review process for all individual undertakings or projects that have the potential to affect properties of traditional cultural and religious significance to Indian tribes. On privately owned lands, landowners are notified of CDF responsibilities and afforded the opportunity to comment and participate in cultural resource investigations.

CDF is responsible to ensure that no undertakings adversely affect historic properties through identification, recordation, and avoidance. If it is determined that an undertaking can not be completed without adversely affecting cultural resources, the federal agency funding the project initiates consultation directly with the SHPO or the appropriate THPO, and the ACHP. Key personnel are informed that if any cultural resources are discovered or inadvertently affected during project implementation, project activities in the vicinity must be stopped until a professional archaeologist conducts a preliminary assessment and protection measures can be implemented.

If any human remains or other items covered by NAGPRA are discovered or inadvertently affected during project implementation, project activities in the vicinity must be stopped until provisions of NAGPRA are implemented. All artifacts, specimens, and associated records that result from investigations must be curated in a qualified repository in accordance with guidelines adopted by the State Historic Resources Commission. Written documentation for all undertakings is prepared in accordance with specified provisions and this documentation is submitted to the appropriate Information Center. Project personnel are informed of sensitive information on a need-to-know basis, and are made aware of their responsibilities for maintaining data confidentiality.

In 1996, a PA was entered into between the USFS, ACHP, SHPO, and CDF that specifically addresses responsibilities for archaeological review of CDF projects funded by the USFS. This agreement was superseded by a new PA, signed in 2004, that is broader in scope to include CDF projects utilizing federal funds provided by the BLM and the U.S. Fish and Wildlife Service.

In the course of developing the PA both CDF and the USFS solicited comments from the public to identify areas of concern. One such issue was a concern that archaeologically trained RPFs might not possess sufficient abilities to identify both new and previously recorded archaeological sites. Another issue was a perceived conflict of interest that might arise from the necessity of requiring RPFs to identify resources that could have a negative impact on the economics of a project. While there is some legitimacy to both concerns, they can be addressed through the review of projects by the CDF archaeology staff and the threat of licensing action for unprofessional work if an RPF does not demonstrate a good-faith effort to fulfill his/her site identification and documentation responsibilities. CDF staff archaeologists review all projects implemented under the PA, and conduct field inspections of a large portion of them, to verify compliance and provide oversight by a professional archaeologist. An annual review of the PA is conducted through a report prepared by the CDF Archaeology Program accounting for the previous year's activities, and a meeting of the signatories to discuss its effectiveness.

CDF administers several facilities that are located on federally owned lands and operated under Special Use Permits issued by the USFS. A number of these facilities are part of the Conservation Camp system and consist of minimum-security correctional facilities operated jointly with the CDC. As with projects carried out under the PA, any projects undertaken at these facilities must be conducted in conformance with federal regulations governing cultural resources.

Native American Consultation

During the 1970s, California Indians became increasingly involved in efforts to preserve their heritage. This activism resulted in the passage of AB 4239 in 1976 that created the Native American Heritage Commission (NAHC). The NAHC is made up of nine members, five of which must be Native American elders recommended by their communities. The purpose of this commission was to identify sacred sites on public lands and review existing administrative and statutory protections. The law also provided limited protection for sites of special religious significance by requiring agencies to forward copies of EIRs encompassing these areas to the commission (Hata 1992:125). The NAHC was given the authority to recommend significant sites for state acquisition, recommend procedures to the legislature to encourage private preservation of important sites and provide access to sites by Native Americans, forward recommendations regarding the State Indian Museum to the director of DPR, bring legal action to prevent severe and irreparable damage to sites, to assure appropriate access for Native Americans to cultural and religious sites, to assist Native Americans in obtaining appropriate access to sacred places located on public lands, and to assist state agencies in any negotiations with agencies of the federal government for the protection of Native American sacred places that are located on federal lands (1992:292). The function of the NAHC is primarily advisory, and must achieve its goals by convincing those in authority of the importance of their concerns (Dutschke 1981:28).

The California legislature, through bills such as AB 4239, has determined that the remnants of Native American culture should be protected whenever feasible. Among the protection measures that are widely employed is the requirement of NAHC consultation before THP approval for a project containing Native American cultural resources. The *EPIC v. Johnson* decision was instrumental in establishing the necessity of NAHC consultation on any projects containing archaeological sites. During the 1980s, CDF developed a working relationship with the NAHC through regular contacts. Complete copies of all THPs were sent to the NAHC immediately after filing, but with approximately 1,500 plans per year being submitted at that time, the NAHC was not staffed to handle this volume of paperwork. They were soon forced to abandon the attempt to review these plans. From 1988 to 1990, CDF worked on a comprehensive package of archaeological rules for the Board's consideration. After considerable public input and protracted negotiations and rule revisions, a noticed hearing was scheduled in 1990 where it was anticipated that the Board was going to adopt its first rule package for archaeology. Key members of timber industry had indicated they were going to withdraw opposition after successfully negotiating a series of compromises on a few key issues. At the hearing, testimony was given by Larry Myers of the NAHC who surprise the Board when he argued that the rule package was not ready for adoption because of inadequate requirements for Native American consultation. From 1990 extending into the first part of 1991, extensive consultations were held

between the Board's Executive Officer, Larry Myers, and the CDF Rules Coordinator to craft the needed rule language which was incorporated into the rule package. These changes providing greater involvement by local Native American tribal groups in THP development and project review. With the support of the NAHC, this updated rules package was approved by the Board of Forestry in 1991.

To facilitate consultation, a Native American Contact List is developed and maintained by CDF with the assistance of the NAHC. The NAHC identifies those Native Americans that must be notified or consulted for CDF projects. This list is organized by counties or portions of counties, and includes all federally recognized tribal governments and other California Native American tribal organizations or individuals that CDF has placed on the list based upon demonstrated knowledge concerning the location of archaeological or other cultural resources. This list is updated monthly with information provided by the NAHC and is disseminated through the CDF Archaeology Program website.

Native American consultation is a standard required on all projects subjected to CDF review, including all THP preparation. As part of project planning, the project proponent or manager is required to provide written notification to the local Native Americans specified on the Native American Contact List. The purpose of this notification is to inform tribes, local Native American groups, and the NAHC about the proposed project, and to invite their views and comments. It also serves as an information-gathering step by requesting information concerning the location of any archaeological or cultural sites that may be known within the project area. The NAHC responds to these requests by a check of their Sacred Lands File. Notification letters include a request for information on cultural resources within the project area, a description of the project location, a general location map depicting the access to the project area, a copy of the appropriate USGS map depicting project boundaries, and statements regarding correspondence, response time, review participation, and confidentiality. In the event that archaeological or cultural sites are identified within a project area, Native Americans are notified regarding the existence of these sites, provided with information on the proposed protection measures, and offered an opportunity to submit comments and participate in meetings to resolve issues of concern.

CDF is occasionally requested by Native American groups not to record certain types of cultural resources, such as ceremonial or sacred sites, as a condition of their disclosure. CDF honors these requests for these types of sensitive resources. Some CDF properties, particularly state forests, may contain plant and animal resources needed to support traditional Native American activities such as basket making. CDF has instituted a policy to allow the gathering of certain materials by local Native Americans if conducted in accordance with applicable rules and forest policies. Native Americans wishing to gather on CDF properties are requested to submit a written request for review and approval.

As a result of some of the archaeological investigations carried out by CDF, artifact collections are generated that require proper management. Even though CDF is a state agency, because it receives federal funds to implement some of its programs, it is subject to NAGPRA. Under NAGPRA, CDF is required to prepare an inventory of its collections to identify reportable items such as human remains, grave goods, sacred items, and objects of cultural patrimony. The act

requires CDF to provide notification to applicable Native American groups and organizations concerning the existence of these collections and to afford them the opportunity to comment concerning their management. CDF completed an inventory of its artifact collections and found nothing that was reportable under NAGPRA. CDF worked closely with the NPS on this effort. The NAGPRA compliance effort of CDF was described in a report distributed to 161 Native American contacts on July 23, 2001.

In 2001, the California legislature enacted AB 978 that requires disclosure of certain classes of Native American artifacts and other cultural items. Under this state law, CDF is required to send notification to a list of Native American groups, regardless of their federal recognition. This law also established a Native American Artifact Repatriation Oversight Commission to resolve disputes and clarify provisions of these regulations.

The Native American Advisory Committee (NAAC) was created in 1994 to address issues regarding the participation of Native Americans in the identification and protection of cultural resources. This nine-member committee provided a means of communication between the NAHC, CDF, and the Board of Forestry and Fire Protection. It was also charged with evaluating the effectiveness of regulations and practices, and the development of a program of consultation between Native Americans, CDF, and foresters. The outcome of these efforts was the approval of a series of amendments to the Forest Practice Rules by the Board of Forestry in 1996. A pamphlet was published (1998) to facilitate Native American involvement in the CDF review process. After several years of inactivity, the NAAC was reconstituted in 2001 as the Native American Advisory Council and continues to work for the preservation of Native American cultural values.

VI. ACCOMPLISHMENTS

Perhaps one of the best ways to assess the value and effectiveness of the CDF Archaeology Program is to review some of the accomplishments that have been achieved over the years. In this chapter, some of these accomplishments will be described in terms of the publications that have been produced, the comprehensive Management Plan that has been completed, the CDF properties that have been inventoried, excavations that have been conducted, and private collections that have been documented.

The sheer volume of archaeological research that has been carried out under the auspices of the CDF Archaeology Program is enormous. Just in site records alone, the quantity of basic archaeological data that has been collected will keep archaeologists busy for many years incorporating this information into the record of California's past. In the early years of the program, fewer than 100 sites were typically encountered each year during project review, and often these findings took place after sites had been impacted by logging operations or other project activities. An indication of the improvements in the effectiveness of the program is demonstrated by the number of sites that are being discovered. Currently, between 500 and 1,000 new archaeological sites are recorded each year, the majority of which are found by RPFs during THP preparation. Nearly all of these sites are identified, recorded, and protected prior to project approval. This improvement is the result of the archaeological rules that are now part of the Forest Practice Regulations, the archaeological training program, and the review procedures implemented by CDF archaeologists.

Another indication of the accomplishments of the CDF Archaeology Program is reflected in the level of annual program activity. During the year 1999, for example, approximately 2,000 projects were reviewed, over 250 field inspections and surveys were conducted, over 250 impact evaluation reports were submitted, nearly 500 archaeological sites were recorded and protected, 6 archaeological training courses were provided, 2 archaeological sites were excavated and studied, and 4 research papers were published. While the numbers of specific types of projects have fluctuated through the years, this serves as a fairly representative example of the extent of work that is typically carried out each year.

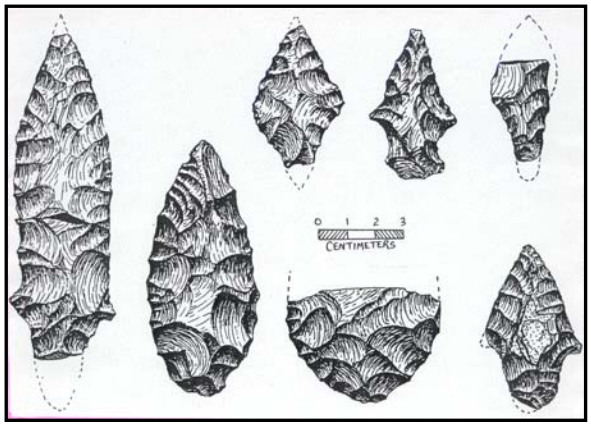
Publications

One of the most substantial contributions of the CDF Archaeology Program is the publication of the Archaeological Reports series. This series was initiated in 1988 and currently includes thirty volumes that disseminate the results of many of the major archaeological investigations undertaken by CDF. Included in this series are survey reports, state forest inventories, excavation reports, a comprehensive Management Plan, technical manuals, and reports on other research projects. The CDF Archaeological Reports series represents a major publication series on California archaeology and certainly the most important archaeological publication currently produced by a state government agency. CDF has been directed to collect, process, interpret, analyze, update, store, index, and make retrievable the array of information and data needed to support forest planning. The Department may issue publications for the purpose of disseminating information relating to its activities, powers, duties, or functions. These publications may be distributed free of charge to public libraries and other state departments and

offices (CDF 2002). Publications have been produced to make available technical information to various interest groups (CDF 1999; Foster 1992, 2000, 2003). The contributions to archaeological knowledge and other forms of information made available by the CDF Archaeology Program through publications are summarized below.

Information necessary for the protection of archaeological and historical resources was assembled in an *Archaeological Information Manual for Prescribed Burn Managers*. The procedures specified in this publication were designed to achieve compliance with CEQA, the statewide VMP-EIR, Executive Order W-26-92, and other applicable mandates and policies during the implementation of prescribed burn projects (Foster 1994).

A great many archaeological surveys have been completed as a result of CDF projects. In 1987, the Crank Fire burned approximately 3,700 acres north of Big Valley along the west slopes of Crank and Happy Camp Mountains in Modoc County. A survey of 830 acres of privately owned lands within the fire area was conducted by the Archaeological Research Program (ARP) at CSU Chico through a contract with CDF. This survey was carried out by Blossom Hamusek and Daniel McGann on March 29 through April 1, May 30 and 31, June 7, and June 27, 1988. The purpose of this investigation was to identify all cultural resources that occurred within the study area, evaluate their significance in relation to NRHP criteria, anticipate potential impacts, and make recommendations for the mitigation of these impacts. Fourteen prehistoric archaeological sites and fourteen isolated finds were documented as a resulted of this survey. Site types included seasonal task specific lithic workshops, temporary hunting base camps, and food processing stations. Diagnostic artifacts encountered suggested the primary occupation of the area extended from A.D. 500 up to historic contact (Hamusek 1988a).



Large stemmed points and bifaces found by Mark Hylkema and Jeffrey Hall on the Carney Ranch.

A proposed controlled burn project led to an archaeological survey by San Jose State University of the 5,800 acre Carney Ranch located in the southern Diablo Range of San Benito County. The goal of this survey was to identify the cultural resources within the project area and provide recommendations leading to their protection. Field reconnaissance was conducted by Mark Hylkema and Jeffrey Hall on November 18 and 19, 1988. Two large prehistoric sites were identified as a result of this survey, both containing abundant cultural evidence in the form of dark midden soils and extensive surface scatters of lithic materials. One of the sites produced an interesting assemblage of chert artifacts including a number of large, contracting-stemmed projectile points (Hylkema 1989).

Collaboration between CDF and the Kern County Fire Department resulted in the documentation of some highly significant archaeological sites. Preparations for controlled burn projects can include road and fireline construction, mechanical brush clearing, and other activities that can seriously damage cultural resources. Survey work was conducted to locate sites and implement

changes in project design in order to ensure site protection. On August 17, 1988, a survey party consisting of Dan Foster, Jack Ringer, Randy Reiswig, and Ken McElroy investigated a series of locations in the Caliente area of Kern County. Seven prehistoric archaeological sites were recorded as a result of this investigation including occupation sites, midden deposits, bedrock mortars, and rock art (Foster, Ringer, and Ciccio 1989).

Midden and bedrock mortar site disturbed by looters, recorded in 1988 during survey by CDF and KCFD.

An archaeological survey of 2,010 acres in Riverside County for the Rancho Pavoreal Prescribed Burn Project resulted in the identification and documentation of 16 previously unrecorded archaeological sites and the rerecording of one previously recorded site. Site types found on this property included large temporary camps or small villages, milling stations, and lithic scatters. This survey was conducted over an eight-day period in June and July, 1992, under the direction of Brian Dillon. Field crew members included Saul Bermudez, Richard Castro, Eulogio Guzman, Karen Kayser, Jennifer Lundal, Marcelle McGovern, Tony Medina, Jean Moore, Paul Porcasi, and Jackson Underwood. As part of this project, the relative significance of these sites was evaluated and recommendations were provided to avoid adverse impacts from the controlled burn project (Dillon 1993).

In addition to surveys, a variety of other types of research has been presented in CDF publications. Three papers on historical archaeology were compiled in a volume covering the topics of firearms and cartridges, gold mining methods, and the history of logging technology. These papers provided important background information for the identification and interpretation of some of the most common forms of historical evidence encountered in California timberlands (Dillon 1995b).

The Dillonwood Grove Site (CA-TUL-1985) is a prehistoric campsite located at an elevation of 7,000 feet on the west slope of the southern Sierra Nevada. The site consists of a lithic scatter of obsidian flakes, flaked stone tools, and several milling implements. This site was discovered in 1993 by RPF Brian Rueger during preparations for a THP. The site had been badly damaged by previous timber operations in the 1960s, having been used as a road and log landing. Under the newly proposed THP, the site area would once again be used as a haul road. An inspection of the site by CDF Archaeologist Dan Foster was conducted to assess site significance and develop management recommendations. In spite of the damage that had occurred, Foster considered the site to be significant because it possessed unique characteristics such as an unusual setting; absence of bedrock mortars, midden, or pottery often found at similar sites in the region; an artifact assemblage suggesting a possible early occupation; and was the only site on the property that still held any research potential. Foster recommended that the site be protected by avoidance or subjected to a limited archaeological investigation before any further disturbances occurred. Construction of a new road to bypass the site area proved to be unfeasible, and the landowner rejected the proposal to conduct an archaeological investigation. In order to satisfy the requirements of the Forest Practice Rules, the landowner proposed to cap the site with a fabric

membrane and a six-inch layer of fill to enable reuse of the road. This proposal was approved by CDF.

CSUB archaeological investigations at the Dillonwood Grove Site in 1996.

In order to salvage a small sample of information from this significant site, in June, 1996, the Center for Archaeological Research (CAR) at CSU Bakersfield (CSUB) conducted a limited investigation of the Dillonwood Grove site. This study received only small-scale funding from CDF and none from the landowner but conducted by CSUB anyway as a public service to archaeology. The field crew included Matthew DesLauriers, Jill Gardner, and Stacy Tisler under the direction of Robert Parr. The investigation included site mapping and a sample in-field lithic analysis. Fifteen obsidian flakes were collected for sourcing and hydration analysis. Two ground stone specimens were collected for protein residue analysis. Three quartz artifacts were also collected. The analyses of these materials suggested that the site represented a temporary camp associated with seasonal hunting and gathering forays and may have been occupied as early as 1,800 years ago with utilization extending into the late prehistoric period (Parr 1997). This case serves to demonstrate the limitations of regulatory authority that currently confront CDF in the efforts to protect archaeological sites.

Obsidian hydration analysis is considered to be one of the most important techniques for the study of chronology and integrity in prehistoric archaeological deposits. Hydration bands can, however, be damaged by fire. CDF initiated a study of the effects of prescribed fire on obsidian hydration bands through a contract with the Anthropological Studies Center at Sonoma State University. Analysis of the results of field and laboratory experiments indicated that maximum temperature and duration of exposure were the most influential factors affecting hydration bands (Solomon 2000).

The Archaeological Site Record has been recognized as the most fundamental means of obtaining and preserving information on archaeological sites. CDF identified a need for basic instruction and guidance in the preparation of professional quality site records which resulted in a site recording manual that provides advice on techniques for conducting fieldwork, drafting site maps, and preparing completed records (Betts 2001).

Management Plan

In 2001, a comprehensive Management Plan was completed for the historic buildings and archaeological sites under the administration or control of CDF. This Management Plan was developed in response to Executive Order W-26-92, CEQA, and PRC 5020 et seq. These legal mandates directed state agencies to preserve and maintain the significant heritage resources under their jurisdiction. Inventories of CDF properties were implemented to identify all known heritage resources. The significant heritage resources selected from this inventory include 260

historic buildings and 166 archaeological sites. The plan describes the specific procedures that must be followed for the management of these resources. This plan was developed in consultation with OHP and is to be updated every ten years (Foster and Thornton 2001).

The Management Plan contains a comprehensive listing of CDF's historic buildings. This list contains entries for each structure with information on the type or name of the building, the county in which it is located, the year of construction, the NRHP Status Code indicating significance, an indication of selection for preservation, and supporting references and documentation. The plan also contains an inventory of all known archaeological sites located on properties administered by CDF. This inventory includes the property name, the site trinomial, site name, site type, county in which it is located, and references. Two maps in the plan depict the distribution of these properties across the state (Foster and Thornton 2001).

As CDF facilities age, in many instances they no longer meet the operational needs of the primary responsibilities of the Department resulting in an increasing necessity for buildings to be remodeled, upgraded, demolished, or abandoned. All of these actions are considered significant impacts under CEQA. The Management Plan sets out guidelines for the entire building inventory and specifies which of these historic buildings can be feasibly preserved. The accompanying EIR provides the necessary CEQA clearance to address issues regarding other buildings as they arise (Foster and Sosa 2001).

The development of the Management Plan began in 1991. Inventories of CDF properties were conducted from 1991-1996. Drafting of the plan was begun in 1996, submitted to OHP in 1998, and distributed statewide to agencies, groups, and individuals who wished to offer comments in February 1999. The EIR was written during 1999-2000. Various factors necessitated revisions to the plan and a second draft was circulated in March 2000. The completed plan was approved and distributed in November 2001. This Management Plan is a tool to assist in safeguarding the best of CDF's archaeological and historical resources for future generations to enjoy and appreciate. This document was eleven years in the making and is the most ambitious project so far undertaken by the CDF Archaeology Program.

Inventory of CDF Properties

A major part of the Management Plan was the systematic inventory of CDF properties. Numerous surveys were implemented to identify and document the heritage resources under the control or jurisdiction of CDF. The two components of the CDF property inventory are historic buildings and archaeological sites.

Building Inventory The current CDF building inventory includes approximately 2,300 structures distributed over 375 sites. These buildings are located at forest fire lookouts, forest fire stations, administrative sites, and on state forests. Of these buildings, 260 are considered to be historic, having been constructed before 1949. Fewer than 190 of these buildings predate 1946. The majority of these structures are remnants of the CCC-WPA construction era. The old fire station buildings on Mount Zion State Forest are the only pre-CCC era suppression facilities remaining in the CDF property inventory. The Management Plan identified 86 buildings that were historically significant on both architectural and historical grounds. Seventy-eight of these

buildings were determined to be significant and eligible for listing on the NRHP and the CRHP. A list of selection criteria was developed for buildings to be preserved which included public access, condition, sample diversity, and feasibility. Twenty-nine of these buildings were selected for long-term preservation. These buildings were found to be significant because many are examples of a distinctive architectural style and they are associated with an important historical event. The development of the CDF wildland fire control system over the last century is considered to be a significant historical event in the lives of many Californians. Some of these buildings will be saved and used in their original locations, others will be relocated and restored at nearby public facilities, and some will be given to other agencies for continued management and preservation. A variety of factors impose limitations on the number of the buildings in the CDF inventory that can be preserved including the closure and abandonment of facilities, the utility of the structure, fiscal constraints, ownership and control problems, and exposure to liability. Included in the Management Plan are descriptions of each of the 29 buildings selected for preservation along with specific management recommendations to accomplish this objective (Foster and Thornton 2001).

In 1991, consulting historian Mark Thornton accepted a contract from CDF to begin conducting inventories and significance evaluations of CDF historic buildings. The first stage in this research resulted in an inventory and evaluation of 77 fire lookout stations. These properties were documented on DPR Historic Resource Inventory Forms, 35 mm black and white film, and on videotape. A volume was compiled that provides the age and historic significance of each surviving CDF lookout facility (Thornton 1993).

Former setting of CDF's 1940 Hayden Hill Lookout, relocated to a museum in Bieber in the 1990s.

Following this project, a complete statewide inventory of CDF historic buildings was undertaken. This study included historic buildings at forest fire stations, region and unit headquarters, air attack bases, conservation camps, nurseries, the CDF Academy, and other administrative sites and facilities. A complete listing of CDF buildings was compiled and construction dates were determined through archival research. Structures built prior to 1946 were identified. On-site visits were conducted at 73 locations containing 189 historic buildings. These structures were evaluated for historic significance and documented using videotape, 35 mm black and white film, and DPR Historic Resource Inventory Forms. A two-volume report was compiled that includes a complete listing of all CDF buildings and provided the date of construction and significance evaluation for each of these buildings (Thornton 1994).

State Forests CDF is responsible for the administration and management of a system of nine state forest units. The concept of a state forest system developed during the 1940s as a means to demonstrate responsible and innovative forest management practices to the private timberland owners of California. The Forest Practice Act of 1945 provided for the acquisition, administration, and operation of the state forests. Management policies for the state forests are set by the Board of Forestry while administration and implementation of these management

policies are delegated to the director of CDF. These policies direct CDF to prepare detailed management plans for the state forests and to conduct innovative programs demonstrating timber management, recreational development, investigations, experiments, and education in forest management. Several of the state forests have been identified as commercial timberlands with primary emphasis on the harvesting of forest products along with the recognition that recreation is a secondary but compatible land use. The smaller forests are used primarily for administrative and recreational purposes, while deed restrictions preclude certain activities on some forests. Timber harvesting on the larger forests is designed to be compatible with recreation, soil, water, wildlife, fisheries, and aesthetic values.

As publicly owned resources, the state forests are held in trust for the benefit of the people of California. The state legislature has specified that the public should derive benefit from the forests through management, where the term "management" is defined as "the handling of forest crop and forest soil so as to achieve maximum sustained production of high quality forest products while giving consideration to values relating to recreation, watershed, wildlife, range and forage, fisheries, and aesthetic enjoyment" (CDF 2002:137). In addition to providing forest products, the state forests contain a variety of other resources such as prehistoric and historic archaeological sites, recreational opportunities, and aesthetic values. Managing this array of resources and values can require choices among conflicting entities, and the noncommercial values must be given consideration. This level of consideration has changed over time in response to changing perceptions, public interest, and scientific knowledge. Current policies direct forest management activities to emphasize water quality improvement and wildlife habitat protection. The importance of the state forests to demonstrate responsible forest management has intensified as the population and development pressures in California have increased the demand for forest products (CDF 2002).

The state forest system contains a large collection of cultural resources that must be managed and protected. CDF has been directed to inventory historic and prehistoric archaeological resources on the state forests and to identify and evaluate archaeological sites that are susceptible to disturbance. Data collection efforts must be prioritized and implemented prior to project activities. The fact that the state forests are publicly owned land invokes additional requirements for the protection, preservation, and stewardship of cultural resources. On state lands, California law specifies that "No person shall collect or remove any object or thing of archeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location, or context in which the object or thing of archeological or historical interest or value is found" (CCR 1427).

One of the primary goals in the management of state forests is to improve the amount and quality of information concerning economic forest management methods available to landowners, resource professionals, the timber industry, and the general public (CDF 2002). The perception that archaeological resource protection will have deleterious financial consequences has been a serious concern for people involved with forest management. The CDF Archaeology Program has endeavored to demonstrate on the state forests that archaeological resources can be successfully protected with minimal restrictions on timber operations. In order to document these efforts and to fulfill its obligation to inventory cultural resources, CDF has published cultural resource overviews and inventories of the state forests in the CDF Archaeological

Reports series. Archaeological research projects have also been sponsored for the development of interpretive programs and to foster scientific research, two major objectives of the state forest system. The following paragraphs briefly summarize some of these investigations.

Boggs Mountain Demonstration State Forest is a 3,493-acre parcel located in Lake County in the southern portion of the North Coast Range. Portions of this property were purchased by the state in 1949, 1954, and 1972. Between 1977 and 1995, at least 11 archaeological surveys were conducted, eventually covering the entire forest. A total of 21 archaeological sites have been recorded as a result of these surveys (Foster and Thornton 2001). An overview of the prehistoric archaeology of the forest was prepared for CDF by Gerike and Stewart (1988). A detailed analysis of surface-collected artifacts has been carried out by researchers from Sonoma State University (Haney 1993). A comprehensive overview that includes archaeological, ethnographic, and historical background research; a complete site inventory and evaluation; and specific management recommendations was subsequently compiled by Dillon (1995a).

Jackson Demonstration State Forest (JDSF) is located between Willits and Fort Bragg in Mendocino County. This 50,505-acre tract is the largest of the state forests administered by CDF. This property was purchased from the Caspar Lumber Company in 1947, and named after the company founder, Jacob Green Jackson. The environment of JDSF represents the coast redwood/Douglas fir forest type. The primary management goal of JDSF is to demonstrate sustained timber production while maintaining soil, water, wildlife, cultural, and recreational values. The initial cultural resource overview of the forest was prepared in 1978 through an interagency agreement with DPR (Levulett and Bingham 1978). This study resulted in the recording of 13 prehistoric sites, one ethnographic site, and one historic site. A more comprehensive inventory of historic resources was undertaken in 1991 documenting 172 resource locations (Gary and Hines 1993). This study focused on Euro-American period resources and provided JDSF with a useful document to achieve compliance with historic resource protection mandates. In a subsequent investigation, 18 of the 20 known prehistoric sites were reexamined and updated site records were prepared (Betts 1999). This study included a descriptive inventory, an integrity assessment, and management recommendations for the known prehistoric sites. Since 1978, at least 48 archaeological surveys have been conducted within JDSF. Most of these surveys have been for individual projects such as timber sale units. While a complete survey of the forest has not been undertaken, approximately 50 percent of the total acreage has received some archaeological coverage. These surveys have resulted in the identification of 49 archaeological sites and approximately 150 additional locations where minor historical features or artifacts have been documented. Two sites have received test excavations (Hylkema 1995; Layton 1990). The prehistory of the forest is not well known since few excavations have occurred. Prehistoric site types include villages, housepits, lithic scatters, midden, and ceremonial locations. Most of the historic sites are associated with early logging activities and include railroad grades, trestles, logging camps, isolated artifacts, two steam donkeys, a locomotive engine, and two standing structures (Foster and Thornton 2001). The historic utilization of the forest is documented in publications such as *Mallets on the Mendocino Coast* (Wurm 1986).

In November 2002, a major milestone was reached with the approval by the Board of Forestry of an updated JDSF Management Plan, although legal challenge to the EIR supporting the plan was

upheld in court, invalidating the plan approval. This plan was nearly six years in the making with input from a broad range of CDF staff, resource professionals, and concerned members of the public. The heritage resources sections of this plan specify comprehensive and highly detailed protection and mitigation measures, Native American consultation procedures, and a newly developed monitoring process to evaluate the effectiveness of these activities (CDF 2002). The heritage resource management proposals within this plan represent a synthesis of several different efforts. A preliminary heritage resource management plan was developed by John Betts and Dan Foster for incorporation into the larger document. A second management proposal developed for CDF by a private consulting firm proved to be unacceptable. A comprehensive record search was conducted by another private consultant at the Northwest Information Center. The final heritage resource management plan for JDSF will follow certification of a new EIR, a project currently in progress.

Kuchamaa Experimental Forest is a 2,040-acre parcel of state land situated along the Mexico-United States border in San Diego County. This property occupies the western flank of Tecate Peak, a mountain sacred to the Kumeyaay Indians who refer to it as Kuuchamaa (Shipek 1985). This property was bequeathed to CDF by W.Y. Evans-Wentz, a scholar and authority on Tibetan religion. According to his will, Cuchama and its surrounding lands were deeded to the State of California with the request that it be made a public monument to symbolize goodwill and fraternity between the races and faiths of the Occident and the Orient (Evans-Wentz 1989). Kuchamaa has been listed on the NRHP and its cultural importance has been documented by Mitchell and Welch (1990). An archaeological survey of a small portion of this property (Foster and Jenkins 1984) discovered a prehistoric site (CA-SDI-9969) near the summit of the mountain. This site provides a unique source of information for interpreting the cultural significance of the mountain.

Las Posadas State Forest encompasses 796 acres of oak and pine forest near the community of Angwin in Napa County. This property was bequeathed to the state in 1930 (Hastings 1985:5). Deed restrictions on the parcel have limited the management activities implemented by CDF. The forest has been subjected to a comprehensive archaeological survey by a team from Sonoma State University (Jablonowski, Martin, and Toriello 1995). This investigation included intensive background research that provided a context for the evaluation of the significance of the historic sites that were identified. Eighteen sites are known on the forest including four prehistoric sites, thirteen historic sites, and one site with both prehistoric and historic remains. The prehistoric sites consist of bedrock mortars and lithic scatters. Historic remains include cemeteries, mining sites, foundations, building pads, rock walls, a network of roads and trails, earthen dams, and a tree plantation. The forest also contains a forest fire station facility and a 4-H Club Camp.

Latour Demonstration State Forest is located in the southern Cascade Mountain Range approximately 50 miles east of Redding in Shasta County. This property was purchased by the state in 1946, and at 9,033 acres, is the second largest of the state forests. At least eight archaeological surveys have been conducted since 1983, resulting in nearly complete coverage of the forest. Only three archaeological sites have been found, two historic and one prehistoric, along with numerous isolated artifacts. The two historic sites consist of a small trash dump dating to the 1940s and the remains of a shake maker's camp. An archaeological survey of approximately 700 acres of the forest conducted by the ARP at CSU Chico resulted in the

collection of eight isolated artifacts including projectile points, a biface fragment, core, flake, hammerstone, and milling stone (Hamusek 1993a). A subsequent survey covering 4,000 acres of the forest failed to identify any archaeological sites, but did collect eight additional isolated artifacts including projectile points and a possible drill. The one prehistoric site on the forest (CA-SHA-1486) has been subjected to a test excavation by the ARP at CSU Chico (Huberland and Dwyer 2001).

Mountain Home Demonstration State Forest (MHDSF) is located in eastern Tulare County and contains 4,807 acres of beautiful giant sequoia forest. This property was purchased from a logging company in 1946 and is the third largest of the state forests. At least five archaeological surveys have been conducted covering nearly the entire forest. Thirty-six archaeological sites have so far been recorded, both prehistoric and historic. Five of the prehistoric sites have received archaeological test excavations. Historic sites include sawmills, early resort facilities, and historic sequoia stumps. A particularly interesting feature of MHDSF is the occurrence of a number of the enigmatic rock basin or "Indian Bathtub" sites. These features consist of enormous circular depressions in the natural bedrock. Their origin and use by Native Americans has been a topic of considerable interest for many years. Mention of several sites containing these features represents the earliest known archaeological investigation on the forest (Stewart 1929). Research on the history and archaeology of the forest was greatly expanded by Floyd Otter, the forest manager from 1953 to 1969. His highly readable book, *The Men of Mammoth Forest* (1963) provides a comprehensive account of the history of the forest and the surrounding region and a list of the historic and prehistoric sites that were known at that time. Archaeological surveys for timber sale projects added a number of sites to the forest inventory (Farris 1980b; Thornton 1979; Woodward 1982). Problems with the Headquarters Timber Sale provided an important incentive for the initial development of the CDF Archaeology Program. In 1982, a seasonal archaeologist was hired to conduct a survey of MHDSF. Over two field seasons, approximately 90 percent of the forest was investigated resulting in the discovery of 18 additional sites (Stangl and Foster 1984). In 1987, William Wallace received a contract to study the prehistory of MHDSF. Twenty-two previously recorded prehistoric sites were reexamined and trial excavations were conducted at five sites. Two reports describing these investigations were produced (Wallace 1993; Wallace et al. 1989). A major excavation has also been conducted at the Sunset Point site (Dillon 1992b). A report on the Enterprise Mill Historic Site (CA-TUL-814H) has been produced (Dulitz 1998). Subsequent recording work by Dan Foster and John Betts has rounded out the current inventory of known archaeological sites on the forest (Foster and Thornton 2001).

Two of the mysterious rock basins ("Indian Bathtubs") at Mountain Home Demonstration State Forest.

Mount Zion State Forest is located near Pine Grove in Amador County. This small forest comprises approximately 165 acres and contains an assortment of historic structures and sites.

The property making up the forest was acquired gradually through a series of transactions between 1928 and 1958. As a result of the CDF fire lookout and historic building inventories, the Mount Zion Fire Lookout Station and the Mount Zion Ranger Station Residence complex were documented (Thornton 1993, 1994). An archaeological survey of the forest (Betts 1995a) recorded three historic archaeological sites, one historic building, one historic linear feature, and two isolated artifacts, but no prehistoric resources were encountered.

Ellen Pickett State Forest is a 160-acre parcel located four miles south of Lewiston in Trinity County. The state acquired this property in 1939 as a public gift. An archaeological reconnaissance survey of the forest failed to identify any prehistoric or historic resources (Betts 1995b).

Soquel Demonstration State Forest is located approximately eight miles south of the city of Santa Cruz in Santa Cruz County. This 2,681-acre forest is dominated by coast redwood forest and is situated primarily within the east branch of the Soquel Creek watershed. This forest was subjected to a comprehensive archaeological survey that identified six archaeological sites including two prehistoric sites, three historic sites, and one multicomponent site (Dillon 1992a). One of these sites, CA-SCR-296, contains bedrock mortars and a cupule petroglyph boulder. This is only the second rock art site recorded in Santa Cruz County (OHP 1988) and represents a highly significant discovery. Extensive background research conducted for this project offered detailed interpretations for the other sites that were found. In 2003, two additional archaeological sites were discovered during preparation of the Fern Gulch Timber Harvesting Plan (THP 1-04-046 SCR) – a segment of an old road and a prehistoric archaeological site. The prehistoric site consists of bedrock mortars and cupules, the first such site discovered on the Forest north of Soquel Creek and one of only a few such sites yet recorded in Santa Cruz County.

Brian Dillon and survey crew at Soquel Demonstration State Forest in 1991.

Cupule petroglyph boulder discovered during Dillon's 1991 survey at SDSF.

In addition to the state forests, CDF owns or controls a variety of other properties across the state containing various types of facilities. Some of these properties contain cultural resources and have been the subject of archaeological investigations. The Intermountain Conservation Camp is located on an 80-acre parcel of state land near Nubieber in Lassen County. A survey of the entire property by a team from CSU Chico resulted in the identification of six archaeological sites and numerous features within the camp property (Foster and Thornton 2001).

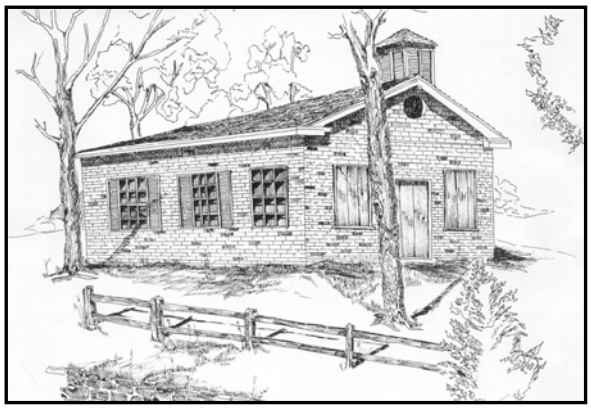
The Bautista Conservation Camp in Riverside County is located on a 240-acre parcel of state land surrounded by the San Bernardino National Forest. Archaeological surveys conducted on this property have identified seven archaeological sites consisting of rich artifact scatters indicative of ancient occupation areas (Foster and Thornton 2001). A survey by Foster and Jenkins (1985) prior to the construction of the camp covered approximately half of the property, recorded three sites, and reexamined four previously recorded sites.

Excavations

Many agencies in California include archaeology programs that frequently initiate limited archaeological test excavations or full-scale data-recovery efforts as a commonplace response to state or federal environmental protection laws. For several reasons, this is not the case at CDF. In the past two decades CDF has sponsored fewer than 25 archaeological excavation projects in spite of management work involving the review of over 10,000 individual projects with literally hundreds of potentially affected archaeological or historical sites during this same time period. Archaeological sites identified on CDF projects are usually protected through avoidance of project related disturbances. Timber operations, controlled burning, reforestation, or fuels reduction treatments can usually accommodate a flag-and-avoid solution, bypassing the cost and potential time delays associated with excavations for significance determinations or data-recovery. Construction of CDF Fire Stations and other facilities improvement projects often can not avoid sites and these projects have sometime resulted in excavation work. Opportunities for archaeological excavations have occasionally been realized on the State Forests, through encouragement to local university programs. On only three occasions has even limited funding been made available for significance evaluations – through archaeological excavation and analysis – for archaeological sites located within State Forests.

In general, most of these archaeological excavations have been undertaken for data recovery purposes in an effort to salvage information from highly threatened or damaged sites as a public service to the citizens of California or in direct response to requirements of CEQA. Volunteer assistance has been utilized to carry out these projects on several occasions. In a few cases, projects have been undertaken in emergency situations when funding was not fully in place, resulting in the fact that final reporting has not been fully completed. The following chapter discusses some of these excavations.

The Altaville Schoolhouse is located along Highway 49 just north of Angels Camp in Calaveras County. Constructed in 1858, this is considered to be one of the oldest and best preserved one-room schoolhouses surviving in the Mother Lode region and has long been recognized as one of the most historically significant structures in the CDF building inventory. This red brick structure has white trim, a gable roof, and a bell tower. It was used continuously as a school for nearly a century up



Altaville Schoolhouse, built in 1858.

until 1950 when the property was acquired by CDF and developed into the Altaville Forest Fire Station. The building became California Historic Landmark Number 499 in 1955 and was listed on the NRHP in 1979. In 1982, CDF proposed to remove and repair the badly deteriorated structure in order to improve station facilities. On April 20, 1982, CDF Archaeologist Dan Foster conducted an archaeological excavation adjacent to the building before it was moved. Seven artifacts were recovered from a one-by-one meter test unit excavated to a depth of 30 cm. After the building was moved a short distance to a land parcel in front of the station, additional excavations were conducted within the building foundation by a crew from the CDF Baseline Conservation Camp. These excavations produced 323 specimens including window glass fragments, cut nails, wire nails, horseshoes, wood and plaster fragments, slate pencils, chalk nubbins, fragments of blackboard slate, bottle fragments, crockery fragments, pieces of cut bone, and numerous other individual artifacts. In 1996, a report was prepared on the results of this study which included background history on the schoolhouse, a catalog and analysis of the artifact collection, and a compilation of documents related to the restoration efforts. The preservation of the Altaville Schoolhouse was a cooperative project between CDF, the Calaveras County Historical Society, the Calaveras County Board of Supervisors, the Angels Camp City Council, local industries and businesses, and many local residents (Napton and Greathouse 1997).

The Sugar Pine Conservation Camp is a minimum-security adult correctional facility located northeast of Redding in Shasta County. Nine archaeological investigations have been conducted on this parcel in response to the development and use of this facility. As a result of these investigations, four prehistoric archaeological sites and a segment of historic road have been identified. Test excavations were conducted at two of these sites (CA-SHA-1483 and CA-SHA-1484) by Shasta College prior to their destruction by grading for camp construction (Foster and Thornton 2001).

Layton's 1984 excavation of Housepit #3, Three Chop Village, JDSF.

During a tour of JDSF in 1984, Professor Tom Layton was shown Three Chop Village (CA-MEN-790) by CDF personnel. Professor Layton immediately recognized the importance of this site and returned with his staff from San Jose State University to conduct limited test excavations and anaysis. Three contact period house depressions were excavated resulting in the identification of three cultural components. The earliest component was interpreted as pre-Pomo and the later two as Pomoan occupations. An assemblage of stemmed points of Franciscan chert suggested a late persistence of this point form. A mid-nineteenth century component that included Chinese blue-on-white porcelain stoneware sherds and green bottle glass is believed to represent materials salvaged by Native Americans from the shipwreck of the *Frolic* near Point Cabrillo on July 26, 1850 (Layton 1990). The investigation of Three Chop Village was not related to timber harvest impacts, but was motivated by a sense of stewardship by CDF for this resource. The findings from these investigations have led to a veritable cottage industry of public presentations on the history and prehistory of Mendocino County.

An archaeological study of MHDSF conducted by William Wallace led to the development of a site typology and regional chronology for the area. Participants in these investigations included Barbara Baker, Dave Dulitz, Franklin Fenenga, Dan Foster, John Foster, Louise Hastrup, Mary Keith, George Kritzman, Mildred Kritzman, Don McGeein, John Manning, Virgil Meeker, Michael Sampson, Maurice Sloper, John Todd, Yvonne Viereckly, and Edith Wallace. Fieldwork was conducted between June 15 and July 15, 1987. Twenty-two previously recorded sites were examined, surface collected, and supplemented when necessary. Test excavations were conducted at five of these sites including Headquarters (CA-TUL-575), Sunset Point (CA-TUL-1052), Vincent Spring (CA-TUL-1053), Methuselah Rockshelter (CA-TUL-1058), and Methuselah (CA-TUL-1173). The tested sites were mostly shallow with sterile soil or bedrock encountered at a depth of 12 to 24 inches. The occupational debris found in these sites included obsidian flakes, fire-cracked rock, charcoal and ash, and a few stone artifacts. Two sites produced mammal bone fragments. Additional artifacts documented in the course of this study included potsherds, pestles, manos, projectile points, flaked stone tools, utilized flakes, hammerstones, and soapstone fragments. Diagnostic projectile points indicated an occupation range for the forest extending from 4000 B.C. to the late prehistoric period. A site typology was developed which included major base camps, temporary camps, and milling places (Wallace et al. 1989).

Wallace's 1987 excavations at Methuselah, MHDSF.

One of the sites excavated as part of the archaeological study of MHDSF was the Methuselah site (CA-TUL-1173). This site was first recognized because of the three large rock basins, or "Indian Bathtubs" that are located here. The site also contains a surface scatter of artifacts, bedrock mortars, milling slicks, and a midden deposit. This investigation was conducted over a four-day period in June of 1987 and included site mapping and the excavation of several five-by-five foot test units surrounding the outcrop containing the rock basins. Cultural deposits were found to extend from 20 cm to 51 cm in depth. Removal of soil from the rock outcrop revealed additional mortars for a total of 33 at the site. Artifacts recovered included brownware pottery sherds, projectile points, flaked stone tools, utilized flakes, flaked stone debitage, a steatite ornament and vessel fragments, a glass bead, a mano, an ocher fragment, and a quartz crystal fragment. This site was interpreted as a seasonal encampment occupied primarily during the late prehistoric period from A.D. 1300 to historic contact (Wallace 1993). The report of this investigation may have been one of the first published excavations of a southern Sierra Nevada rock basin site.

The Salt Creek Ridge Site (CA-TUL-472) is a high elevation prehistoric campsite in the southern Sierra Nevada that contains a surface artifact scatter, a substantial midden deposit, bedrock mortars, and rock basins. This site was heavily damaged by fire suppression activities during the 1987 Case Fire. The site was bulldozed by firefighters during the construction of a fuel break along a ridgetop. The bulldozer crew was aware of the site's location and attempted to avoid it,

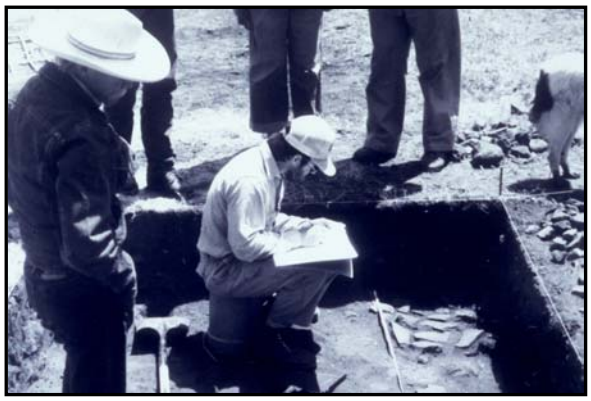
but a sudden change in fire behavior put the lives of the crew in jeopardy. The dozer operators were forced to create a large clearing to escape the flames, and in so doing, caused extensive damage to the archaeological site. CDF agreed to conduct a data recovery and rehabilitation project as partial mitigation for the impacts that had occurred. From September 22 to September 24, 1987, CDF Archaeologists Dan Foster and Richard Jenkins conducted an intensive investigation of the site including a systematic surface collection, site mapping, and a limited test excavation. Five two-by-two meter test units were excavated, the deepest extending to 30 cm. Artifacts recovered during this investigation included manos, metate fragments, a pestle, soapstone bowl fragments, ceramic pot sherds, obsidian projectile points, obsidian biface fragments, a basalt hammerstone, basalt cores, an obsidian drill, obsidian, basalt, and quartz flakes, and burned bone fragments. The projectile point types included four Desert Side-Notched series and one Rose Spring series. A granite outcrop at this site contains 12 bedrock milling features. Five large rock basins or the so-called "Indian Bathtubs" are located on an adjacent outcrop. Analysis of the materials recovered during this investigation suggested a late prehistoric occupation dating from A.D. 1300 to A.D. 1700. Even though this site had sustained extensive damage, it was still considered to be significant, and management recommendations were developed to protect the site from future impacts (Foster and Kauffman 1991).

Richard Jenkins recording archaeological field notes during CDF's 1987 investigation of the Salt Creek Ridge Site.

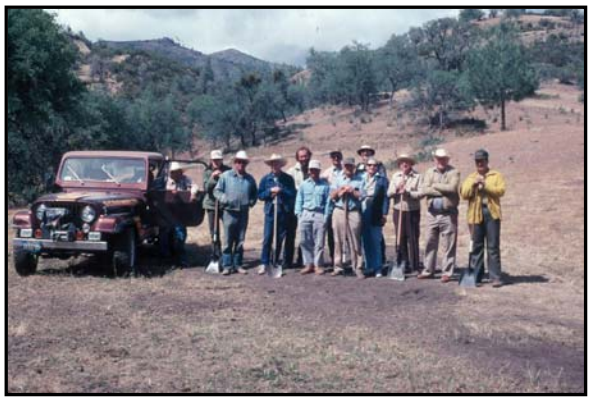
In July 1987, CDF Archaeologist Richard Jenkins conducted an inspection of a VMP project on the Lee Ranch in northern Tehama County. This investigation resulted in the identification of a prehistoric archaeological site situated on a small hilltop which was thought to represent a Late Period Yana hunting camp. The site was designated as the Bebensee Site and later received the trinomial CA-TEH-1490. Unfortunately, this site was severely impacted by heavy equipment operations during the controlled burn project. In March 1988, CDF contracted with the ARP at CSU Chico to conduct an archaeological investigation at CA-TEH-1490 as mitigation for the impacts that had occurred. The principal investigator for this project was Frank E. Bayham with Blossom Hamusek serving as the project director. The field crew included Sandra Flint, Lisa Swillinger, Daniel McGann, Daniel Eliott, Nancy Eliott, Nancy Garr, Curtis Whittaker, Michael Findlay, Jack Broughton, Steven Elmore, and Nettie Hoelscher. Fieldwork was carried out on April 9, 10, 16, and June 17, 1988. The primary objectives of this investigation were to assess the extent of damage that had been inflicted on the site, and to

Hamusek's 1988 excavations at CA-TEH-1490, a site impacted by CDF's VMP operations.

determine the cultural affiliation, function, and period of occupation of the site. These research objectives were addressed through detailed site mapping, a surface collection of diagnostic artifacts, an auger testing program, and the excavation of several test units. As a result of these investigations, the cultural deposit was found to extend from 50 to 70 cm in depth. A total of 1,621 cultural specimens were recovered including projectile points, bifaces, scrapers, cores, modified flakes, lithic debitage of predominantly basalt and obsidian, metates, mano fragments, and a hopper mortar fragment. Analysis of these materials suggested the predominant occupation of the site occurred during the Kingsley and Dye Creek Complex periods extending from A.D. 1 to A.D. 1300. Interpretation of these findings provided information to better understand the cultural chronology, flake stone technology, raw material procurement patterns, and settlement-subsistence practices of this little known region. The results of this investigation were published as volume Number 1 in the CDF Archeological Reports series (Hamusek 1988b).



John Betts recording a fire hearth encountered during excavations at the Corral Site.



Archaeological crew for excavations of the Corral Site, May 1988.

A limited test excavation sponsored by CDF was carried out at the Corral Site (CA-FRE-1346) over a three-day period in May 1988. This project was directed by CDF Archaeologists Dan Foster and Richard Jenkins with the volunteer assistance of Barbara Baker, John Betts, Carlos Farré, Frank Fenenga, Phil Hines, Jack James, Bill Johnson, Don McGeein, Fritz Riddell, Jarrod Smith, William Wallace, and Edith Wallace. The primary goal of this project was to mitigate inadvertent impacts resulting from the construction of a fire control line across the site in preparation for a controlled burn. CDF authorized limited funds to conduct test excavations in the vicinity where the fireline crossed over the site. A research design was developed that addressed basic questions such as site age, function, tribal affiliation, and significance. A total of three test units were excavated that produced a wide range of cultural materials including flake stone artifacts and debitage, ground stone artifact fragments, shell and bone artifacts, numerous faunal remains, large quantities of fire-affected rock, and two hearth features. Five radiocarbon samples returned a series of dates ranging from 400 ± 40 B.P. to 1060 ± 70 B.P. This study resulted in the determination that the impacts to the site were relatively minor as they were restricted to the surface. Subsurface components of the site were found to be intact and contain a wealth of information concerning the Late Period inhabitants of the western San Joaquin Valley and southern Diablo Range. This project was instrumental in the formation of COALARG. A report on this excavation was presented at the SCA annual meeting in 1992 and later published in the CDF Archaeology Reports series (Jenkins 2001).

The Dad Youngs Spring site (CA-PLA-689) is a major prehistoric village located along an east-west trending ridge on the west slope of the Sierra Nevada. This site is associated with a perennial spring and contains a surface scatter of flaked and ground stone artifacts, a rich midden deposit, and seven bedrock mortar features. Between October 2 and October 6, 1989, an investigation was conducted at this site under the direction of CDF Archaeologists Dan Foster and Richard Jenkins, with the volunteer assistance of Fritz Riddell, Don McGeein, Brad McKee, Lissa McKee, and John Betts. This investigation was conducted to determine the full extent of the site area, make a preliminary significance assessment, prepare a complete site record, and evaluate the effects of proposed logging operations. Artifacts encountered during this investigation included manos, metates, pestles, a portable mortar, steatite bowl fragments, numerous projectile points, bifaces, drills, gravers, scrapers, cores, utilized flakes, and debitage. The projectile point types ranged from early Martis series to Desert Side-Notched series. A one-by-two meter test unit was excavated to a depth of 120 cm. Within this unit, two pestles were found side by side, surrounded by a concentration of fire-cracked rocks, and associated with two soapstone dart shaft straightener fragments. This site had been heavily damaged by a site preparation project in 1977 which exposed the area to extensive vandalism. At least 13 large relic hunter pits ranging from 1 to 5 meters in diameter and up to 2 meters deep were observed during the 1989 investigation. In spite of the extensive damage that had occurred, the site was still found to have intact deposits, and was considered to be an extremely important and significant site. This investigation was documented in an Archaeological Site Record on file at the North Central Information Center. In 1996, a law enforcement operation was undertaken in an attempt to curtail the destructive vandalism that had continued to occur at this site, but the operation was unsuccessful in apprehending the culprits.

Dad Youngs Spring site excavation crew, 1989.

The McCloud Forest Fire Station is located in Squaw Valley south of Mt. Shasta in Siskiyou County. This three-acre parcel of land was donated to the state by Champion Lumber Company for the purpose of constructing a new fire station. A survey of the property prior to construction identified an archaeological site (CA-SIS-1608) consisting of a sparse lithic scatter covering nearly the entire property (Hines 1990a). It was determined that construction of the fire station would result in direct negative impacts to the site, and consequently, CDF contracted to the ARP at CSU Chico to conduct a

Richard Jenkins backfilling units during 1991 excavations at CDF's McCloud Forest Fire Station.

Phase II investigation to evaluate site significance and propose appropriate mitigation measures. Dr. Frank E. Bayham was the principal investigator with Blossom Hamusek directing the fieldwork and subsequent analysis. The field crew included Daniel McGann, Nancy Garr, and Dina Coleman. Fieldwork was performed over a six-day period on May 30 and 31, June 20-22, and July 18, 1991. Investigations included site recording and mapping, surface collection, augering, eight one- meter-square excavation units, and artifact analysis. Artifacts recovered included bifaces, cores, edge modified flakes, lithic debitage, and one mano. An assortment of contemporary and historic materials was also recovered. The average depth of the deposit was 65 cm, but cultural materials were found to a maximum depth of 100 cm. Analysis of the cultural materials suggested that the site represented a temporary field camp operating as part of a seasonal procurement schedule. Occupation of the site fell within a time span from as early as 5150 B.P. to as late as 895 B.P. with an intensive period of utilization around 1710 B.P. Although the investigations found that the site contained important archaeological information, a proposal was developed to cap the site so that construction activities could go forward (Hamusek 1993b). The new fire station was completed in 1992.

Dillon's 1991 excavations at Sunset Point, MHDSF.

An investigation of the Sunset Point site (CA-TUL-1052) in MHDSF was undertaken to determine the significance of the site and to evaluate impacts occurring because of a modern public campground at this location. Test excavations were carried out over a five-day period from August 5 through 9, 1991. Principal Investigator Brian Dillon was assisted by Francis Riddell as project field director and field crew members Eulogio Guzman, Marilyn Holmes, and Don McGeein. CDF staff members Dave Dulitz, Lloyd Stahl, Mary Crouser, Scott Robinson, Eric Huff, and Sandy Campbell also participated in the excavations. The Sunset Point site consists of a major high-elevation campsite. It is situated in a gently sloping swale between a rounded knoll and a large granite outcrop overlooking a perennial stream. The granite outcrop contains 17 large rock basins or "Indian Bathtubs" and a concentration of 19 bedrock mortars. The site also contains a surface artifact scatter, housepits, and a dark midden deposit. Artifacts found at this site include flaked stone tools such as projectile points, bifaces, scrapers, cores, and utilized flakes; ground stone tools such as manos, metates, and pestles; and other cultural materials including pottery sherds, hammerstones, steatite vessel fragments, and fire-cracked rock. Ten one-meter-square test units were excavated during the 1991 investigations. Cultural deposits were found to extend to more than 1.5 meters in depth. These excavations identified a late prehistoric occupation dating from A.D. 1300 to A.D. 1800 overlying a deeply buried deposit extending back to the Early Archaic Period. A radiocarbon assessment of a charcoal sample from the 125 to 132 cm level yielded a result of 8,130 ± 60 years B.P. This represents one of the earliest known archaeological sites to have been documented in the southern Sierra Nevada. As a result of these findings, and the excellent state of preservation, the Sunset Point site was considered to be of utmost scientific and humanistic significance. The discovery of deeply buried cultural deposits that were not indicated by surface evidence was thought to have important implications for other presumably late period sites in the region. Recommendations

were provided to reduce impacts to the site in order to ensure its long-term preservation (Dillon 1992b). The campground that was causing impacts to the site has since been closed and an interpretive trail has been developed which leads visitors through the site area where they can learn about the prehistory of the forest and the results of the 1991 excavations (Foster and Thornton 2001).

During the summer of 1992, San Jose State University conducted an excavation at an important late prehistoric/early historic Coast Yuki village site on Lincoln Ridge, near Westport, California. This site was first discovered and recorded by RPF Brian Bishop during preparations for a THP. Bishop also served as an intermediary between Louisiana-Pacific Corporation and the excavation team to facilitate the research. This project was carried out as a summer archaeological field school and provided information that led to a more complete picture of prehistory and history on the Mendocino Coast.

The historic site known as Misery Whip Camp (CA-MEN-2296/H) is located on JDSF within the Caspar Creek drainage. Potential impacts from timber harvest operations necessitated an archaeological investigation. Due to the topography and proximity of yarding equipment, the site could not be protected by avoidance. A test excavation was undertaken in 1995 to determine the age and function of the site in order to evaluate its historical significance and to recover information as mitigation for unavoidable impacts. The project was carried out by Mark Hylkema through an interagency agreement with San Jose State University. Site features included a camp cooking facility, a blacksmith work station, a crib dam, and several foundation platforms. Artifacts recovered included extensive kitchen ware ceramic fragments, "penny pipes", glass bottle fragments, melted glass, bricks, square iron spikes or nails, and a variety of metal tools and hardware. Ceramic makers marks and bottle fragments appeared to date the site between 1880 and 1900. Historic research suggested that the crib dam may have been constructed in the 1870s (Hylkema 1995). This site may have been one of the earliest logging camps on the forest, predating the railroad logging era. The evidence from this site suggested early logging technology utilized oxen yarding and "splash dam" transportation to the sawmill. This investigation was a rare example of management other than protection through avoidance or alteration of project design (Foster and Thornton 2001).

Two summers of excavations were carried out on the Zeni Ranch in Mendocino County by students from San Jose State University under the direction of Professor Tom Layton. These investigations were reported in a Master's thesis by Patricia Dunning (1996). This study described the prehistory of the region from the vantage point of the Zeni Ranch and represents a pioneering statement of Coast-Interior archaeological connections based on prehistoric commerce. This research was initially facilitated by CDF Forester Jim Purcell.

A recent case with important implications for the CDF Archaeology Program was the Murphys Forest Fire Station project. A two-acre parcel of land was purchased along Highway 4 in Calaveras County to construct a new fire station. This parcel was situated on a rounded knoll above a small drainage just west of the property. The Department of General Services (DGS) oversees state projects that involve capital outlay or real estate transactions. DGS, in partnership with CDF, administered the contracts for the needed archaeological work. A survey of the parcel identified a prehistoric archaeological site described as a sparse lithic scatter. The full extent of

the site area could not be determined because of heavy ground cover but the site seemed to possess relatively minimal cultural materials (Neuenschwander 1995). A Phase II testing program conducted by Peak and Associates (1996) was undertaken to determine the areal extent and depth of the site. This testing demonstrated that the site was much more extensive than was indicated by the surface distribution of artifacts, had depth, and appeared richer and more complex than originally perceived. Lithic tools, cores, and debitage, as well as historic period artifacts were recovered. Since avoidance of the site by the construction of the planned fire station would not be possible, excavation and interpretation were proposed as mitigation measures. A contract was awarded to EIP Associates for $250,000 to conduct a Phase III data recovery excavation to mitigate the loss of the archaeological values prior to impacts from construction. Jeannette McKenna was the principal investigator for the excavations that were conducted in the fall of 1996 (EIP Associates 1997). Members of the Calaveras Band of Miwuk Indians served as monitors and consultants during the excavation. These excavations and subsequent surface collections produced over 5,000 artifacts. The majority of these materials consisted of lithic debitage, but bifaces, cores, and modified flakes were also recovered. Additional artifacts were revealed during monitoring of construction activities including nearly 100 ground stone artifacts and several hundred glass trade beads (McKenna 1998). Monitoring continued during construction in 1999 and two additional test units were also excavated (McKenna 1999).

The archaeological investigations initiated by DGS were fraught with problems leading to repeated delays and cost overruns. The excavations were poorly planned and supervised, and caused numerous problems with local Native Americans hired to monitor the construction, and with Caltrans archaeologists reviewing utility right-of-ways. The archaeological reports submitted for this project did not meet basic standards for archaeological reporting (EIP Associates 1997; McKenna et al. 1998) and were rejected by CDF. The CDF Archaeology Office had to stipulate explicit criteria for additional reporting. The poor performance of the archaeological contractor threatened to derail the entire project and delayed construction of the new fire station for nearly three years. In 1998, CDF Regional Archaeologist Linda Sandelin was assigned to supervise the archaeological component of this project. Over a four-month period she served as the CDF liaison with DGS, the contract archaeologist, local Native Americans, and Caltrans. Her capacity to make on-site decisions resulted in the resolution of numerous disputes, and the new Murphys Forest Fire Station was finally completed in 1999.

Location where construction activities at Hurley FFS unearthed numerous beads and other evidence indicating the presence of an archaeological site.

The Hurley Forest Fire Station is located on a parcel of state land near Auberry in Fresno County. When this station was originally constructed in 1949, it was placed upon a prehistoric archaeological site which has subsequently been designated CA-FRE-2240. This site consists of an Indian village containing bedrock mortars, a midden deposit, an obsidian lithic scatter, and hundreds of steatite and split-

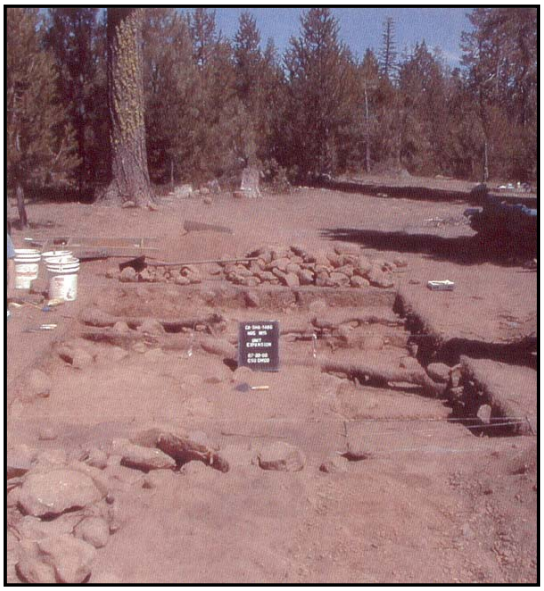
punched olivella beads (Foster and Thornton 2001). A proposal to upgrade facilities at this station led to an intensive archaeological investigation by the CSU Stanislaus Foundation. The purpose of this study was to determine the significance of the portions of the site to be affected by the proposed construction through the sampling of subsurface deposits. Field studies were conducted by Principal Investigator L. Kyle Napton and Elizabeth Greathouse with the assistance of field crew members Cynthia Gourley, Jonna Nunes, Bill Ray, Eric Schaffer, Stan Strain, and Kelley Tricarico, from January 6 to 14, 1999. A variety of excavation techniques were employed including manual, mechanically assisted, and backhoe excavations. The prehistoric artifact assemblage included projectile points, steatite beads, steatite vessel fragments, utilized flakes, cores, a scraper, ground stone fragments, polished bone fragments, bone awl fragments, a bone bead, a shell bead, a potsherd, and obsidian, basalt, chert and other types of debitage. Intrusive materials in the deposit including blasting caps, shell casings, wire nails, and glass fragments, provided an indication of the thoroughly disturbed composition of the cultural deposit. This study concluded that the portions of the site to be impacted by the proposed construction would have no significant effect on the cultural resource values of this site (Napton and Greathouse 1999).

Napton's 1999 excavation at Ishi Conservation Camp during heavy rain.

The Ishi Conservation Camp is located near Paynes Creek in northern Tehama County. This camp is situated on a 110-acre parcel that was purchased by the state in 1956. A large multicomponent archaeological site within the compound has been designated as the Ishi Plum Creek Site (CA-TEH-1621/H). This site straddles Plum Creek and consists of a developed mound, midden deposit, obsidian flakes, bifaces, projectile points, and evidence of a historic homestead (Foster and Thornton 2001). Proposed underground construction activities prompted an archaeological investigation of this site by the Institute for Archaeological Research at CSU Stanislaus. The field crew was supervised by Principal Investigator L. Kyle Napton, Elizabeth Greathouse, and Field Supervisor Bill Ray and included Eric DeSelms, Tammy DeWitt, Paula Echebarne, Cynthia Gourley, Mark Kile, Jonna Nunes, Tony Rocha, Kelly Tricarico, Yvonne Villaneuva, and Gabriella Visola. This investigation was conducted on April 6 through 7, and June 2 through 3, 1999. The purpose of this investigation was to determine the depth and extent of the portion of the site to be affected, the qualitative and quantitative composition of the subsurface assemblage, the source of lithic materials, and the potential age of the archaeological deposit. Four one-by-one meter units were excavated. The rich assemblage of prehistoric and historic cultural materials recovered as a result of these excavations demonstrated that portions of this site retained sufficient integrity to be considered significant (Napton and Greathouse 2000).

Only one prehistoric archaeological site (CA-SHA-1486) has so far been identified within Latour Demonstration State Forest. This site consists of a sparse surface scatter and shallow deposit of flaked and ground stone artifacts situated on a stream terrace surrounded by mixed conifer forest. When this site was initially recorded in 1983, it was thought to be largely destroyed and of little

value because of its location within a modern campground. A subsequent investigation of the site (Hamilton and Neri 1997) discovered additional artifacts and recognized the potential for buried cultural materials. These observations prompted a proposal for a more intensive investigation of this site. In 2000, test excavations were conducted at CA-SHA-1486 by the ARP at CSU Chico. This investigation was conducted over a two-week period during the summer of 2000. This project was motivated by a proposal to install a vault toilet in the Butcher Gulch Campground as well as a need to evaluate site impacts resulting from ongoing campground use. The investigation included surface examination and collection, mapping, surface test units, excavation units, large exposures, and artifact analysis. Materials recovered included mano and metate fragments, projectile points, bifaces, edge modified flakes, obsidian and basalt debitage, and one obsidian core. A layer of volcanic cobbles 10 cm below the ground surface limited the depth of the cultural deposit. Analysis of the recovered materials and a collection of the isolated artifacts found on Latour Demonstration State Forest indicated occupation of the forest from the Early Archaic through Emergent Periods, with the most intensive use occurring during the Upper Archaic. The discovery of a substantial ground stone component suggested that CA-SHA-1486 may have been occupied by complete family groups during certain time periods. While the test excavations demonstrated that the site had the potential to yield important information, it was felt that this study realized most of that potential (Huberland and Dwyer 2001).



Layer of volcanic cobbles found during excavations at Latour Demonstration State Forest in 2000.

Private Collections

In the course of the many types of archaeological investigations undertaken by CDF, opportunities have occasionally arisen to record private artifact collections. While many professional archaeologists maintain a justifiable disdain for amateur artifact collectors, the CDF Archaeology Office has taken a pragmatic and proactive position, recognizing the potential scientific value of these collections. Private landowners often occupy their properties for many years and have the opportunity to witness objects being exposed through natural and cultural processes that would not be possible for professional archaeologists. In order to take advantage of these findings, the CDF Archaeology Office has attempted to systematically document these collections when they have been encountered. These documentation efforts have typically consisted of site recording and photographs of the artifacts which have sometimes been mounted in displays. The following accounts represent a few examples of the private collections documented in the course of CDF investigations.

An archaeological survey in preparation for a CFIP project was conducted in 1982 on portions of the Enke property in Shasta County. A very large but diffuse lithic scatter was encountered that

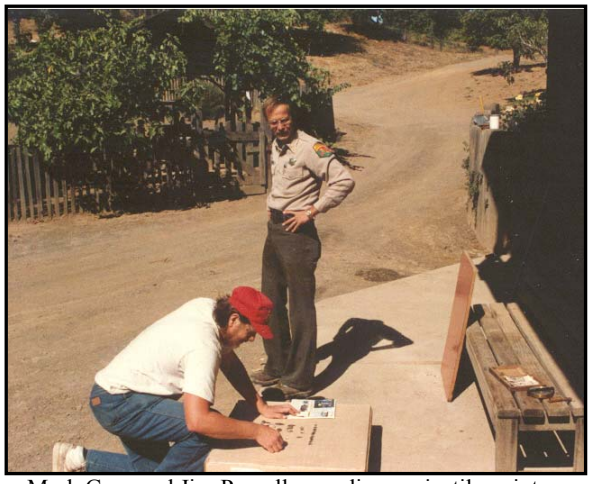
extended over most of the property. The landowner possessed a collection of approximately 1,000 artifacts that had been gathered over a 25-year period. Due to this intensive collecting, observable surface remains were limited to thinly scattered flakes and point fragments. The landowner's collection of obsidian projectile points, bifaces, drills, and scrapers was documented in photographs. Many of the projectile points were of the Gunther Barbed series. Two chert projectile points and two mano fragments were also in the collection.

Large collection of artifacts recorded during review of the 1982 Enke CFIP project in Shasta County.

A collection of surface finds from CA-PLU-358 was photographed by amateur archaeologist Rick Trumm in 1985. This collection included 13 basalt projectile points and one obsidian projectile point. In 1986, a site record was submitted to CDF by Rick Trumm and Janet Nelson for a site in the Plumas County section of Sierra Valley. This site contained three bedrock mortar features and a light lithic scatter. A mano, pestle, and two projectile points were documented. In 1987, Trumm and Nelson submitted a site record to CDF for the Manix Beach site (CA-SBR-223) in San Bernardino County. This extensive site appeared to be a large quarry area. A collection of approximately 20 artifacts was documented in a series of illustrations and photographs.

One of the large bifaces and preforms recorded from the Manix Beach quarry site.

CDF Forester Jim Purcell facilitated the recording of the Zeni Ranch site (CA-MEN-2136) in 1987. This prehistoric village is situated on a major ridge midway between the coast and interior valleys of Mendocino County. A midden deposit covers nearly two acres on a flat above a spring. The landowner, Mr. George Zeni, possesses a large collection of artifacts recovered from this site. The collection includes approximately 150 projectile points manufactured from obsidian, Franciscan chert, and Monterey chert. Also in the collection were several large obsidian bifaces or ceremonial blades, sandstone pestles, mortars, and metates. This proved to be one of the most remarkable collections ever encountered in this area. The landowner's grandfather remembered Indians camping on the ranch around 1890-1910. This



Mark Gary and Jim Purcell recording projectile points from the Zeni collection in 1987.

investigation led to a systematic surface collection and test excavation of the site by San Jose State University reported in a Master's thesis (Dunning 1996).

In 1988, a preharvest inspection was conducted for a THP on the Cloud Ranch overlooking Goose Lake in Modoc County, an area rich in archaeological sites. The Clouds were very knowledgeable concerning the archaeological sites on their ranch. During the inspection, an enormous archaeological site was encountered in the Fandango Valley area consisting of an extensive obsidian lithic scatter and numerous rock ring features. The Clouds also possess a collection of approximately 275 artifacts that includes obsidian projectile points in a broad range of styles, bifaces, crescents, milling stones, and bola stones. This collection was documented in a series of photographs.

Dozens of complete pestles, mortar bowls, and other groundstone artifacts recorded in the Thornton collection, Mendocino County.

In 1991, a large prehistoric village site (CA-MEN-2547) in Potter Valley was recorded by Dan Foster and Mark Gary. This site may have been the ethnographic Pomo village of "Seel." The artifacts in the possession of the landowner, Mr. Cedric Thornton, were one of the most impressive private collections ever encountered in Mendocino County. Mr. Thornton recounted the existence of a large earthen mound, approximately 70 meters in diameter and 2 meters high, that was situated on a level stream terrace near the confluence of two creeks. This mound was leveled in 1951 when the land was developed for a large pear orchard. Mr. Thornton began collecting the cultural materials as they were exposed. He also observed a cache of nested abalone shells. The collection he possesses contains thousands of glass trade beads, magnesite cylinders, and cylinder beads; several hundred complete projectile points, drills, bifaces, scrapers, choppers, ceremonial blades, and core tools of obsidian and chert; pestles, manos, metates and stone bowls; schist and soapstone pendants, stone pipes, charmstones, complete Haliotis shells and ornaments, clam shell disc beads, bone awls, grizzly bear teeth, an incised stone, a bear track shaped ornament, an incised bone tube or flute with bone mouthpiece, and square nails. This tremendous collection was documented in a series of photographs.

COALARG team members recording the Charlie Akers collection in 1990.

One of the primary objectives in the formation of COALARG was to document private collections. As a result of public outreach efforts by COALARG members, several private collections from sites in the region were acquired and cataloged. One of these was the Louis Deford collection. In February 1992, these collections were formally donated for permanent

curation and display to the Baker Museum in Coalinga. The Charlie Akers collection was also documented as part of COALARG investigations (Hylkema 2001).

One encounter with a private collector resulted in a less positive outcome. In the early 1990s, CDF Forester Larry Blackman provided a tip to CDF Archaeologist Dan Foster that a neighbor of his had a large collection of prehistoric artifacts. Blackman arranged for a meeting by assuring his neighbor that Foster was not the sort of archaeologist that would turn him in but often worked with private collectors in a productive way. Foster approached the situation with an open mind, met the neighbor, and viewed a massive collection which contained thousands of projectile points, beads, and many other artifacts collected from Shasta County and other locations throughout northeastern California. An attempt was made to persuade this relic hunter to stop digging and start documenting his collection with the hope of converting him into a more responsible amateur archaeologist. About this same time, Foster conducted an archaeological survey on property in nearby Tehama County for a CFIP project, and encountered something odd. Near the landowner's house were massive collections of artifacts on display, and some of these, such as legged metates were obviously collected from regions outside of California. Both the CDF forester and the RPF hustled Foster away from the displayed artifacts and back to the nearby CFIP project for fear we had encountered something outside our authority. As it turned out, although this landowner was a former president of the local historical society, it was apparent from the extensive volume of illicitly obtained artifacts seen on the property that he was a pothunter and probably engaged in antiquities trading. Foster later learned that this landowner and the Shasta County neighbor were friends and they probably dug-up sites together. Both of these men were subsequently apprehended on the Lassen National Forest digging in a prehistoric archaeological site on federal lands, and were arrested for violations of the Archaeological Resource Protection Act (ARPA). They were observed by Forest Service personnel and caught with artifacts in their possession. This turned out to be an important ARPA case with Foster providing depositions for the prosecution. This case was eventually settled. The Shasta County neighbor pled guilty to lesser charges and was directed to donate his collection to a public institution. He later claimed to have disposed of the entire collection in a dumpster somewhere near Davis, California.

CDF Archaeologists examining the Archie Brown collection in 2003.

In 2003, CDF archaeologists had an opportunity to examine the artifact collection of the late Archie Brown. Historian Bob Colby made arrangements with Mrs. Romayne Brown to examine this collection. Archie Brown was a rancher near Vina in Tehama County, who became interested in Indian artifacts early in life. Most of his collection came from the vicinity of the family ranch. Local farmers would notify Archie when they were plowing their fields and he would walk behind the equipment to recover the artifacts that were unearthed. Additional artifacts were collected in the Deer and Mill Creek canyons. During the brief examination by CDF staff, 757 ground stone artifacts were counted, including 447 stone bowls or mortars, 133 pestles, 141 shallow hopper mortars, 10

metates, and 26 manos. Also in the collection was a bedrock slab with seven mortars, an unusual three-sided mortar, an incised stone bowl fragment, net weights, and a large rock encircled with a groove. Most of the ground stone artifacts were manufactured from vesicular basalt, andesite, sandstone, and other rocks of local origin. The Brown collection also includes projectile points, arrow shaft straighteners, charmstones, small paint mortars, stone and shell beads, a bone awl, and an assortment of historic artifacts such as ox shoes, spades, bear traps, firearms, a lock, and two large Chinese stoneware jars. Mrs. Brown asserted that most of this collection was gathered locally, although from a number of different sites (Foster, Sandelin, and Fenenga 2003).

Private archaeological collections have played a long-standing role in the study of California prehistory. The earliest comparative analyses, as well as some of the first regional syntheses, were developed with the aid of large private collections (Gifford and Schenck 1926; Holmes 1900; Schenck and Dawson 1929). The analysis of private collections was also incorporated into the development of the Central California Taxonomic System, which has become the theoretical framework for central California prehistory (Lilliard, Heizer, and Fenenga 1939; Beardsley 1948, 1954; Bennyhoff and Frederickson 1994). It could be argued that archaeological materials collected by amateurs without the use of scientific methods have little or no value because the context of their discovery has been lost. There are, however, many different components of scientific research, and certain aspects of amateur collections make them suitable for comparative studies. Archaeological excavations typically produce only a small sample of artifacts of the quality that are often found in abundance in private collections. The small size of scientifically recovered collections often limits the statistical reliability of the analytical results that can be achieved. The large quantities of finished stone tools found in private artifact collections offer the possibility of constructive forms of investigation and analysis. The potential research value of private collections has motivated the documentation of these collections when they have been encountered during CDF archaeological investigations.

CDF forester examines private artifact collection during a PHI on the Byers property in Del Norte County.

VII. PERSONNEL

Credit for the accomplishments of the CDF Archaeology Program must be wholly attributed to the individuals who have made this program a success. From the dedicated and professional staff, to the broad assortment of contractors, to the talented and resourceful volunteers; policies and procedures accomplish nothing without competent and committed personnel to carry them out. At the inception of the CDF Archaeology Program, some officials believed that one archaeologist within the Department would be more than enough to handle all of the archaeological problems that might arise. With statewide coverage and ever increasing responsibilities, the sole archaeologist was often stretched extremely thin. It soon became apparent that additional staff would be necessary if CDF intended to meet their cultural resource protection responsibilities. The CDF archaeology staff, through their diligent efforts and responsive interaction with forestry personnel, the public, and other stakeholders, has made substantial strides towards the preservation of California's heritage resources.

CDF Staff

Currently, the CDF Archaeology Program has six full-time professional archaeologists on staff to provide support and assistance in the archaeological review of CDF projects. CDF staff archaeologists have major responsibilities in THP review and enforcement, archaeological training, historic preservation, policy development, contract administration, agency contacts, Native American consultation, as well as wildfire and emergency response. Their duties also include providing assistance to CDF project managers and private sector RPFs to achieve archaeological compliance during environmental planning for projects proposed or permitted by CDF. Two of the CDF archaeology positions are filled at the Senior State Archaeologist level and four are filled at the Associate State Archaeologist level. These positions are based in Sacramento Headquarters and at field offices in Redding, Santa Rosa, Fresno, and Fortuna.

Deputy Director Ross Johnson (on right) and Staff Chief Jerry Ahlstrom supported the development of an archeology program within CDF.

The CDF Archaeology Program is directed by the Archaeology Program Manager, a Senior State Archaeologist position based in Sacramento. The program manager executes the planning, organization, and supervision of the statewide archaeology program. Among the responsibilities of the program manager are the development of procedures and policies for cultural resource review of CDF projects, development of cultural resource management plans for CDF properties, cost analysis of resource protection measures, representation of CDF at Board of Forestry functions involving cultural resource issues, development of programmatic agreements with other state and federal agencies, participation in the recruitment and hiring of CDF archaeology staff, supervision of regional and contract archaeologists, the planning, direction, and delivery of the CDF archaeological training program, the development of the statewide cultural resource program budget, and the monitoring of the overall effectiveness of the Department's cultural resource program. This position also serves as the CDF agency

preservation officer responsible for the assessment of the historic significance of CDF buildings and archaeological sites and consultation with the SHPO to obtain the necessary clearance for project implementation. The program manager is responsible for the investigation of the most sensitive and complicated archaeological situations that can involve potential litigation, public controversy, law enforcement, and other consequences for CDF programs.

The CDF Archaeology Program also supports a second Senior State Archaeologist position at the Northern Region Headquarters in Redding. This position functions as the technical expert for the archaeological review of all CDF projects within this unit of the statewide program. Initially established as a regional archaeologist position in 1990, this position now supervises the Associate State Archaeologists assigned to the region.

Two regional archaeologist positions are filled at the Associate State Archaeologist level. These positions are located at the Southern Region Headquarters in Fresno and the Northern Region Headquarters in Santa Rosa. The regional archaeologists are responsible for archaeological review of projects conducted under several CDF programs including Forest Practice, forestry assistance programs, state forests, engineering projects, and fire protection. Duties include the review of archaeological work performed by others, archaeological research, field surveys, subsurface testing, significance evaluations, site recording, development of management recommendations, and the preparation of memoranda and technical reports documenting archaeological investigations for CDF projects.

Two additional archaeological positions are currently staffed at the Associate State Archaeologist level, one stationed in Sacramento Headquarters, and one at the Humboldt-Del Norte Unit Headquarters in Fortuna. The primary duty of the Sacramento position is to deliver archaeological support for federally funded grants throughout southern California. This position also fills requests for archaeologists on wildfires, and delivers numerous archaeological training sessions. The Humboldt-Del Norte Unit position was recently created to provide better archaeological review in response to the heavy workload and remote location of the north coast region. The entire CDF archaeology staff maintains liaisons with other government agencies and organizations such as the USFS, BLM, DPR, OHP, ACHP, NAHC, Native American tribal groups and individuals, local governments, regional colleagues, and members of the private sector. Archaeology staff members provide assistance in the development and delivery of the archaeological training program, the administration of contracts for professional archaeological services, and respond to requests for assistance during emergency wildfire incidents.

Much of the early development of the CDF Archaeology Program was supervised by Kenneth Delfino. He strongly supported policies for the protection of cultural resources which were largely developed under his watch. In 1981, Delfino became Chief of Resource Management, and then in 1984, Deputy Director for Resources (Martin 1989). During his tenure, he requested that CDF staff conduct an analysis of the requirements contained in CEQA in order to guide the Department in the development of policies for the protection of archaeological resources on private lands, leading to the procedures that are in place today.

Daniel G. Foster was hired as the first full-time archaeologist at CDF on December 14, 1981. Dan received his B.A. degree in Anthropology from CSU Stanislaus, in 1977. He served briefly

as a district archaeologist on the Plumas National Forest from 1980 to 1981. Between 1976 and 1981, he held several positions with DPR, conducting numerous surveys and excavations throughout the State Park System. He began at CDF at the Associate State Archaeologist level and was promoted to Senior State Archaeologist in 1996. He has received the Superior Accomplishment Award twice, once in 1987, and again in 2002. In addition to his CDF duties, Dan has sustained a long-standing research interest in rock art through a series of articles and papers (Foster 1983; Foster and Betts 1990, 1994; Foster and Foster 2002; Foster, Betts, and Sandelin 2002; Foster, Jenkins, and Betts 1990; Gary and Foster 1990), and has written many important policy and procedure documents for the Department.

Richard Jenkins began his career at CDF in 1984 as a seasonal archaeologist on loan from DPR. He was hired as the second full-time CDF archaeologist on July 14, 1986. In 1990, he became the first regional archaeologist stationed at the Northern Operations Center in Redding. Rich reviews all THPs, controlled burns, reforestation plans, and construction projects in northeastern California. He also provides supervision to the regional archaeologists in Santa Rosa and Fortuna and the contract archaeologists working for CDF in the region. Rich received the Superior Accomplishment Award in 1999 in recognition of his outstanding public outreach efforts such as Project Learning Tree, California Archaeology Week, and various school and historical society presentations.

Mark Gary and Fritz Riddell at a CDF Archaeological Training Class near Ukiah in 1998.

Mark Gary was an extraordinary individual who made a substantial contribution to California archaeology and to the CDF Archaeology Program in particular. Mark attended the University of California, Berkeley, in the tumultuous times of the late 1960s. In the early 1970s, he acquired 60 acres of land on the Greenfield Ranch in a remote area of Mendocino County. In 1984, he published a book of poetry titled *Lighthouse for Nightbirds*. Volunteer work on field projects for the BLM, DPR, and CDF kindled a passionate interest in archaeology. Mark devoted a large part of his time to public outreach and education on the value of archaeology. He served on the Mendocino Archaeological Commission for many years, and in 1985, he began delivering a series of lectures on archaeology to schools, civic groups, and foresters. These presentations led to the reporting of many new sites by interested members of the public (Gary and Foster 1990). Mark received his B.A. degree in Anthropology from Sonoma State University and was working towards an M.A. degree in Anthropology from San Jose State University. He had hoped to write a thesis on the archaeology of the Masut Pomo (Parkman 2001). Mark and his wife Deborah were regular fixtures at the SCA annual meetings, delivering a series of papers (Gary 1989, 1991, 1995; Gary and McLear 1988) and videotaping many of the sessions. The discovery and excavation of the Caballo Blanco biface cache represented their most significant published contribution to archaeology (Gary and McLear-Gary 1990). In the late 1980s, Mark began providing archaeological services to CDF through a contract with San Jose State University. On September 25, 1995, he was hired to fill the CDF

regional archaeologist position in Santa Rosa at the Associate State Archaeologist level. During his career, he conducted countless archaeological surveys and project reviews, and recorded over 500 archaeological sites. On April 30, 2000, he received the Superior Accomplishment Award from CDF Director Andrea Tuttle. His death on Memorial Day, 2001, at age 50, was an unexpected shock to all of his many friends and colleagues.

In 1994, a regional archaeologist position was established for the Southern Region in Fresno. This position has an area of responsibility larger than any other agency archaeologist in California. The position was initially filled by Carlys Gilbert who was hired in 1994 and then retired from state service in 1997. Linda Sandelin was hired to fill this position in 1997. Linda received her B.A. degree in Anthropology from UC Davis in 1992. In her position as regional archaeologist, she reviews all CDF projects in the Southern Region for archaeological compliance and assists with the management of cultural resources on the state forests. In 2000, Linda received the L.A. Moran Award, CDF's highest honor, for her superior achievement in several important programs. She was recognized for her role in resolving archaeological problems during the construction of the Murphys Forest Fire Station, her public outreach efforts during the Hurley Forest Fire Station project, the expansion of her responsibility into the southern portion of the Northern Region, her liaison with DGS to achieve historic preservation clearance on capital outlay projects, and her role in the delivery of the CDF archaeological training program.

Gerrit Fenenga came to CDF with a strong background in both academic and contract archaeology. He has earned three degrees in Archaeology from UC Berkeley. Gerrit served on the faculty of CSU Bakersfield for nine years and has worked in archaeological programs at CSU Long Beach, UC Riverside, and UC Santa Barbara. He has also done archaeological work for the BLM, USFS, DPR, and has been involved in contract work for agencies such as the Army Corps of Engineers, Bureau of Reclamation, NPS, and Caltrans. Gerrit was hired to fill the Associate State Archaeologist position in Sacramento in 1999.

John Charles (Chuck) Whatford began his career in archaeology by participating as a volunteer in investigations at Annadel State Park and at Jack London State Historic Park, both in Sonoma County. In 1987, he began attending Sonoma State University, earning his M.A. degree in Cultural Resource Management in 1993. He has worked for environmental consulting firms, as a seasonal archaeologist with DPR, and in 1997 became an Associate State Archaeologist at OHP. He was hired as the CDF regional archaeologist in Santa Rosa in 2001.

Steve Grantham was hired by CDF in 2001. Steve came to CDF after earning his B.A. degree in anthropology at Humboldt State University in 1987, and his M.A. in anthropology at California State University, Sacramento in 1994. With seventeen years of professional experience, Steve has done archaeology with the USFS, Caltrans, as a private consultant, and the Office of Historic Preservation. Steve is assigned as an Associate State Archaeologist with the Humboldt-Del Norte Unit in Fortuna.

Dorothy ("Dolly") Stangl was hired as a seasonal archaeologist at Mountain Home Demonstration State Forest. She worked there for two seasons during 1982-1983 conducting archaeological surveys within the State Forest.

The CDF Archaeology Program has occasionally benefited from the contributions of student assistants. Eric Kauffman, a graduate student at CSU, Sacramento, was employed at the CDF Archaeology Office during 1989. Other individuals who have participated in this program include B.J. Ciccio, Deidre Kennelly, and Steven Valencia. This program provides valuable work experience for students considering a career in archaeology.

Contractors

Important contributions to the CDF Archaeology Program over the years have resulted from contracting for archaeological services. In addition to the staff archaeologist positions, CDF employs additional archaeologists through contracts with several state colleges and universities. These contract archaeologists work on a part-time basis in office settings or on-call for field assignments under the direction of the CDF staff archaeologists. These contractors provide CDF assistance and expertise in archaeological and historical resource investigations as needed to support projects throughout the state. Assignments can include review of timber harvesting operations conducted on private and other nonfederal lands subject to CDF regulation; investigations on state forests; projects under the various forestry assistance programs; engineering projects at CDF facilities; and any other CDF activities requiring archaeological investigations. Actual tasks include archaeological, historical, and ethnographic research, record searches, field inspections, project reviews, damage assessments, test excavations, surface collections, site record preparation, significance evaluations, and the development of recommendations for the protection and management of cultural resource values.

The contract documents for these services include a scope of work statement, budget, general terms and conditions, and special terms and conditions. Each project is discussed in detail with the contractor to determine the scope of work, time scheduling, expected costs, property access, and other logistical arrangements. Written reports are completed for each investigation and submitted to the appropriate CDF offices and CHRIS Information Centers. Contractors are responsible for providing CDF with locational information and management recommendations sufficient for CDF to proceed with project planning within strict time lines. All newly discovered archaeological and historical sites found as a result of these investigations are required to be formally recorded in accordance with the standards specified by OHP (1995). Contractors are also responsible for providing office settings for conducting background research, artifact analysis, report and site record preparation, and administrative duties.

The State Forester was first empowered with contracting authority in 1919. Since that time, contracting has played a major role in the operations of the entire Department. Some of the earliest archaeological investigations carried out by CDF were done through contracts. In 1975, CDF began contracting with DPR for the part-time use of one of their staff archaeologists who conducted surveys, project reviews, and provided archaeological training to CDF personnel. An archaeological survey for the Headquarters Sale at Mountain Home State Forest was contracted to CSU Fresno in 1977. A contract was written for DPR Archaeologist Jim Woodward to work exclusively for CDF in 1981.

CDF has been directed to seek the assistance of state colleges and universities in conducting

studies requiring special knowledge. During the early 1980s, several small contracts were implemented with state university campuses. The contracting program with state colleges and universities was greatly expanded during the latter half of the 1980s. Long-standing contracts have been implemented with San Jose State University, Sonoma State University, CSU Stanislaus, CSU Chico, CSU Bakersfield, CSU Sacramento, CSU Northridge, and Indiana University.

During the 1980s, contracts with San Jose State University facilitated the work of Mark Gary in the Northern Region and surveys by Mark Hylkema in the Diablo Range (Hylkema 1989). Contracts with CSU Stanislaus over the past twenty years have resulted in over 100 reports, hundreds of site records, and several excavations (Napton and Greathouse 1998; 1999; 2000). From 1988 through 1995, Blossom Hamusek completed numerous investigations for CDF under contracts with the ARP at CSU Chico. For nearly 15 years, CDF has maintained annual contracts with the Center for Archaeological Research (CAR) at CSU Bakersfield. The administration of approximately 11 annual contracts has provided employment for several part-time archaeologists conducting surveys in support of many CDF programs. Since 1997, the CDF Archaeology Program website has been maintained by a contract with the Underwater Science Program at Indiana University. Beginning in 2000, CDF has implemented a contract for on-call archaeological services with the private consulting firm of Far Western Anthropological Research Group. Lisa Hagel began working at the CDF Northern Region Headquarters in Santa Rosa as a contract archaeologist in 1998. Polly Tickner began working at the CDF Northern Regional Headquarters as a contract archaeologist in 2001.

Over the years, some of the most respected and accomplished archaeologists working in California have completed projects for CDF through the contracting program. Many of the studies published in the CDF Archaeological Reports have been completed by contractors. These projects are representative of the archaeological research that is made possible by this program. Some of these projects provide opportunities for archaeologists to investigate large private landholdings that would not otherwise be accessible, often resulting in exciting archaeological discoveries. Some of the individuals that have participated in the CDF contracting program over the years include John Betts, Brian Dillon, Mark Gary, Mary Gorden, Elizabeth Greathouse, Lisa Hagel, Jeffrey Hall, Blossom Hamusek, Amy Huberland, Mark Hylkema, Michael Jablonowski, Jerald Johnson, Tom Layton, Lew Napton, Bob Parr, Bill Rich, Fritz Riddell, Mark Sutton, Mark Thornton, Polly Tickner, Sharon Waechter, and William Wallace.

Volunteers

In the course of the many archaeological investigations that have been undertaken by the CDF Archaeology Program, the assistance of volunteers has occasionally been utilized to complete projects. Interested avocational archaeologists have been recruited to aid CDF staff in conducting these investigations. Test excavations at the Old Corral Site and Dad Youngs Springs were carried out with volunteer labor. Many of the activities of COALARG were the result of volunteer efforts. Volunteer historian Bob Colby has contributed towards the documentation of the Sawmill Peak Fire Lookout (1997) and the Stirling City Ranger Station (2003a; 2003b). Don McGeein has been an indispensable participant during excavations at the

Old Corral Site, Dad Youngs Springs, Methuselah, Sunset Point, and Limekiln Gulch. The efforts of Jack Ringer have brought a number of important sites to the attention of CDF. Lew Napton and Elizabeth Greathouse volunteered their time to complete a study of the preservation of the Altaville Schoolhouse. Volunteer services have also been provided to the CDF Archaeology Program by Keith Argow, Barbara Baker, John Betts, Louis Deford, Matthew DesLauriers, Carlos Farré, Franklin Fenenga, Jill Gardner, Phil Hines, Brad McKee, Dan Murle, Janet Nelson, Robert Parr, Pete Rhode, Fritz Riddell, Mark Stechbart, Stacey Tisler, Rick Trumm, William Wallace, Edith Wallace, and many others.

One particular individual who made a valuable contribution to California archaeology through his volunteer collaboration with CDF was Willis A. Gortner. Following a distinguished career as a professional biochemist, Will developed an abiding interest in the petroglyphs that he encountered near his family's summer residence in the Sierra Nevada along the upper reaches of the North Fork of the American River. He spent many years studying this unique archaeological phenomenon and in 1984, published the results of his investigations (Gortner 1984). Will came to the attention of CDF Archaeologist Dan Foster when he was selling copies of his book at an SCA annual meeting. With the encouragement and assistance of the CDF Archaeology Office, Will prepared archaeological site records for over 50 petroglyph sites located in the drainages of the North and Middle Forks of the American River. Two volumes of these site records (1986a, 1988) were distributed by CDF. Most of these sites had never been previously recorded. Will also published a book on his interpretation of the Martis Archaeological Complex (1986b). These efforts represent an extraordinary example of the contributions that can be made by an avocational archaeologist. Will passed away in 1993, after a difficult battle with cancer.

Francis A. Riddell

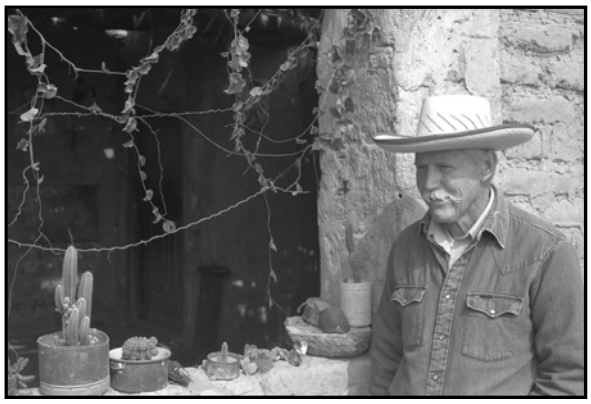
No account of the CDF Archaeology Program would be complete without a discussion of the inestimable contributions of Francis A. (Fritz) Riddell. Fritz could be considered the godfather of CDF archaeology and officially participated in the program as an educator, contractor, and volunteer. Growing up on a small ranch in the Honey Lake Valley of Lassen County, he developed an early interest in archaeology while collecting arrowheads with his brother Harry. The Riddell family moved into Susanville when Fritz was ten, and then from Susanville to Sacramento in 1936. Visits to the California State Indian Museum heightened his interest in Indian artifacts. Fritz and Harry graduated from C.K. McClatchy High School in 1938 and entered Sacramento Junior College in the fall of that year. This proved to be a highly fortuitous event, as the Riddell boys came under the influence of College President Jeremiah B. Lillard. Some of the earliest and most important archaeological investigations in central California were being conducted by Sacramento Junior College under the direction of Lillard and his protégé Franklin Fenenga (Towne 1984).

In 1942, Fritz joined the Marine Corps and participated in numerous campaigns in the Pacific Theater during World War II. Following the war, Fritz took advantage of the G.I. Bill to enter the University of California, Berkeley. After receiving his B.A. degree in Anthropology, Fritz took a position with the newly formed California Archaeological Survey. The summer of 1949 was spent with William Evans making a preliminary archaeological survey of Lassen County (Riddell 1956a). He received his M.A. degree in Anthropology in 1954 based on investigations

in southeastern Alaska. Some of his major archaeological investigations in California from this period included Tommy Tucker Cave (Fenenga and Riddell 1949; Riddell 1956b), KER-74 (Riddell 1951), the Farallon Islands (Riddell 1955), the Karlo Site (Riddell 1956c, 1960b), and Amedee Cave (Riddell 2002b). Throughout his career, Fritz also maintained a deep interest in living Native Americans, resulting in several important ethnographic works (Riddell 1960a, 1968, 1978; Meighan and Riddell 1972).

In 1956, Fritz became the curator of the California State Indian Museum, and in 1957, began directing archaeological salvage projects for the State Highway Program. Following intensive lobbying efforts, he became the first California State Archaeologist in 1960. In this position, he was responsible for most of the archaeological investigations being conducted by state government agencies. His office also served as the incipient OHP by nominating sites to the NRHP. As a result of the mounting workload, a pressing need for an accessible repository of archaeological information became apparent. The first such repository had been established at UC Berkeley under the direction of Robert Heizer, where Fritz had worked during his college years. When the time came to set up a state-administered archaeological information system, Fritz turned to Heizer for copies of the site record files at Berkeley, but they were not forthcoming. Although Heizer had made magnanimous statements regarding his intentions to work cooperatively with other institutions (Heizer 1948), such was not to be the case. Fritz would later comment that "Heizer wouldn't give you a whiff off an oily rag." This period proved to be very difficult and challenging for Fritz, with state government agencies having very limited interest or sympathy for the preservation of cultural resources. Little or no funding was provided by state agencies to adequately carry out the work that was needed. His office was also criticized by members of the archaeological community who lacked a comprehension of the difficulties he was facing. Fritz would retire from state service in 1983, leaving behind a well-established program of cultural resource management within state government.

Following retirement, Fritz became more active than ever in archaeological research. He renewed a long-standing interest in Peruvian archaeology by establishing the California Institute for Peruvian Studies which organized annual field expeditions to South America. In recognition of these efforts, his Peruvian colleagues awarded him an honorary Doctorate from the Catholic University of Santa Maria, Arequipa, in 1998 (Dillon 2003).



Fritz Riddell in Peru.

Fritz became intimately involved with the CDF Archaeology Program, serving as a training course instructor, contract archaeologist, excavation team member, and expert consultant from 1986 to 2002. He also conducted a complete inventory of all of CDF's artifact collections, consulted with Native Americans, and assisted in the development of the Department's report in compliance with the Native American Graves Protection and Repatriation Act (NAGPRA). His unique sense of humor and straightforward manner enabled him to effectively communicate knowledge to a sometimes less-than-receptive audience during training sessions, or during

communications with landowners. He participated in numerous preharvest inspections and volunteer projects for CDF in addition to conducting contract work on private forest lands.

Fritz Riddell teaching an RPF how to identify groundstone artifacts.

He could usually be seen at the annual meetings of the SCA where he received the Mark Raymond Harrington Award for Conservation Archaeology, and later, the Lifetime Achievement Award (Foster 1995). At one such meeting, when asked his impressions of the papers he had attended, he sagely noted "These young students seem to be killing a fly with a sledgehammer." In spite of this observation, Fritz often went out of his way to encourage any young person that showed the slightest aptitude for archaeology.

In the early 1980s, Fritz was diagnosed with cancer, which he battled for the rest of his life. His medical problems, however, never seemed to put a crimp in his style or constrain his enthusiasm. On one early COALARG expedition, the subject of Valley Fever was brought up. When asked if he had ever suffered from this disease, his retort was "I've had everything but AIDS." As with many archaeologists, Fritz had some unfinished business to pursue in his final years. Inquiry regarding the progress on a particular project might bring on the lament, "Whenever I sit down to work on that, I feel an urgent need to clean my aquarium." Despite this susceptibility to procrastination, shortly before his death, he was able to provide a brief account of his colorful life in a series of articles published by the SCA (Riddell 2001a, 2001b, 2002a, 2002b). These reminiscences were supplemented by tributes from long-time friends William Olsen (2002) and Brian Dillon (2003). Ironically, after his long struggle with cancer, Fritz succumbed to a heart attack on March 8, 2002. Throughout his long career, Fritz was a friend, mentor, and inspiration to nearly everyone who knew him.

Working as a CDF Contract Archaeologist long after his "retirement" from state service, Fritz is recording a site near Burney in 1993.

VIII. Voices

History might best be recounted by those who lived it. Unfortunately, this is not always possible. The history of the CDF Archaeology Program has occurred recently enough that many of the participants can still relate their own stories. At the inception of this project an invitation was distributed to approximately 80 individuals requesting contributions to this study. These people have made substantial contributions to the development of the CDF Archaeology Program or have played prominent roles in important events that shaped it. This chapter contains a series of brief accounts written by the actual people that participated in these events. Each of these contributors has a unique and personal perspective on the events they experienced. Some of these individuals played a prominent role in the early years of the program and their recollections were the primary source of information about these events. Each contributor was requested to discuss the following topics:

- Their relationship to the CDF Archaeology Program
- What was their job for CDF
- The years this work took place
- A particular project, assignment, or memorable experience
- A significant event that shaped the program
- Opinions on the overall accomplishments or deficiencies of the CDF Archaeology Program

This chapter provides the reader with a broad sample of the kinds projects completed and the experiences of an incredibly diverse group of current and former state employees, associates, and members of the public that have been connected to CDF over the years. It also reveals some of the unique aspects associated with archaeology work done directly by or under the auspices of this Department.

One of the driving forces to produce this "Voices" chapter was the realization that much of our program's history is undocumented, and important events were only known in the memory of key individuals, some of whom were passing away. Some readers may feel that this material contains too many personal accounts to have any substantive value in contributing to a history of this sort. However, we believe the personal nature of some of these accounts, especially the colorful anecdotal reminiscences that are provided, allow readers to more fully appreciate the issues, difficulties, and nuances that go into this type of work done at this agency.

The debate on the worthiness of personal-anecdotal accounts to capture the history of a discipline or program reminds us of written correspondence between Arlean Towne and Robert Heizer captured in Towne's (1976) excellent history work documenting the development of Central California Archaeology from 1880-1940. Following Towne's letter inviting him to provide comments, biographical information, and taped interviews to capture his contributions towards a compilation of the history of the development of Archaeology in Central California, (very similar to the invitations we distributed to the contributors of "Voices") Heizer provided the following response:

> *In answer to your letter of February 17, I have to tell you that I have no interest at all in being interviewed, nor do I feel that I "owe" anyone or any subject any comments. I say this because history is not personal recollections, but what people have done. My principal teacher, Alfred Kroeber, was not an anecdotal person, and perhaps I learned this from him. Over the weekend I went through a big accumulation of notes, letters, and the like going*

> *back to 1932, and reading this really convinced me that it is the published writings of a person that must be the basis of his contribution to a subject. I have destroyed that file, precisely so it will not become "archival" and subject to the possibility of being pawed through and its contents "interpreted" (Robert F. Heizer - February 24, 1975 in Towne 1976).*

It is surprising to realize that the great R.F. Heizer would actually destroy his files to make sure those materials would never be included in Towne's or any subsequent history project. Perhaps he was worried that disclosure of those materials might well have fueled an interpretation of his personality, placing certain aspects of his character in an unfavorable light. During the compilation of "Voices," we occasionally received similar feedback from some of our invitees. A few contributors were not thrilled with the idea of submitting personal types of accounts, urging us instead to rely upon a careful review of records to form an objective presentation of our program's history. We decided to do both. We believe that Heizer and others that think as he did fail to appreciate the value of this type of documentation, especially for an organization such as CDF archaeology whose story is only now being written. It is a mistake to expect researchers to rely exclusively upon on a published record as the sole source to document a history of this sort. In many cases written records concerning the origins and development of a governmental program are either absent or woefully incomplete. We felt it was important to try to capture the recollections of certain key people while they were still around to provide them. We are extremely grateful for the numerous articles that were written and the generous amount of time given by our friends and colleagues to help us tell this story.

Jim Anderson
CDF Division Chief - Retired

Jim Anderson

When Dan Foster asked me to contribute to this chapter, I had reservations about trying to recall events that occurred many years ago. Dan had requested that I describe my role in a law enforcement case back in 1979 against Georgia-Pacific Corporation resulting from the destruction of an archaeological site in the coastal area of northwestern Mendocino County. I did, however, agree to investigate the extensive files kept by CDF in the Howard Forest resource management archives. I was able to locate numerous documents related to this case including the original THP (#1-79-224M), the law enforcement report, the Court Order of Probation, a report and recommendations from John Foster, several public document letters, and additional supporting documents. These materials indicate that the archaeological review was done in response to public comments received during the THP review process. One of the public comment letters was from archaeologist Valerie Levulett which included the request that an archaeologist be appointed to the multi-agency review team. As I recall, this letter generated a great deal of interest in Sacramento Headquarters with regard to archaeology and the probability that CDF was not complying with the obligation to provide proper protection of this resource. This may well have provided much of the motivation to develop the program in place today.

Keith Argow, Ph.D.

Keith Argow, Ph.D.
National Historic Lookout Register
National Woodland Owners Association

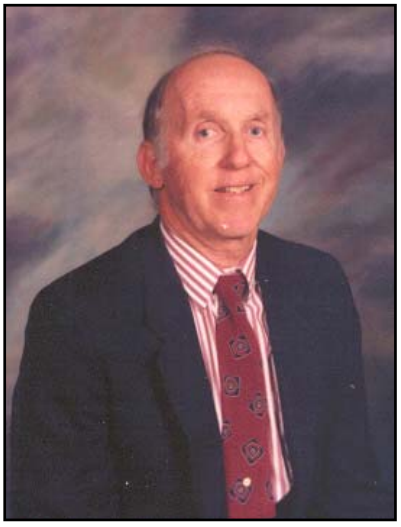
The National Historic Lookout Register works closely with all 49 state forestry agencies in this country that had fire lookouts. For the past 13 years I have corresponded with CDF providing input and assistance during the agency's task of managing historic lookout towers. This correspondence included frequent telephone conversations with Dan Foster and several actual meetings with current and former CDF Directors. This consultation allowed me to voice public interest and support for the preservation of historical lookout towers and other important resources. With the exception of Kansas (the only state never to have a lookout), every one of the 49 states with fire lookout towers and lookout structures has buildings that are over 50 years old and of historical significance. During the 1960s through the 1980s many of these were abandoned when it was believed that they were too expensive to maintain and alternative detection systems were cheaper.

As it turned out.... relying on airplanes, cell phone, satellites, or neighbors to report wildfires has not been nearly as effective or as inexpensive as fire agencies had envisioned, and many such agencies are regretting abandonment of their fire lookout programs. Major fires were getting away because they were simply too large when first detected to respond to initial attack. By that time, many of the historic structures were gone. CDF has been an exception. Although air operations are as prominent as any state, the agency realized that lookouts are important both as historic icons and detection points. Still, in a period of declining budgets, funding these stations became difficult and some historic sites had to be abandoned. But CDF did not just walk away. They had an Archaeology Program that carefully documented the state's extraordinary inventory of historic structures. Then they took action to protect as many as possible.

Because California has been in the forestry business a long time, and is a big state, there is a rich history. It is not surprising that it is one of a handful of states that has taken its cultural history seriously. Society benefits from professional documentation of the past, landowners benefit from the continued protection of lookouts and other stations that are again being appreciated for their important role.

The National Historic Lookout Register is pleased to have listed California's most important sites, and will continue to do so in an ongoing project. Moreover, the state is the first in the U.S. to have three separate chapters of the Forest Fire Lookout Association, a growing organization that will provide additional resources to the CDF Archaeology Program to move ahead with restorations and other protection activities. Congratulations to CDF on its 100 year anniversary. We are proud to be your partner.

Brian R. Barrette
CDF Staff Chief - Forest Management - Retired


Brian Barrette

With the old Forest Practice Rules being declared unconstitutional due to the fact that "acreage owned determined the votes cast", the new Forest Practice Act (Z'berg-Nejedly FPA) was passed in late 1973 and staffed beginning in July of 1974 with 48 mostly new Foresters and 12 clerical support staff. The newly designed Timber Harvest Plan (THP) form covered all of 3 sheets on both sides, and supplemented with a map showing roads and boundaries. While the new rules were more stringent that the previous ones, they still were fairly straight forward and simple. What changed the most was that sister agencies such as Fish and Game, Mines and Geology, Water Quality Control Board, and Department of Parks and Recreation were authorized to accompany CDF Foresters on Pre-Harvest Inspections (PHIs), and although CDF had the final say on approving (a bone of contention with industry since they insisted it was conforming, not approving), any of these other agencies could file a non-concurrence if they felt their concerns were not sufficiently addressed during the inspection and review process. Most non-concurrences were filed on Coastal plans in general and Humboldt and Del Norte counties in particular, and most were filed by Fish and Game and the North Coast Water Board.

While protection of archaeological resources were supposedly covered, there was at that time no particular rules demanding a formal archaeological survey of any sort. This led to some problems and concerns. Expertise was provided through Parks and Recreation as CDF did not have any Archaeologists at this time. DPR staff was small and unavailable to look at every THP submitted that might have threatened resources, and as a result there was occasional damage and losses.

In late 1975, there was sufficient concern by the legislature and the Resources Agency over the effectiveness of the process that the Agency established a THP Review Task Force under the direction of Agency staff person Frank Goodson. I was selected as CDF Liaison and Coordinator. It was decided that a random selection would be made of the THPs since the implementation of the new FPA that were for the most part either being operated on or completed. Each agency representative was allowed to select several controversial plans to be visited, and of the 100 total, some 30 plus would be visited on the ground. Of the group, there were two or three that had significant archaeological resources involved. One was the infamous Hoxie Crossing Plan near Covelo, another was near a State Park in Santa Cruz County, one was the Blue Ledge Mine in Siskiyou County, one was on the Mountain Home State Forest in Tulare County, and the final one was in Cannell Meadows close to Lake Isabella.

Several different Archaeologists from DPR participated in the on-the-ground reviews. For the most part the resources were well protected. The Cannell Meadows plan was the main exception as the access road was constructed right by a significant Pictograph site, and while it didn't appear to have been damaged significantly, the site was not adequately protected from those who might deface the pictographs or search for arrowheads and other artifacts. Overall the Task Force made only minor recommendations related to protection of the archaeological resources, but this group probably had significant influence in the development of specific rules to protect

cultural resources from harm. The final report of the Task Force was pretty much put on the shelf as the results showed that the current rules were working pretty well with no significant damage; except perhaps to the old growth in the Redwood Creek drainage where logging was accelerating due to concerns over the expansion of the Redwood National Park.

The passage of the California Forest Improvement Program (CFIP) in 1978 created another push for additional staffing for the Archaeologists to review projects funded by the revenue from the State Forest Timber Sales. The passage of the Chaparral Management Program (CMP-now VMP) in 1981 further pushed the CDF into first contracting with DPR for Archaeological assistance, and eventually into hiring staff as CDF employees. Eventually concerns over damage not only from prescribed fire, but from wildfire as well resulted in staff being assigned to both VMP and wildfires to monitor the construction and cleanup efforts.

Training of CDF Foresters occurred first by the staff, and eventually led to the training of private foresters as well so that they could be on the lookout for and provide protection for cultural resources during the THP review process. At first there were only a few CDF Forest Practice Inspectors who really went out of their way to protect the resources. Dave Dulitz, the Forest Manager for Mountain Home State Forest was one of the most supportive, as was Dave Drennan of the Garberville office. Others who I don't recall were also supportive, but some inspectors showed little enthusiasm for this additional workload. I am unclear when the first specific archaeological rules were adopted by the Board of Forestry, but suspect it was in the mid 1980s.

Charles Beeker
Indiana University

Charles Beeker

From 1997-2004, the Underwater Science Program at Indiana University, an educational leader in the field of World Wide Web development and Information Technology, has accepted a small annual contract with the CDF Archaeology Program to develop and maintain CDF's web pages. As an educational institution, IU's goal was not only to deliver an outstanding product but also to use this opportunity to involve students in all aspects of Web site maintenance and development. Over these years, tens of students of all backgrounds have participated in creating CDF's Archaeology Program Web pages by learning the basics of Web making as well as creating sophisticated tools for content delivery via the Internet.

Currently, Ania Budziak, Underwater Science research associate, is responsible for all aspects of CDF's website maintenance and development. Her primary goal is to maintain a user friendly, up to date website that serves the needs of CDF and assists in fulfilling CDF's commitment to preserve California's past. However, together with CDF's staff and other collaborators, she works continuously on improving the online delivery of information and services to CDF's professional as well as the general public.

We hope to continue to assist CDF Archaeology Program in delivery of online information. Our goals for the future remain unchanged: Via the Web, we hope to facilitate information flow

among the CDF's professionals as well as to and from a variety of stakeholders. Using the excellent human and technological resources of Indiana University we are proud to contribute to the preservation of California's rich cultural heritage.

Ronald J. Berryman
Consulting RPF
Berryman & Associates, Forestry Consultants
Instructor - CDF Archaeological Training Program

Ronald J. Berryman

Dan Foster first approached me about becoming an instructor in the formal CDF Archaeological Training Program in 1997. Being easily flattered (and possessed by a life-long interest in Indian culture and life-ways) I agreed to instruct those portions of the course dealing specifically with mitigation measures and how foresters can best conduct their activities without running afoul of the rules.

In the earlier days of the program, many foresters were very apprehensive about how the "new" archaeological requirements were going to impact them. I saw my basic mission as reassuring them that the rules are not as onerous as they may appear. Sharing my own techniques for discovering and recording sites in the field went a long way towards gaining foresters confidence that the new rules were *not* the end of forestry as we knew it.

Working with Dan Foster, Fritz Riddell, Brian Dillon, Richard Jenkins, and several other instructors, I noticed a perceptible shift in attitude toward the end of each course that archaeology could actually be an *enjoyable and interesting* part of preparing a THP. Dillon, of course, is the one that most foresters remember the easiest due to his refreshing, non-conforming style of presenting material. Beginning his lectures by stating that he was raised by *wild dogs* endeared him to those of us who secretly felt that we were raised pretty much the same way. I remain proud to have been chosen as an instructor for what I feel was one of the most interesting series of courses that CDF and the California Licensed Foresters Association (CLFA) ever sponsored.

John Betts
CDF Consultant

John Betts

I am not an archaeologist. I am not a writer. In the early years of my adult life, I aspired to be an artist, but even that now seems like an unwarranted pretense. To make ends meet, I worked as a welder, truck driver, carpenter, and snow plow operator, among other things. During my travels I came across a couple of petroglyph sites and remember thinking "this is something I should look into someday." Then in 1986, while hiking in Anza-Borrego State Park, I visited the Little Blair Valley pictograph site. It occurred to me at that time that the study of rock art might present a means of learning something about the origins and function of art in society. I also wanted to

utilize some drawing techniques that I had developed to illustrate some of these sites as a possible contribution to the study of this interesting phenomenon. I began visiting sites around California, collecting rock art literature, and contacting various people with knowledge on the subject. Two of these contacts, Ken Hedges of the San Diego Museum of Man, and Anne Carlson of the Tahoe National Forest, both suggested that I look up a fellow named Dan Foster at the California Department of Forestry who was a purported authority on rock art in the Sierra Nevada. While in Sacramento on other business, my wife Kathy and I dropped in on Mr. Foster. He was rushing off to a meeting, but gave us a couple of tips on sites we might want to visit and invited us to come back when we would have more time to talk. We returned several weeks later with some examples of illustrations I had completed. Dan must have been very impressed with my drawings because ever since that day he has done everything possible to encourage my interest and facilitate my involvement in archaeology. He began by inviting me to participate as a volunteer in several CDF field trips and then made arrangements for Kathy and me to meet with Mark Gary and Deborah McLear to see the spectacular Keystone boulder that had recently been discovered in Mendocino County. In the following months I began to produce a series of limited edition rock art prints based on my drawings. Dan immediately purchased one of each and encouraged everyone he could think of to do likewise to enable us to get more prints made.

About this time I also checked in with the Tahoe National Forest to show them what I had been working on. The Forest Archaeologist, Dick Markley, offered me an opportunity to work as a volunteer recording some of the petroglyph sites on the Forest. At that time I did not know what rock art recording meant, but I diligently scurried around the Forest sketching and photographing as many sites as possible in the short time left within the fiscal year. In 1990 the Tahoe National Forest began hiring people to perform archaeological surveys for the massive timber salvage program that was being implemented. I called Dick Markley and asked if this was something that I would be qualified to do. He suggested that I contact the Truckee Ranger District Archaeologist, Carrie Smith, whom I had met previously, and get an application form. Over the next nine years I worked seasonally as an Archaeological Technician for the Tahoe National Forest, eventually carrying out a broad range of cultural resource management duties such as surveys, site recording, site protection and monitoring efforts, research, and report writing. I also participated in test excavations and gave public presentations on rock art.

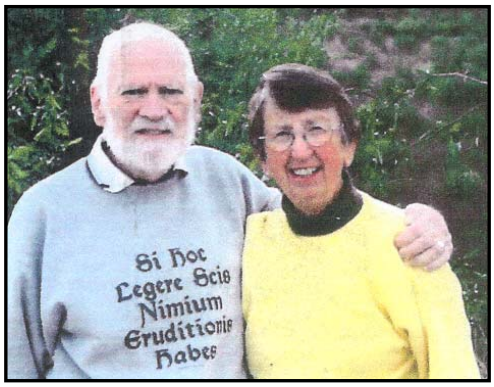
In 1992, Dan Foster asked if I would be interested in doing some work for CDF on a contract basis. He said this work would include such things as site recording, small surveys, and occasionally a pre-harvest inspection for a Timber Harvest Plan. I did not really know what a Timber Harvest Plan was, but agreed to give it a try. Dan made arrangements with Anthropology Professor Jerry Johnson for me to work through the CSU Sacramento Foundation. Initially this contract was very small but it helped to get through the winter months when laid off from the Forest Service. Over the years the contract gradually increased taking up the slack as Forest Service work diminished. In ten years working under this contract I have recorded many sites, participated in numerous pre-harvest inspections, conducted several surveys, and prepared some Archaeological Resource Management Reports. More recently I have been given several writing assignments that have resulted in publications in the CDF Archaeological Reports

John Betts demonstrating compass use at Washoe Cultural Protection and Preservation training in 2002

Series. Perhaps the most rewarding accomplishment of my CDF work, however, has been the opportunity to prepare site records for approximately 50 petroglyph sites in the northern Sierra Nevada region. This has been the culmination of my original interest in rock art and continues to be, I believe, an important component in the preservation of these sites.

In my earlier career as an artist, doors often seemed to close in my face because I did not have the right credentials or did not know the right people. From the beginning of my interest in archaeology, however, people have been eager to provide encouragement and take advantage of my abilities; people such as Dan Foster, Rich Jenkins, Dick Markley, Carrie Smith, Susan Lindström, Marianne Russo, Jerry Johnson, Fritz Riddell, Penny Rucks, Will Gortner, Albert Elsasser, Jim Woodward, Linda Shoshone, and many others. Throughout my career in archaeology I have felt that it was a tremendous privilege to be able to work in this field. I have tried my utmost to produce work of the highest level of quality that I am capable of, and I am very grateful to the people who have given me the opportunities to do so. It is easy to find fault with an entity such as the CDF Archaeology Program with all of the taskmasters it must serve as part of the massive State bureaucracy, but it is also a remarkable organization that can find ways to incorporate the efforts and participation of people from many different walks of life towards the goal of protecting and preserving the heritage of California.

A.J. and Frank Bock
American Rock Art Research Association



Frank and A.J. Bock

Our association with Dan Foster and the CDF Archaeology Program goes back over 20 years. Our common interest is the identification and management of rock art sites in California, which has enabled us to cross paths from time to time. In 1989 Dan and A.J. took the week-long Rock Art Site Protection and Management Training offered by the Getty Conservation Institute, and our group, the American Rock Art Research Association (ARARA) has provided input to CDF during several rock art site management situations including preservation efforts at Wabena Point and enforcement of the destruction of the Cupule Point site near Coalinga. For the remainder of our contribution to this chapter on CDF's history, we would like to inform CDF's readers about the origins of ARARA and of our involvement with it.

In September of 1956, Frank, while driving to California to begin a new job as an Instructor at Whittier College, paused at a roadside rest somewhere in New Mexico. Caught by the sight of the sandstone cliffs behind the parking lot, covered in what appeared to be Indian *"writing",* was fascinated, and when he began living in California, decided to explore the country; so he bought an old U.S. Army Jeep and began visiting the California desert. One trip, while bouncing down a dry river bottom in the Borrego desert, he stopped near a sandstone outcropping and climbed up to find a rather shallow overhang. Standing in the shade of the overhang, he was met by a series of stick-figure men, painted red, marching across the wall. His feeling was "Good heavens, I'm standing in the middle of ancient history!" Back home he contacted his friend, Wilson Turner, who was interested in studying ancient Hieroglyphs in the Yucatan, and upon hearing of Frank's "discovery", they immediately wanted to go see the site. They drove back to the panel of the little marching men, took pictures and drew a rough sketch of the panel, then

both decided to scout all the other areas in California where rock art sites existed.

They picked up a small publication from the Museum in San Bernardino that listed 25 rock art sites around San Bernardino County. They were both hooked, and in a matter of a few weeks found the 25 and started the grand search for more. They spent nearly every weekend in the Mojave Desert, camping in the back country, thus locating scores of rock art sites.

A.J. and Frank met at Cerittos College and joined families in 1967. This enlarged our group to five children who joined our trips in searching for the elusive rock art. We assumed that this little band were unique in our endeavors to find rock art. It wasn't long before, by word of mouth, that we were surprised to find other individuals who were also intrigued by these ancient marking and paintings. In 1972 Dr. John Cawley made contact with Dr. Klaus Wellman, who exchanged letters seeking information about rock art. This exchange of letters expanded to a meeting held in Farmington, New Mexico in 1974. To the surprise of all who had heard of the proposed get-together, nearly 100 rock art enthusiasts made their way to Farmington and all were pleased to find they were not alone in the fascination and interest in rock art. Nor did the group realize that this was the beginning of what has become one of the world's largest associations devoted to the recording and preservation of prehistoric rock art.

Frank and A.J. devoted twenty years to basically running ARARA. In that time, they wrote and published ARARA's quarterly newsletter *La Pintura* and, in addition, they edited and published the papers presented at the annual meetings of the organization. Also, several summers were spent in conducting Rock Art Recording Sessions for the Bureau of Land Management, the National Forest Service, National Park Service and other government agencies. A.J. was chosen to be secretary and treasurer, and for the next two decades remained at those two important roles, as well as being responsible for arranging the annual conferences. We are grateful for the opportunity to contribute to this history project, and want to thank CDF for their numerous site discoveries, publications, and public outreach to inform the citizens of California about the spectacular rock art sites that exist in this state.

Patricia Murphy Brattland
CDF's Native American Advisory Council

Patricia Murphy Brattland

I have been registered and recognized by the Bureau of Indian Affairs (BIA) as a California Indian all my life. I have researched our Indian lineage to great lengths. I soon realized my father's people were of great importance and made a significant contribution to California Indian history. Among their many contributions, were the construction of the San Juan Bautista Mission, the construction of Fort Miller in Millerton, California and a succession of Chiefs signing the Treaties of 1851-1852.

My father, Thurman Murphy Jr. said very little regarding his Indian heritage and my grandfather, Thurman Murphy Sr., said even less, which is not uncommon among Indian families, due primarily to the sad chapter in our California Indian history represented by many "forced actions" in the 19th Century that has haunted us for so long. One of the things my grandfather

always said to me and to my father was to stay on the BIA Rolls; "We're going to receive our land back." I am a Dumna and Kechayi Yokuts Indian from along the San Joaquin River, at Millerton and Friant, California and Pomo from Mendocino County. I know very little of my Pomo grandmother, although research is under way. She died when my father was three years old. My great-grandmother's people (my grandfather's mother) come from Kuyu-Illik, a Dumna village, now under the waters of Millerton Lake, where Fort Miller was built in the 19th Century. Her grandfather, Chief Tom Kit, was one of the Chiefs to sign the Treaties of 1851-1852, treaties sadly enough, that were never recognized and ratified by the US Government. Yet-choo-nook's mother, Wa-see-it, was the daughter to Chief Tom Kit, a Dumna and her father was Gai-da-na, a Kechayi Chief, also a relation to Chief Tom Kit as well as a signer of the Treaties of 1851-1852. The Kechayi lived just above the Dumnas along the San Joaquin River, at what is known as Table Mountain, where my (Murphy) family lived continually until 1960 on 146 acres of Indian Allotment land immediately adjacent to Table Mountain Rancheria.

Our people were such an important part of California Indian history, I decided to create a web site and share this valuable information I was collecting. As a result, I was asked to perform research for other tribes, individuals and our own state offices. You can view this information at: www.gerlecreek.com/documents/dumnayokuts.htm and www.dumnaindians.org

I was invited to apply to the Native American Heritage Commission for the Most Likely Descendent of the Dumna and Kechayi Tribes. I did so, along with my cousin, Keith Turner of Auberry, California. Keith was selected Most Likely Descendent for the Dumna Tribe and I was selected the Most Likely Descendent for the Kechayi Tribe. We were honored, indeed, to be selected and I realized then, my path would be as an active participant in California Indian issues and a voice my family never had.

We are encouraged that the State of California and the Native American Heritage Commission have recognized the cultural and historical significance of the unrecognized California tribes and the great value in their contributions. When Larry Myers sent me an application for the newly created CDF Native American Advisory Council, I did not hesitate in completing it and returning it. I am one of the nine members selected to serve on the California Department of Forestry and Fire Protection's Native American Advisory Council. This was an opportunity not to be passed or ignored. It is our American Indian way not to disclose and to enjoy life's journey while leaving no tracks. However, if one does not participate our message is lost. The word Anthropology seems to have taken on the "A" word among many American Indians and rightly so. The CDF Native American Advisory Council has allowed me to become involved, to realize that CDF was not just about putting out fires nor was it their common goal to seek out the sacred and cultural sites for satisfaction or profit. Rather, the CDF has the California Indian sacred and cultural sites and their safe preservation at the top of their priorities.

In May 2003 I attended the Archaeology Training Class #86 held in San Diego which has opened my eyes to the state of Archaeology within California as it relates to California Indians. To be part of the program as an instructor was, indeed, an honor. The Archaeological Training Program is a fine example of CDF's commitment to preserve and protect sacred and cultural sites, whenever possible. We may not agree with all that the archaeologist does to prepare and preserve but it can be done with our involvement. Rules and regulations are changing and if we are not part of the solution with our wisdom, our voices will not be heard. Many of the Tribes are not aware of the CDF Native American Advisory Council or second Council; there is still a hesitancy regarding the Council, but we need to make more of an effort to get the word out.

Kris Bundgard
Maidu Interpretive Center - City of Roseville

Kris Bundgard (front row far right) standing with Maidu Park Docents

What's so special about the Archaeology Program at CDF? Docents, the volunteer tour guides at the City of Roseville's Maidu Interpretive Center and Historic Site, unanimously confirm that it's the professionalism, in-depth knowledge and community outreach and education efforts that distinguish this unique archaeology team.

From 1995 to 2004, the knowledgeable archaeologists at CDF, including Senior State Archaeologist Dan Foster and Associate State Archaeologist Gerrit Fenenga, have assisted the Maidu Interpretive Center to help train the team of docents that lead over 25,000 school children around the Maidu Historic Site each year. The docents educate visiting school children and teachers about Nisenan history and culture and the ancient Indian village site, which includes archaeological features such as petroglyphs, bedrock mortars and middens. This Maidu Historic Site is officially designated as the Strap Ravine Nisenan Maidu Historic Site, listed on the National Register of Historic Places in January 1973.

While training the docents to accurately interpret this special site, Gerrit and Dan, who were assisted on occasion by Fritz Riddell, provided basic information about California Indian archaeology and the features of the Historic Site. The archaeologists focus on eliminating stories, undocumented sources or hearsay and encourage the use of information from well-documented publications and the archaeological features of the site itself in guided tours. The CDF archaeologists answer questions and provide direct information and referrals to assist Maidu Interpretive Center docents with research projects concerning the site.

Since a complete archaeological excavation has never taken place on the Maidu Historic Site, and since some explanations are not clearly defined, docents are encouraged to present information as "hypotheses" and to present a number of scientific, in addition to California Indian viewpoints, concerning the petroglyphs, how long the site was occupied, and other such complex issues. Gerrit Fenenga also presents talks on California Indian archaeology for the general public who visit the Maidu Interpretive Center, helping to increase public understanding and appreciation of archaeology and the kinds of information it can provide for our future.

In 2002, as the Maidu Interpretive Center Director, I had the opportunity to attend the 4-day CDF Archaeological Training Course #80 held in Redding. This training program provides valuable information to foresters and other resource professionals (including myself) to enhance our ability to recognize, document, interpret, and wisely manage archaeological sites in California. This training has been particularly valuable for me to help guide us in the management of cultural resources at the Maidu Historic Site.

CDF's archaeologists embody a high level of knowledge, professionalism and commitment to education. Sharing these resources with community partners, such as the City of Roseville's

Maidu Interpretive Center, enhances the image of CDF and presents that Department as a model for State agencies as being knowledgeable, accountable, service-oriented and accessible. The Maidu Interpretive Center docents and staff extend their "thanks" for the on-going partnership with and assistance from CDF's Archaeology Program staff.

Steve Q. Cannon
Consulting RPF

Steve Q. Cannon

Archaeological surveys on private lands have changed over the years. The degree of detail has increased, the technology used for surveying has become more sophisticated and the training of the people doing the work has improved. Another thing that has changed is the attitudes and points of view of the people doing the surveys and the landowners on whose lands the surveys are done. This change in attitude was illustrated to me in a dramatic fashion a couple of years ago.

In 2000, I was asked to put together a Timber Harvesting Plan (THP) for a property in Calaveras County. The Plan Submitter suggested to me that the THP might also include an adjacent property, but the second landowner had not made a decision as to whether he wanted to be included. We all agreed that it would be wise to include his land in the request for information from the Central California Information Center. If he decided to get on board on the project, then we would have the necessary information to proceed. When the Information Center Report arrived, I found that my suspicions of prehistoric use on the property were justified. A survey was conducted in 1961 by a local archaeologist as a result of the discovery of three skulls during the construction of a swimming pool. The archaeologist was given one of the skulls, another was given to the local high school and the third was used for target practice by the landowner! The archaeologist's comment regarding the landowner was; "With the owner shooting up one skull, with mortars and arrowheads lying in his back yard I assume his archaeological interest and knowledge is not <u>too</u> good."

On another property where I wrote a THP and surveyed the area for the archaeological survey report, I found a number of grinding rocks and an area of midden soil. The landowner for this property was highly interested in the existence of the site and very committed to the protection measures that ensured the integrity of the site. When I told him that the possibility existed of human remains in the area, he responded, "Then it's a good idea to have identified the site so we can make sure that it gets left alone."

John Christopherson
Nevada Division of Forestry

John Christopherson

Nevada's state forest practice rules are significantly less voluminous than those in California. One area not addressed in our State statutes is protection of cultural resources during timber harvests. We have no state laws that protect our rich cultural resources on private lands from potential degradation resulting from forestry operations. The field personnel at our agency (Nevada Division of Forestry-NDF) therefore, do not necessarily have formal training in recognition and protection of such resources. Any such knowledge our staff may have regarding such resources has come as a result of an individual's personal interest in the subject.

A recent retiree from NDF, Rick Jones, is one of those who has such an interest. Through his contact with other RPFs in California, he was aware of CDF's Archaeology Program. In 1994, Rick and another NDF employee, Susan Stead, received permission to attend CDF's four-day archaeological training course in Redding. Since that time, and largely as a result of Rick and Susan's recommendation, four others from our agency have taken the same course. Rick and Susan were re-certified in CDF's one-day refresher course and performance evaluation in 1999. Seven new NDF employees recently completed CDF Archaeological Training Course #86 which was held in Redding in September, 2003. This training has benefited our current NDF staff on how to identify and protect cultural resources.

The archaeology training has not only given our forestry staff an important skill to use in our job, but I'd say a greater appreciation for the value of the cultural resources left by those who were here before us. We are better able to serve our clients, the citizenry of Nevada, with this knowledge and appreciation of archaeology and its significance. On a more mundane note, namely regulatory, many of our forestry projects are partially funded through federal cost share programs such as the Forest Land Enhancement Program (FLEP) and National Fire Plan grants. Projects that have federal funds associated with them require consultation with the State Historic Preservation Office if cultural resources are discovered. The knowledge and skills NDF staff have acquired from CDF's archaeology training further our ability to recognize and protect cultural resources in compliance with this law.

Robert E. Colby
Historian, Editor-Tales of Paradise Ridge

Robert E. Colby

My introduction to wildland firefighting agencies goes back to the mid 1950s, to the days when it still was called forest fire. And then it was not with CDF, but with the USFS and State Park Service. A geology major at San Diego State College, I worked on the geological survey for the southern end of the Feather River Aqueduct that ran across Forest Service and State Park land in the Cuyamaca Mountains of San Diego County.

In the summer of 1956 I got a quick, brutal introduction to wildland fire when a fire that started on the Inaja Indian Reservation killed eleven firefighters and chased our field crew out of the Cuyamacas. Little did I know that 46 years later the Cedar Fire, the largest wildland fire in the history of California, would ravage this same area plus another 240,000 acres, killing one CDF firefighter and some 14 civilians in the process.

It took me another 41 years to really pay much attention to CDF. In 1994 I retired into CDF country in Butte County and visited the Sawmill Peak Fire Lookout that protects the lower Feather River country. Then in 1997, as a historian and editor for *Tales of the Paradise Ridge*, the biannual publication of the Paradise Historical Society, I researched and wrote the history of the lookout. Built in 1929 by the USFS, it predates many lookouts built by the CCC during the Great Depression. Of course since 1947 CDF personnel from the Butte Ranger Unit manned the lookout. I think that it was Division Chief Bill Holmes whom I initially contacted in the Butte Unit. In short order I was getting information and leads from active and retired CDF/Butte County Fire people too numerous to list here as well as from people in Sacramento and Redding. I also got help from people in the USFS on the pre-CDF history of the lookout. But, it was people from CDF that educated me in the use and importance of such things as the Osborne Fire Finder and that archaic wall map with the pins on retractable strings that was used to "cross smokes" before computers. (Personally, I think that the old way was more fun and had a lot more panache.)

People in the Butte Unit must have liked the history I wrote, because they asked me to be the historian for the Unit, unpaid of course. During Governor Wilson's administration, the State ordered all its departments to collect and record their history and evaluate the historical significance of their facilities. Needless to say, little money was appropriated so unpaid volunteers were in high demand.

The combination barracks at Stirling City Forest Fire Station, Butte County.

One of my assignments was to collect photographs of all of the past chiefs of the Butte Unit. I never did find any, at least usable, photos of the 1920s State Fire Wardens and Rangers. However, photos of all the Unit chiefs, back to the first one, Ranger Miles Young, were found. Another project involved the history of the Stirling City Ranger Station. Historian Mark Thornton's survey of the historical significance of CDF facilities established that the station was the most historical of all in the CDF inventory. It was constructed by CCC and WPA men under the supervision of USFS Ranger Oscar Carlson on the Lassen National Forest in the fall and winter of 1936-37. The buildings are virtually unchanged today, making the station unique among both CDF and USFS stations. Stirling City was where I first met Dan Foster on a beautiful, but freezing March morning. He came up from Sacramento to inspect and make his own evaluation of the station. He was not too pleased with what he saw in the 66-year-old buildings. Their condition was poor and the cost of restoration and maintenance required for historical preservation was prohibitive even without considering that CDF had to operate a modern fire station on the site.

In June 1999 I had published a story on the 1945 Kimshew Fire in Butte County. At 11,800 acres it was a big fire for the time and cost CDF more money in suppression costs than any previous wildland fire. Interestingly, George Stewart based his 1948 novel *Fire* on this fire. My contacts in CDF as well as in the USFS were invaluable in researching what documents that had been saved and interviewing old-timers who had actually been on the fire. Again it was material that had been stashed away by individuals that provided much information.

In 2002 I resigned as historian for the Butte Unit because with all my other historical obligations I just did not have time to do the job right. That same year CDF found a solution to the problem of trying to operate a modern fire station out of the archaic, yet historic Stirling City Ranger Station. Acting upon Foster's recommendations, CDF deeded the ranger's residence, residence garage and ranger's office to the Stirling City Historical Society for use as a museum.

In August 2003 Stirling City celebrated its 100th anniversary. For the June 2003 issue of *Tales of the Paradise Ridge*, I wrote the history of the ranger station and its role in protecting the town and the surrounding timber lands from wildland fire. The December issue of the publication had the history of the Bald Mountain Fire Lookout, about four miles to the northeast. It dates from 1904 when Diamond Match built the first private lookout tower in California to protect its timber lands. In 1932 the USFS built a small wood lookout and in 1934 a 33-foot, L-80 steel tower and BC-301 cab. CDF replaced the cab in 1971. Again, I had the help of CDF personnel, active and retired. Dan Foster was especially helpful in finding old photos and referring me to other people in CDF in Sacramento to locate other photos.

During research on these projects, I was surprised to find how much information CDF did not have on its history. Aside from a number of papers, reports and photographs stashed rather randomly around fire stations and Unit and Sacramento headquarters, the last really organized attempt to record and preserve CDF history appears to have been about 30 years ago in C. Raymond Clar's day. Without the efforts of active and retired individuals who recognized the value and kept this material, even more would have been lost.

In one instance, I was trying to find a photograph of a Jenny biplane that had been used in one of the earliest attempts at fire bombing on a wildland fire east of Oroville in the 1920s. Along with a number of other photographs of the early days of aerial fire suppression it had been donated to the CDF Academy in Ione. When I visited the academy, Bill Cote, the Administrator, informed me that nobody knew where the photos were. And it was not just this material that could not be located. There was no system for archiving historical material because there were no funds to develop such a system and no personnel to do the job, not even VIPs. I did not find the photos, but in looking through boxes, it was obvious that there was a treasure trove of historical photos and documents.

As a historian, I do not specialize in a particular field. And I doubt that I have seen my last encounter with wildland fire and CDF history. Indeed, CDF's needs to fund a serious archival program. In the meantime the efforts of its retirees and the people in the Units and in Sacramento help compensate for the lack of such a program.

Norm Cook
CDF Resource Manager - Retired

Norm Cook

I began my career with CDF in 1974 as the Forest Manager at Mt. Home State Forest near Springville, California. Previously, I had worked for Los Angeles County as a forester and also with the USFS in the Mammoth Lakes area. While in Los Angeles County, I greatly expanded the museum at Henninger Flats to better show visitors the history, nature and prehistory of the San Gabriel Mountains. I also had many interesting experiences exploring prehistoric and historic sites on the east side of the Sierra and helping to enforce the Antiquities Act while working with the USFS. Nothing, however, in my previous experiences had prepared me for what I found when I arrived at Mt. Home State Forest. While the forest was rich in logging history, the most amazing thing to be found are the so-called "Indian Bathtubs." These basins, carved into solid granite, are everywhere on the forest and are curiously found only in the general vicinity of Mt. Home. The rock basins are upwards of 5 feet across and two feet deep and seem to be worked to a smooth finish. While all archaeologists do not agree that they are man-made, it is abundantly clear that they were used by prehistoric people due to the occurrence of typical grinding holes that are located in close proximity. I was especially impressed by the "bathtubs" located on Father Maloney's Rock and on Boxcar Rock. While many of the "bathtubs" were found near stream locations, these two sites are located right on top of huge boulders with significant drop-offs on either side of the rock in areas that are remote from running water sources. At Father Maloney's Rock, it is easy to picture prehistoric people working at grinding seeds while children played on the rock precariously close to a fatal fall from this large granite edifice.

Towards the end of my five years as Forest Manager, it became obvious that we needed to identify all of the many archaeological sites on Mt. Home if we were going to be able to continue harvesting timber on the forest with any certainty that these sites would be free from damage. At that time, I had the funding to hire four forestry students for the summer, and so I began to work on a plan to convert one of these positions to a seasonal archaeologist. During that period, I changed jobs and moved to Fresno, but I continued as the supervisor of the Forest Manager at Mt. Home. Then, in the summer of 1982, and with the help of Dan Foster in Sacramento, Dorothy Stangl was recruited as seasonal archaeologist on Mt. Home. She worked for several seasons identifying all the historic and prehistoric sites on the forest. I believe we were the first State Forest to create such a position. Her work is still used today in developing protections for archaeological sites on THPs and other projects on Mt. Home.

In 1979, I became the Resource Manager in Region 4 Headquarters in Fresno in charge of Forest Practice and other forestry activities. I visited many THPs that were submitted by consulting foresters on private timberlands in the Sierra. In those early days, it was difficult to get the consulting RPFs to go along with protecting archaeological sites because it usually resulted in a loss of timber value to the landowner. I recall, for example, a THP that was located on top of Kit Carson Pass in the high Sierra. A piece of the Emigrant trail, used by perhaps thousands of persons "bound for the promised land", passed right through the property. The THP called for using the trail to skid logs as it was about the only good access to the property due to extensive granite bedrock outcroppings. There were no rules in place at the time to stop such a proposal.

Another notable THP involved destroying a lumber mill site in the mountains above Fresno to make a landing and provide road access. I recall visiting the site during the Pre-Harvest Inspection and looked into the windows of historic buildings which included furnished mess halls, offices, machine shops, and bunkhouses. All were subsequently destroyed by heavy equipment that was available while the logging was in progress. It was clear to me that strong regulatory language was needed. However, early efforts at archaeological protections in CDF were based on good intentions and wishful thinking rather than enforceable rule language.

The development of enforceable Forest Practice regulations was a slow process and was often not an easy sell largely due to an overriding concern for the potential cost of regulations on the private timberland owner. Meanwhile, with the absence of effective rules, we had an incident where logging equipment destroyed a very nice archaeological site in the Tobias Meadow area of Tulare County. I transmitted the report on this occurrence to Sacramento Headquarters pointing out that rules were needed to prevent these types of incidents. Even after the first set of relatively weak rules were established, sites continued to be destroyed by logging because the rules failed to hold anyone accountable. For example, a THP was submitted on a old fish hatchery site that was abandoned by DFG and sold to a private landowner. The property contained a well known pre-historic site that was subsequently damaged during the timber harvest. Neither the RPF nor the logger could be held accountable because the rules at the time did not assign responsibility. Yet another incident happened on private industrial timberland where a well flagged and protected site was looted by someone working on the timber harvest. We learned there that it is not always a good idea to plainly identify sites with flagging on the ground and mark them on the THP map. The concept of a confidential addendum arose from incidents such as this.

Sometime around 1988, I was given funding for a Wildlife Biologist position to work within the Region to help review THPs for their potentially negative effect on biological resources. I was always bothered by the fact that we already had excellent cooperation from Department of Fish and Game in matters relating to biology and that we really did not need our own Wildlife Biologist. I began an effort to trade the biologist position for a Region 4 archaeologist. Again, with the help of Dan Foster, we were able to make the trade and hired Carlys Gilbert to work in Fresno as a regional CDF archaeologist. This position was later filled by Linda Sandelin following the retirement of Carlys. The archaeologist position became a valuable asset for the Region, not only in review of Resource Management projects and THPs, but in the review of fire station construction projects and other capitol improvements done within the Region and also in rehabilitation following large wildfire incidents.

I think that my role in the CDF Archaeology Program as it developed from 1979 to my retirement in 1999 was to let these various rule failures be known to the Board of Forestry, the Southern Forest District Technical Advisory Committee, and the Forest Practice staff at Sacramento Headquarters and to encourage the development of enforceable rule language. One of my pet peeves was that private consulting foresters often did not know beforehand what documentation was needed until the THP was already under review. I feel that I was helpful in demonstrating a need for a formal Archaeological Addendum so that consulting foresters would know what must be included in the THP <u>before</u> it was submitted, rather than finding this out after-the-fact. I also feel that I was instrumental in hiring a professional archaeological staff that was available to help the consulting forester, our own CDF Foresters and the Fire Protection program in CDF's Region 4 to recognize cultural and historic sites and to provide for appropriate protections.

Ken Delfino
CDF Deputy Director - Retired

Ken Delfino

Historically California is a very interesting place. People moved at a slower pace and our forests, game and resources were unlimited. This historic perspective has an allure to most foresters. Young people enter the profession of forestry because of an interest in the natural world and a belief, however erroneously, that with a career working in the woods there will be a freedom from the normal "people" pressures that infect most other jobs. Even I considered a career in archaeology, but instead decided on forestry because it had greater job opportunities. Foresters encounter historic and prehistoric artifacts frequently when working in the woods because forests are relatively undisturbed compared to other areas of the state. Indigenous people inhabited California for at least the past 10,000 years and used forests extensively for their survival. Historic sites exist throughout the woods in the form of old mining camps, ranches, logging camps and early resorts. With a little training a forester with a sharp eye can easily identify these sites. Many foresters acquired personal collections of arrowheads and old glass bottles found during their work in the woods (of course these were collected before Historic Preservation laws that prohibit collecting on most lands).

Case Mountain My first experience with archaeology in CDF occurred at Case Mountain in Tulare County in about 1975. I was the Area Forester for the Tulare Ranger Unit and responsible for all Timber Harvesting Plans (THPs) for the southern Sierras. A THP had been submitted for a property on Case Mountain, about 5 air miles from Mineral King. The Forester (RPF) submitting the plan had a reputation for purchasing property or timber rights from uniformed landowners (regarding timber values), cutting all available trees and dumping the property for development. I was especially sensitive to this plan since it proposed to cut Sequoia Redwoods up to sixteen feet in diameter (PRC 4726 prohibited cutting Sequoia Redwoods in excess of sixteen feet in diameter in Tulare, Fresno, and Kern County). Case Mountain had a grove of old growth Sequoias that had never been harvested. During the Pre Harvest Inspection (PHI) I noted many old growth Sequoias in the five to fifteen foot diameter range and I was concerned about the proposed harvest of these magnificent trees. I also noted an expansive area containing 27 of the so-called "Indian Bathtubs" and numerous bedrock mortars. I suspected more prehistoric sites might exist on the property as well. Although public notice and copies of THPs were not easy to get during that time, the local Sierra Club Chapter got wind of the plan because of the possible harvest of the giant sequoias. A local group of Native Americans became concerned about possible sacred sites on the mountain top.

I requested a review from Sacramento since the harvest would probably cause a great upheaval in the community. I got more than expected. The inspection party included Larry Richey, Chief Deputy State Forester, Jim Denny, Chief of Resource Management, Ranger Ray Banks (Tulare Ranger Unit) and a local Sierra Club activist invited by Richey. We arrived at the entry point to the property about 9 am to find the gate blocked by the RPF's truck, and his attorney, who was packing a side arm. After a brief, but acrimonious exchange, the RPF refused to allow passage on the road to the site because of the presence of the Sierra Club representative. Ranger Banks got on the CDF radio and ordered a bulldozer to remove the truck since the seven-mile road to the harvest site was maintained by CDF as a fire control road and CDF had a right to pass at any

time. The RPF backed down and we proceeded to the THP site. (Ranger Banks was small in stature but mighty in spirit.) The inspection proceeded and a number of issues were raised, including harvesting old growth Sequoias and possible significant archaeological sites. An archaeological survey was requested for the site, however the RPF refused because such surveys were not required by the Forest Practice rules. The THP was denied, appealed to the Board of Forestry by the RPF, and denied by the Board. By this time the site had gained much local publicity. A THP was never resubmitted and the area was never harvested. A few years later the site was acquired by BLM and is now protected.

Forest Practice Inspector Ken Delfino.

Cannell Meadows American Forest Products (AFP) harvested Timber Harvesting Plan 4-75-121, in Cannell Meadows, in 1974. This was a private parcel that had been an old homestead next to a large meadow, surrounded by the Sequoia National Forest. I inspected the plan in late 1975 with Hank Abraham, Forester with AFP, after the harvest was complete. During the inspection Hank took me to an archaeological and historic site next to the meadow. Two dilapidated hunting shacks were undisturbed. Hank was most excited about a small granite rock that contained rock art. The rock was near a haul road and next to a landing. I noticed a walnut sized flattened stone lodged in a crevice of the rock that contained the same pigment as the artwork. It appeared to be a stone used to grind the pigment, probably left by the original artist. Although the area immediately around the stone was undisturbed, the adjacent disturbed landing and haul road contained many artifacts. I noticed numerous obsidian flakes, a sharpened stone needle-like tool, scrapers and chipped and round stones that were not native to the site. If surface arrowheads had been present, they had been picked clean by others.

It appeared that the site was significant because of the rock art and I notified Sacramento that an archaeological survey might be justified. This THP became one of about 100 THPs statewide that were reviewed in 1976 by a team from CDF and other agencies. The site was subsequently recorded and later acquired by the Forest Service. It is now part of the Sequoia National Forest.

CFIP and CDF's First Archaeologist During the early days of the Forest Practice program, archaeology was not a big issue. When it did arise, Archaeologists from the Department of Parks and Recreation (DPR) would provide services, paid for by CDF. By 1979 CDF was contracting for a full time Archaeologist from DPR to review THPs, other Resource Management projects, and construction projects. The first opportunity to establish a CDF Archaeologist position occurred in 1980 when the California Forest Improvement Program (CFIP) and the Vegetation Management Program (VMP) were established. The Budget Change Proposal (BCP) for CFIP included one position. Dan Foster was hired in 1981 and he has been the Archaeology Program manager since that time. Dan's time was to be divided between several Resource Management programs and Technical Services (CDF construction division). CDF continued contracting with DPR for services with Dan administering those contracts.

Early on we decided that CDF would institute our Archaeology Program with an education and persuasion approach rather than the big stick. I had had experience with federal agency Archaeologists where any number of projects were stopped or drastically altered when historic

or prehistoric artifacts were found, even where those findings appeared to be relatively minor. Federal forest managers became hostile toward the program and cooperation with archaeologists, in some areas, became strained. Dealing with archaeological resources on private land is different from federal lands. The landowner, with the exception of burial sites, owns the artifacts. They are free to do with them whatever they wish. Under CFIP and VMP, since these were voluntary grants, CDF did have some clout to require protection of sites, or else not make the program grant.

Under the Forest Practice program the only clout, however meager, came through the California Environmental Quality Act (CEQA). There were no Forest Practice rules requiring survey and protection of sites until about 1991. Without cooperation from RPFs and landowners it would be difficult to provide protection for prehistoric sites. Dan Foster understood this and was willing to use the CDF approach. He created and taught training classes which have actually become popular. Dan prescribed mitigation measures that protected sites and allowed project activities to proceed. All CDF foresters were trained to work with landowners and RPFs in a cooperative way so that sites were recognized, recorded and protected. The success of the program is evident in the statistics. More sites have been recorded in California under the direction of the CDF Archaeology Program than by any other single agency, including federal landowners. We are proud of this accomplishment, and California's historic and pre-historic resources are better protected because of this program.

Brian D. Dillon, Ph.D.
Consulting Archaeologist
Instructor - CDF Archaeological Training Program

Brian Dillon

I was born in Oakland, California, a patriotic fifth-generation Northern California boy with at least one Gold Rush ancestor. One of my earliest childhood memories, at about four years of age, in 1957, is of swinging in my Mill Valley back yard as high as the top bar of the family swing set alongside my best friend. We were singing the latest Elvis Presley hit song *"Put another dime in the rockin' machine"* at the top of our lungs. Were actual life scripted by a Hollywood hack, such an auspicious beginning would inevitably lead to an adulthood spent either as a rock star or Olympic gymnast, but reality is of course much different: my friend grew up to be a cowboy, rodeo rider and thoroughbred horse auctioneer, while I grew up to be an archaeologist.

As a kid, I simply presumed that I would grow up to become an historian like my dad. My early childhood was spent accompanying my dad, a well-known western historian, to and from a seemingly endless procession of museums, libraries, historic and prehistoric sites, and culture-historical attractions throughout the Western U.S. And, while other kids played baseball with their dads, at age five I was playing Pershing vs. Pancho Villa with mine. My father would dress me up in Mexican sombrero, cartridge bandoleros, and burnt-cork mustache, and we would slither through the tall grass in the hills above our small town yelling epithets such as "*Maten los Gringos*!" and "*Viva Villa*!" This activity was obviously a legacy from my father's own childhood and playtime with his dad, my paternal grandfather, William Tarleton Dillon, an heroic figure of mythic proportions, who rode with Pershing against Villa between 1914 and 1916, after his Spanish-American War service in Puerto Rico, Cuba, and the Philippines, and his

Boxer Rebellion service in China, and his service in South Africa in the Boer War as an Irish-American volunteer fighting the British, etc., etc. While other kids brought in baseballs autographed by Willie Mays for show and tell at school, I would lug in .50 caliber 1871 Remington Rolling Block rifles and give lectures on buffalo hunting on the Great Plains, the Indian Wars, and other such topics. So, when folks ask me why I became a ***prehistorian***, I always respond, tongue-in-cheek, that it was simply to go my old man one step better, since he has spent his life as merely an ***historian***. . .

One day, in 1962, my brothers and I erected a tent in our front yard, went through our house collecting every bit of historical junk we could find; car parts, spiked helmets, old, rusted guns pulled up from San Francisco Bay with my trusty Navy surplus magnet, etc. etc. We opened the "Dillon Family Museum", charging the public 5 cents admission. I provided the crowd of visitors with a running commentary not always absolutely accurate ("here you see before you the actual typewriter upon which Thomas Jefferson wrote the *Declaration of Independence*") but appreciated nonetheless for its style and verve.

The archaeology bug first bit in 1964, when our family made a trip through the American Southwest after my father's teaching duties at UCLA had been concluded. We went from archaeological site to archaeological site and Indian Reservation to Indian Reservation. On this trip, while 11 years old, I experienced what I later recognized as a critical turning point on the road to my eventual career. Standing in a jeans jacket and bad haircut before Spruce Tree House at Mesa Verde National Monument, I found myself looking up at the Anasazi ruins, all contemporary matters completely forgotten. I thought to myself "*whatever this stuff is, I want to do it for the rest of my life!*" My rediscovery of the archaeological discipline at UC Berkeley eight years later would reawaken the excitement I first felt at Mesa Verde: my life has been in ruins ever since.

But the firm decision to become an archaeologist actually took place while spending innumerable hours in the US Army's Oakland Induction Center, reading Bernal Diaz' *True History of the Conquest of New Spain*, one of the best-sellers of the late 16th century. I promised myself that if I were to be turned loose from the US Army, I would spend the rest of my life in archaeological harness. And, because of an unhealed broken left wrist, the legacy of a skateboard accident at age 11, my draft card was stamped 4F, and I was sent back to UC Berkeley and to the study of archaeology. So, I am proud to say that, unlike most of my peers, I became an archaeologist as the direct result of a physical, rather than a mental, disability.

My academic progress at Berkeley was very rapid, but nonetheless hand-to-mouth. I went all the way through graduate school on fellowships and scholarships, both local and national, also scraping along on what I could make doing contract archaeology around the San Francisco Bay area. My doctoral dissertation research took place in Guatemala, as a Fulbright Fellow, 13 months straight in a jungle field camp reachable only by boat or helicopter, 32 kms away from the nearest dirt road, electric light, or permanent human residence. My little tribe of archaeologists shot all our own meat, caught all our own fish, and grew all of our own fresh vegetables while doing Maya archaeology for more than a year. Returning to *Gringolandia,* I wrote my dissertation on a National Defense Foreign Language Fellowship, and was awarded my Ph.D. degree while still only 25 years old, the youngest person to do so in archaeology, I am told, in the history of the University of California. The day after I turned in my dissertation I took a research job in archaeology at UCLA, (which, according to Berkeley Ph.D's, stands for ***U****niversity of* ***C****alifornia for* ***L****ower* ***A****chievers*).

I earlier had worked with Robert F. Heizer at UC Berkeley; now my mentor at UCLA became Clem Meighan, and through Clem I met many other leading lights in California Archaeology, such as Frank Fenenga, Bill Wallace, and Fritz Riddell. My life-long friendship with Fritz Riddell began one day in 1980 when Clem walked Fritz into my subterranean office at UCLA and introduced him. Within seconds all three of us were jaunting down memory lane and yukking it up. I first met Dan Foster in 1983, when he walked into my office at UCLA asking for help and access to our archaeological files. I was happy to oblige him, and the level of cooperation Dan received apparently made such an impression on him that seven years later he was able to overlook my many faults and invite me to become an instructor in his CDF archaeological training program. This recruitment was done at the urging of our mutual friend Fritz Riddell, who recognized early on that CDF archaeology and I might be a good "fit," the proverbial round peg in the round hole.

Through working with and teaching for CDF I have come to know it well. It is the most enlightened of all public agencies I have had the pleasure of working for over the past 31 years. Through CDF I have come to know hundreds if not thousands of rugged individualists in my own and in other western states, those foresters who still tromp the ridgelines and continue to make important archaeological discoveries. Most of these people are far more capable and archaeologically savvy than even the best of the young archaeology students one encounters within the University context, and I find that I have much more in common with them than I do with the increasingly disconnected university small fry.

Brian Dillon explaining site formation during archaeological training class.

Foresters, unlike most anthropology majors, are already accustomed to "reading" the landscape, and attuned to subtle nuances of topography and vegetation that make historic or prehistoric features register on their radar while others walk right past them. Foresters, used to thinking in "tree ages" deal with the concept of time depth every day out in the woods, in other words, they are at home with basic archaeological concepts that are completely alien to most modern California urban idiots, anthropology majors included. So, for the past 13+ years I have been most grateful to be doing archaeology with, and teaching archaeology to, a group of people that are the finest our state has to offer. A mark of my increasing age, if not maturity, is that in my CDF classes I am beginning to find the sons and daughters of older foresters who survived earlier classes more than a decade ago. And, the fame of the CDF Archaeology Program has spread far beyond California's borders; our program has become so successful that we regularly incorporate foresters from other Western States and even from foreign countries in our classes.

I joined the CDF archaeological training course teaching staff in 1990, and the first class I helped teach was #18. I have not missed a single one of the 70+/- classes since then, although I came close to missing one of the Redding sessions. Redding, land-locked in about as central a position in the heart of the state, is not renowned for its seafood, yet, our entire CDF teaching cadre went out for Sushi one night while our class was in session, at the urging of our fearless leader. My suspicions were aroused when I realized that not only were there no Japanese diners

present, but that none of the staff appeared to be Japanese as well (the waitresses probably had last names like Sorensen, Johanneson, and Jensen). Despite being a firm believer in the old adage of not eating fish (especially raw fish) in a restaurant beyond the actual sound of the breakers, and against my own better judgment, I nevertheless ordered sushi along with the rest of the CDF gang just so as to be sociable. Big mistake. I spent a sleepless night suffering all the symptoms of food poisoning, and could barely drag myself out of bed to do my first lecture the next morning. But, the show must go on, and despite looking green around the gills, and feeling much worse, I managed to struggle through my morning lecture. But just barely. At the end of my tether, I made a rush for the men's bathroom which, unfortunately, had already filled up with a couple dozen foresters, all waiting in line inside to use the various facilities. Bursting through the door, I realized in an instant that both the toilets and urinals were unavailable, so with my final reserves of strength, I made it halfway through three or four ranks of foresters so as to vomit from a distance of at least three or four yards into the nearest sink. The immediate outrush of people from the john into the hotel lobby looked like a minor volcanic eruption, and I spent the rest of the day sleeping in my truck outside the classroom. Those students present that day will never forget the *Redding Sushi Barf-o-Rama*, a unique event in which the instructor not only made his audience, but he himself, sick. I heard later, but of course did not witness it first-hand, that Dan Foster delivered my remaining lectures that day.

Fritz Riddell and I bunked together for many years while team-teaching our CDF classes. It is unlikely that anyone else could have put up with either of us, for we were constantly producing a strange litany of grunts, throat-clearings, and nasal trumpetings as a result of various ailments. During one night, or rather early one morning, around 2 am, in Redding, a knock came at the door. I got up to answer it, presuming that it was a student with a serious problem (it would have to be pretty serious to wake us up at 2 am). Fritz got up too, wearing only his skivvies, his chest and other portions of his anatomy covered with various scars, zippers and bandages. I pulled open the door to find a confused soiled dove who, when she saw Fritz, exclaimed *"Oh, there are two of you!"* I suggested that she had probably gotten the room number wrong, but Fritz, by then in his late 70s, nevertheless still managed to yelp out in a stage whisper *"Call her back!"* as I was closing the door. I still wonder which of our students or teaching cadre had actually ordered up female companionship that night, or whether it was a practical joke played upon us by some member of the class.

Brian Dillon lecturing to students at archaeological training course near Ukiah.

Fritz Riddell and I came to be a kind of Mutt and Jeff comedy duo in our CDF teaching, keeping the students entertained so that they could stomach the less agreeable but still necessary aspects of the class such as rules and regulations (which, thankfully, neither of us ever had to teach- Dan did then, now Linda Sandelin handles this part of the course). Fritz and I made fun of each other during our lectures, constantly ribbing each other from behind the podium. We played many jokes on each other, on our boss Dan Foster, and other CDF archaeologists. A favorite was showing a slide of Dan and Rich Jenkins together out in the field, and then asking the class for a voice vote as to which had the most impressive CDF archaeological potbelly.

We also pulled gags on our CDF students over the many years that we team-taught, some simple, some complex. A standard gag was mixing donuts and bagels in with the stone artifacts laid out for teaching purposes, but one of the best gags involved a fake, foam-rubber rock, a Hollywood prop, realistically painted to look like a small granite boulder. One day while lecturing about the different kinds of stone which could be used as raw materials for chipped vs. ground stone tools, I lifted the rubber rock up from behind the podium, holding it up as an example, and then hurled it over the heads of all the students at Fritz who was nodding off in the back of the classroom. Fritz squealed like a stuck pig, falling out of his chair, and came up off the floor with a big, embarrassed grin, eager for revenge. And so it went, year after year, until our great good friend Fritz Riddell left us for good in 2002.

In 1992, the year that the whole state was on fire, we almost had to cancel a class due to the flames. At one of our Redding Classes we began the day with a major fire just put out in Calaveras County, another one still burning in Eldorado County, and foresters from both areas nervously checking their truck radios during each break. Then, during our first day's session, another big fire sprang up to our west in Trinity County, and halfway through the teaching session another fire began blazing in Shasta County to our immediate east (the Fountain Fire), right where we were intending to take our class for the field session the following day. We blitzed through the CDF barricades in our little red CDF pickups notwithstanding, and did our field session at an alternative location while the fire was still growing only a short distance away. Subsequently, driving home in our CDF rigs, we were greeted as "heroes" by local residents, but were too embarrassed to admit that we were merely archaeologists, not actual firefighters.

Dillon teaching RPFs housepit recognition skills.

But the closest of several close calls resulting from fires took place in Southern, not Northern, California. One of our field training classes incorporated a visit to Corral Canyon on the Malibu Coast, a chaparral-choked box canyon with only one easy way in and out. I had conducted archaeological excavations there some years earlier, and our CDF students were trying to find the limits of the prehistoric archaeological site. This class, unlike many, was light on foresters but heavy on firefighters, especially those from L.A. County. Halfway through the final field exercise, one of the students, a fireman, wrinkled up his nose, and began asking if anyone else could smell smoke. Soon, half the class was sniffing the air like coyotes and running up the nearest ridgeline like deer, and yelling out that the very next canyon over was on fire! Needless to say, we dismissed the class early that day. Local residents later remarked that they had never seen such a rapid response to a fire call, so many little red fire trucks so soon. . .it was almost as if the firemen were there before the fire broke out (which, of course, they were, but doing archaeology!).

Another memorable CDF training class took place in Ukiah while the Los Angeles Riots were going on. These began to be reported on TV and on the radio shortly after the class began, and came to dominate most conversation in the classroom. By the end of the first day just about every student in the class came up so as to ask me if everything was O.K. back home in L.A., where I had just left the wife and kids. I eventually was able to get through on the telephone

only to find out that my wife's workplace in Downtown L.A. had closed down early in the day because of the riots, and that my wife had taken advantage of this unique "free day" opportunity to go shopping! The shopping trip was not successful, however, as most downtown businesses were boarding up their doors, so for my wife the L.A. Riots were most memorable as her worst-ever shopping day.

Foresters in my CDF classes often ask me what my most important and exciting discovery as a life-long archaeologist has been; without hesitation, I always answer "my wife." I found her in the front row of a Berkeley archaeology class I was the T.A. for. But, early on my wife Millie had the good sense to abandon anthropology in favor of Library Science, leaving only one professional lunatic in the family. And, for nearly three decades now she has exerted a humanizing and civilizing influence upon me, or at least tried to. If my own childhood disproves the common public misconception that all archaeologists of my generation were raised by wild dogs, then my marriage to the world's most tolerant and patient woman has had an additional benefit to my chosen profession: proof that at least one archaeologist can be periodically unleashed upon an unsuspecting world without the resulting collapse of modern Civilization.

David Dulitz
CDF Forester - Retired

David Dulitz

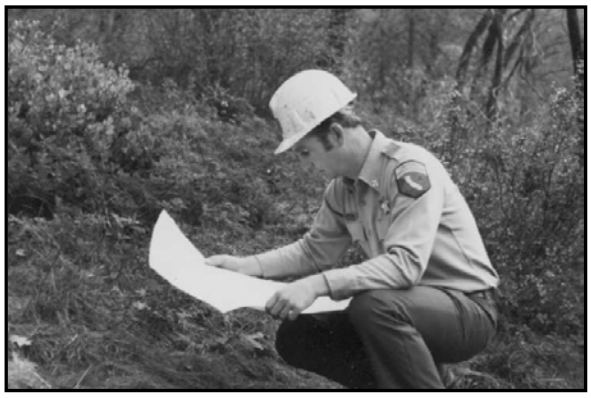
Mountain Home Demonstration State Forest (MHDSF) is the third largest State Forest and occupies 4,807 acres of giant sequoia forest in the upper reaches of the Tule River in eastern Tulare County. I was fortunate enough to work on this forest for almost 27 years, first as Assistant State Forest Manager from 1974-1979 and then as State Forest Manager from 1979 to 2000. MHDSF is very rich in both historical and prehistoric archaeological sites. The historic sites date back to the late 1800s when seven sawmills were constructed in the immediate area to process the abundant timber resource. A resort was also established on the forest that included a store, hotel, summer school, and numerous cabins. The prehistoric sites on MHDSF forest are fine examples of seasonal camps of the Yaudanchi Yokuts and other ethnographic groups. Another archaeological feature on MHDSF is the curious granite rock basins that occur alone or in conjunction with prehistoric sites on the forest.

Floyd Otter, State Forest Manager from 1953 to 1969, accomplished some very important archaeological work on MHDSF. Floyd was very interested in the history of the area and documented his years of research into a book titled *The Men of Mammoth Forest* published in 1963. This book provides an outstanding reference for the history of the MHDSF and surrounding area. Floyd also developed a list of historic and prehistoric archaeological sites along with rock basin locations of the forest. This list turned out to be remarkably complete after extensive archaeological surveys were completed in the 1980s and 1990s.

Starting in the 1970s, Environmental Impact Reports were required for State Forest timber sales. Archaeological surveys were subsequently required for these reports and were initially contracted out to the California University system or Department of Parks and Recreation. Logistical problems in the archaeological survey for the 1979 Headquarters Timber Sale resulted in a delay of that sale for one year and a resulting loss of hundreds of thousands of dollars to

CDF because of falling timber prices. This got us thinking about getting archaeological surveys done up front for the entire forest to avoid delays in specific projects. We allocated some of the State Forest forestry aide budget in 1982 and hired Dorothy Stangl as a seasonal archaeologist for two seasons to accomplish a survey of the entire State Forest. An estimated 90% of the State Forest was surveyed for both historic and prehistoric sites and included the discovery of 18 additional sites. By this time, Dan Foster had been hired as the CDF archaeologist in Sacramento and he assisted Stangl in recording these additional sites.

The first detailed excavations of archaeological sites on the forest were accomplished in a 1987 contract awarded to William Wallace and his wife, Edith. Trial digging was done at five sites and an extensive excavation was accomplished at a seasonal base camp at Methuselah. This work resulted in two reports, *The Prehistory of Mountain Home State Forest* and *Methuselah, A Southern Sierran Bedrock Mortar and Rock Basin Site*.



Dave Dulitz compiled locations of archaeological sites during his tenure as Forest Manager at MHDSF.

Another contract awarded to William Wallace in early the early 1990s was focused on detailed study of the Sunset Point site. This spot was chosen for study because of the degradation of the site that was occurring in association with the campground that was adjacent to the site. Wallace started this project but encountered some health problems associated with the high elevation. With much regret, Bill and his wife Edith were forced to abandon the project because of health concerns for Bill. Brian Dillon later completed the excavations finding the site to be more complex and significant than expected with material over 8,000 years old recorded. As a result of this work, the small campground at this site was closed, and the site was turned into an archaeological interpretive site and day use area. A self-guided trail was developed around the site with beautiful signs manufactured by the Mountain Home Conservation Camp. Assistance for one of the signs was obtained from Leona Dabney, a Native American living on the Tule River Indian Reservation. This made a very special connection to the decedents of the original occupants of this site that are living in the local area.

The State Forest is also rich in logging history. Beginning in the late 1800s, sawmills were brought up to Mt. Home and extensive logging of the giant sequoia forests occurred. Evidence of this early logging remains in the form of sawdust piles, remains of sawmill sites, skid roads and stumps. In the mid 1970s, Floyd Otter showed me remains of log chutes built to skid the huge redwood logs down to the sawmill sites. By the 1900s remains of these log chutes were gone because of the natural decomposition of the wood. I felt that it was important to document these historic logging areas before more deterioration of the sites occurred. In the late 1990s we undertook and extensive survey of Enterprise Mill and Frasier Mill, two of the larger mill sites and logging areas. A detailed map was created of the logging area, skid roads, and individual giant sequoia stump locations. A report of this work for the Enterprise Mill Site was published in 1998 titled *Enterprise Mill Historic Site, CA-TUL-814H*. It is interesting to note that this work has proven valuable not only for its archaeological significance but also for an understanding of the size and spatial distribution of giant sequoia trees before this early logging activity.

Mountain Home Demonstration State Forest remains a very special place to me because of the

memories of 27 years working on the forest. The rich archaeological resources on the forest also hold the secrets of the memories of countless souls that have encountered this gem of a forest in the Tule River country of the Sierra Nevada. The work that CDF has done to identify and manage these important state-owned resources has an important place in the history of CDF's Archaeology Program.

Glenn J. Farris, Ph.D.
Senior State Archaeologist - DPR

Glenn Farris

My first project for CDF was an archaeological survey at Jackson Demonstration State Forest (JDSF). I was employed by the Department of Parks and Recreation as an Archaeological Project Leader in order to meet our commitment to do field work for CDF. John Foster was our main liaison with CDF at the time and he got me involved in this project. So, on May 12, 1980, I met with John and with Harold Slack of CDF to get oriented to the project. A few days later, on May 15, I met with Cliff Fago of CDF who provided me with maps and valuable information on the survey area as well as a list of contacts.

On the way to Fort Bragg on May 21, John and I met with Jim Purcell of the Ukiah Field Office who then accompanied us to the Point Arena CDF Fire Station. We met a representative of Louisiana-Pacific (LP) there and visited a knoll-top site near an old Air Force Communications Station that had been pretty badly impacted by previously logging activities. John and I worked out a "long-line" plan with the LP rep to avoid further impacts to the site. We then took notes on the site for John to use later to prepare a site record. Following this interlude, we continued up the coast to Fort Bragg for the night.

Next morning we met with Forest Supervisor Forest Tilley, as well as Henry (Hank) Land and John Griffen. They jointly provided a briefing on the timber sales and outlined the order of harvest. After this John and I drove through JDSF and we looked at sites that had been previously located by archaeologist Valerie Levulett and her crew. Although we were focused on prehistoric sites, we did note the many stretches of redwood trestles remaining from the old logging railway. We went on to visit an impressive (CA-MEN-790) site that featured Chinese export ceramics. This site (Three Chop Village) was later excavated intensively by Dr. Thomas Layton of San Jose State University.

Over the next couple of weeks, I completed the survey of the 1980 timber sale. It was a valuable experience in understanding how selective the Indians had been in the use of redwood areas. They largely avoided the lower lying areas and concentrated on the ridges which provided them easier movement between inland and coast as well as a somewhat more mixed forest. In particular, one would find tanbark on the ridges, but not in the low areas. I was often surprised to find beautiful flats down near the river that showed no sign of having been used by the Indians for camping.

The survey area was often very steep and difficult terrain, but there were some nice rewards in terms of patches of wild rhododendron, a 40 foot waterfall and a hidden grotto that made things interesting. Those were the days when we often worked alone without even a radio for

communication. Fortunately, I didn't have any particular problems, but would have been up the proverbial creek if something untoward had occurred. I recall having little faith in the old clunker of a truck I had checked out from the State Garage. I especially distrusted the tires and had to repair the right brake/turn signal light myself. When I finished up the survey on June 6, I held an exit interview with Henry Land (Forest Tilley being away that day) and returned to the office in Sacramento to complete my report.

On June 17, 1980 I was off to Mountain Home State Forest to do a survey for a timber sale. On my way I stopped at Fresno State University to check records and met with Dr. Dudley Varner and Ms. Kathi Cursi who were in charge of the Archaeological Clearinghouse located there. I then continued on to Mountain Home State Forest and met with Forest Manager David Dulitz and Assistant Forest Manager Norman Benson. Dave Dulitz took me on an orientation tour of the site and showed me a rock outcropping with BRMs and two "Indian Bathtubs" identified as CA-TUL-575. These peculiar features have proven somewhat enigmatic over the years and various scholars including George W. Stewart (1929) and William J. Wallace (1993) have weighed in with their own interpretations of the use. I put forward the possibility that they may have been used by Mono people who had come across the Sierra from the east to harvest acorns. They may have used them as cookers for processing quantities of acorn mush, however, Bill Wallace has questioned this theory, so I think it is still uncertain.

Next day, I began a reconnaissance of the old Enterprise Mill (CA-TUL-814H) site and the Mosquito Pond. I was surprised to find that in spite of a good flow of water and an abundance of sugar pine and redwood in the area, no prehistoric sites were located in the project area. Therefore, the main sites were historic ones dealing with the logging history of the area. One particular historic feature was something known as the "California Tree" (now the California Stump, CA-TUL-815H). This tree was supposedly cut down by promoter John McKiearnan in 1889. The stump stood 7 feet tall and measured approximately 72 feet in basal circumference.

My visit to the site coincided with my own dissertation study of the Indian use of pine nuts in California. Dulitz noted how the squirrels would regularly gnaw off the large sugar pine cones that would come crashing down to the forest floor. Dulitz would often collect these to be used to gather seed specimens for the Forest Research Lab at UC Davis. Dave said that he would get a royal scolding from the squirrels who had done the hard work, but it sure beat having the climb the tree himself.

My last project with CDF also occurred at JDSF. On October 28, 1991 I drove up to Fort Bragg to help with an historical sites evaluation. I met with Forester Jim Hordyk. Hordyk recommended I get a copy of a book by Ted Wurm titled *Mallets on the Mendocino* that described railroad logging on the Mendocino Coast by the Caspar Logging Company. The next morning, Hordyk oriented me to various locations in the forest. I soon found that many of the old camp sites were remarkably ephemeral and were largely clean of artifacts. I did come across a number of can scatters, but many of them were fairly recent piles donated by the local population. Many of the cans had been thoroughly blasted by people who like to bring their guns into the back country and blaze away. I soon found that one of the problems with photographing in the woods was the remarkable darkness. Even ASA 400 film was not effective in the early morning and late afternoon.

In my search for various sites I began by attempting to confirm the locations that Mark Gary had previously located in this same area within JDSF. I got help at times from people like Camp

Host Robert Allen (stationed at Camp One) and from Forester Tom Larsen who told me about a large dump site in the Three Chop Ridge area that had not been included on the Gary map. One evening I called a retired forester named George Williams who had appeared in an old photo of the Hare Creek Trestle. George suggested that for details of this site that I contact Forester John Griffen.

On another day, I ran into Forest Manager Forest Tilley who helped by pointing out the location of two gravesites. When I spoke to him again on my way out on November 1, Tilley confirmed that several of the bridges along Hare Creek had actually been built by CDF in the late 1950s or early 1960s even though they looked older. He explained that in the early days CDF had hired some old-timers who had worked in the Forest with the CCCs and so their construction methods were consistent with the older style which could confuse a latter-day researcher trying to date certain structures by their "style."

This later research ultimately resulted in a paper given in a symposium at the Pasadena Society for California Archaeology (SCA) meetings organized by CDF Archaeologist Dan Foster in 1992. It was titled, *Historic Railway Logging at Jackson Demonstration State Forest*.

I was fortunate to work with several really fine people at CDF in the early years of the Archaeology Program. I even had a brief shot at the job Dan Foster has so ably filled over the past couple of decades, but at the time I was still trying to complete my dissertation at UCD and did not want to take on full time employment until I had it behind me. In retrospect, I would say that CDF was fortunate to get Dan.

Gerrit L. Fenenga, Ph.D.
Associate State Archaeologist - CDF

Gerrit Fenenga

One day during the spring of 1999 I received a phone call from Dan Foster asking if I was interested in applying for a position in the Archaeology Program at CDF in Sacramento. I had known Dan since we met as teenagers on an archaeological project during the early 1970s and he must have heard through the grapevine that I was dissatisfied with my position on the faculty at California State University Bakersfield and was searching for employment elsewhere. As I remember that call, I was less than enthusiastic about this proposition, primarily because I had had some previous experience working as a public agency archaeologist with the BLM and the USFS and I was not especially interested in moving from the world of academic archaeology back to the world of cultural resource management (CRM). Dan was very persuasive, however, informing me that this was a "very good job" and promising me that I would have plenty of field time and would not be tethered to a desk. He described the nature of the position to me in what I have since learned is typical CDF jargon using program titles and various acronyms that I was not familiar with at the time. I tried to get him to explain the job to me in plain English, and eventually decided that it wouldn't hurt to apply in the event no better employment opportunities presented themselves.

The position Dan offered was that of archaeologist for CDF's Cost-Share Programs, principally

the California Forest Improvement Program, which at that time was well funded and expected to grow. I filled out the required State employment forms and a short time later was asked to schedule an interview. As things turned out, the date of my interview coincided with the date of birth of my son Jacob and the interview was conducted over the telephone since I could not make it to Sacramento. I recall little of the discussion since I had virtually no sleep for three days due to my wife Janel's prolonged and somewhat difficult labor. To this day I think that the interview team must have given me a break, because the other candidates must have performed better than I for that portion of the application. I also like to think that my family increased not by one that day, but logarithmically as I indeed became part of the larger CDF "family." As things have turned out, Dan was right. He was offering me "a very good job" and one which has not slighted my academic interests at the expense of management-driven archaeology.

The nature of the Archaeology Program at CDF is unique in many aspects from cultural resource programs in other agencies and is both intellectually challenging and rewarding. Not only is there rarely a dull moment for any of the CDF archaeologists, but none of us find ourselves confined to the typical oppressive office environment of that of many of our sister agency colleagues. I doubt a better job exists than that of walking around the woods looking for archaeological remains, and then having the satisfaction of knowing that those we find are likely to be protected for the benefit of future generations. My own role in the Program has changed somewhat over the five years I have now been with CDF. At first I was to act as the archaeologist for CFIP and other land owner assistance programs, as well as to participate in our Archaeological Training Program. Given that I had an educator's background and an interest in teaching archaeology, the latter role was a natural choice for Dan to exploit my service. Within a short time, however, I found my position had expanded into also being the archaeologist for the Urban Forestry Program, the State Forest Program, and the Timberland Conversion Program. I had statewide responsibility at that time and found myself commuting like a truck driver juggling projects in Trinity County one day, Tuolumne County the next day, and San Diego County on the next. Whereas this was fascinating to me as a California archaeologist, it was logistically complicated and inconvenient in many ways. This fact, together with issues surrounding the State budget, led to Dan reorganizing the entire Archaeology Program so that today each of us now oversees the archaeology in each of the different CDF programs within a specified region of the State. As such, I now am involved with much of my time in Forest Practice like the other CDF archaeologists, and they each now review archaeology in our other programs. The exception to this is our Archaeology Training Program, where I serve together with Linda Sandelin as Lead Instructor, and the Timberland Conversion Program in which I still am the sole archaeologist. Under our new organization, I am the archaeologist for the central Sierra Counties from Sierra County on the north to Tuolumne County on the south. Because this territory overlaps into both the formal Northern and Southern Administrative Regions of CDF, I often refer to myself as the "Mother Lode Archaeologist" for CDF to describe the region my responsibilities now cover.

Gerrit Fenenga teaching archaeology at Keystone Site near Ukiah in 2003.

Before I came to CDF I thought I had a reasonably good sense of how CRM was practiced in

California and elsewhere in the United States. I had been around practicing archaeology since before the establishment of early modern resource protection legislation such as NEPA, NHPA, and Nixon's Executive Order 11593 pertaining to federal properties, CEQA, and other authority in California. I had worked as an archaeologist for the first private cultural resource management firm in the United States (Archaeological Resource Incorporated, Inc.) and had both experience and formal cultural resource training with two federal (BLM and USFS) and one state agency (DPR). I also had been involved with contract work for a number of other entities including NPS, Army Corps of Engineers, Bureau of Reclamation, and CalTrans. In addition, I had worked at various times with the archaeological programs at a number of academic institutions including CSU Long Beach, UC Riverside, and UC Santa Barbara. I received formal training at UC Berkeley where I earned three degrees in archaeology, and I had taught archaeology in the California Community College system at Chabot College in Hayward and for nine years served on the Anthropology faculty at CSU Bakersfield. I had even developed and taught courses specifically on CRM, as well as related topics such as California Archaeology and Historical Archaeology. However, when I was hired by CDF I was startled to learn there was a whole world of CRM of which I was totally unaware. That world was CRM as practiced under the unique program developed by Dan Foster at CDF.

There are a number of reasons why the Archaeology Program at CDF developed in a unique and different way than that of other public agencies. Some of these include the fact that CDF works largely on private rather that public lands which it administers and manages, the fact that we have no analytical facilities such as a laboratory or any curation facilities, our role in regulation primarily through the Forest Practice Rules as defined by the Forest Practice Act (FPA) of 1973, and the way our Archaeological Training Program certifies Registered Professional Foresters and other resource professionals to conduct archaeological work in a paraprofessional manner under the guidance and review of CDF's professional archaeological staff. Together, these conditions have acted to require CDF to develop a different approach to CRM archaeology and have resulted in a system which finds, documents, and protects more cultural resources annually than any other public or private agency in the State. In addition, I suspect (although I haven't collected data to prove this point) that implementation of our Forest Practice review process provides the majority of fiscal support for more than one of the California Historic Resources Inventory Information Centers. These are an essential part of historic preservation in California and would never survive under the budget supplied by the State Office of Historic Preservation which directs and manages them.

Gerrit Fenenga with a portion of the Archie Brown artifact collection.

I am not the only practicing archaeologist in California with a lack of knowledge about the nature and effectiveness of the Archaeology Program at CDF. I served for three terms on the Executive Board of the Society For California Archaeology (SCA) and during my tenure heard a variety of negative comments about both CDF and Dan Foster expressed by other members of the Board. Specifically, these centered around two topics. First was the use of an archaeological training program to certify non-archaeologists to practice archaeology. The second related to continual lobbying by several individuals to promote Dan for one of the annual awards given by the Society to recognize outstanding achievement in California archaeology. In retrospect, and

with the advantage of having now worked within the CDF system, I have come to understand these criticisms much better than I did in those days. The first issue involves little more than a self-centered concern on the part of certain individuals who practice archaeology in the private sector that they might be missing out on some potential contract dollars, coupled with a lack of understanding of the manner in which individuals certified under the Archaeological Training Program are policed by the professional archaeological staff at CDF. The second issue was simply the fact that a number of professional archaeologists who had been exposed to the program had realized its significance and they honestly felt Dan was due just recognition for having developed it. Dan never did receive an award from the SCA and in recalling this story I clearly remember a conversation I had with Fritz Riddell a short time after I came to CDF. Fritz, who was one of the great patriarchs of California archaeology, told me at that time that Dan was "the most important archaeologist in California." Fritz was a wise old man who in his sixty-odd years of experience in California archaeology had seen a lot and realized that the program that Dan wrought was far better than the system that he had developed as the first California State Archaeologist.

I have described some of the circumstances that have resulted in why the Archaeological Program at CDF evolved in a unique manner, but I have not provided much evidence for how the approach used at CDF is distinctly different from that of other regulatory agencies. This difference begins with a conceptual basis that what archaeologists are documenting and protecting through the environmental review process is not really the geographic locations that we refer to as archaeological or historical sites, but rather it is the scientific information that these locations contain. This information is not only important, but it belongs not to the individual landowner so much as it does to the People of the State of California. This concept is implicitly stated by the significance criteria utilized to evaluate cultural resources as defined in both CEQA and the Forest Practice Act. Operating on private land with little or no resources for evaluating individual sites through the more widely known Section 106 process used by the Federal government (or those modeled after it, such as CEQA), CDF has adopted a completely different strategy for conserving cultural resources.

Under Section 106 of the NHPA, when an archaeological site is discovered it must be evaluated to determine if it is a significant resource. This evaluation process is not fully standardized, but basically involves investigating each site through archaeological excavation and analysis with the resulting data assessed in a comparative way against other such resources. This is a costly and cumbersome process. CDF's approach is conceptually different, is less costly, and is more elegant. Using the Forest Practice Act or CEQA significance criteria, all archaeological deposits are assumed to contain "information important in prehistory or history" (CEQA) or "information needed to answer important scientific research questions" (FPA). In other words, in order to destroy an archaeological site, one must prove that the site is <u>not</u> significant, rather than the reverse. This method achieves the same goal as does the Section 106 or the CEQA process, but does so in a more economic and simple fashion. Coupling the CDF approach with a general "flag and avoid" conservation policy results in less costs to landowners during timber harvests or other activities that might impact resources while maximizing their protection and conservation.

Archaeology is a complex field with many different dimensions. Unlike other fields of science, it is what analytical archaeologist David Clark once described as "an unempirical empirical discipline." This statement was made in reference to the fact there are many different ways to do archaeology. CDF has exploited this aspect of the field by involving people with many different backgrounds and experiences and encouraging them to participate in the process of site

discovery, documentation, and interpretation. The goal of this approach has been primarily to find and protect cultural resources, but also it has contributed greatly to educating a wide variety of individuals to the nature and importance of such resources. The program developed at CDF to deal with cultural resources is not perfect because things do get missed and sometimes fall through the safety net established by our environmental review process. The Archaeology Program itself is under constant review and revision as efforts are made to improve its ability to contribute to historic preservation in California. An example of this is seen in recent efforts that have been made to reduce damaging impacts that can potentially affect resources during fire suppression activities. Firefighting is an important aspect of our agency, yet only recently have we begun to aggressively address this issue in terms of its potential impact to significant cultural resources. Two important steps that have been made in this area include systematic documentation of the kinds of negative damaging effects that do occur when sites are burned and/or impacted by fire suppression, and secondly to make a concerted effort to educate firefighters to recognize, avoid, and report archaeological discoveries during the course of conducting their other activities. Initial movement in this direction has shown remarkable success and CDF archaeologists are encouraged by the progress we have seen in a very short period of time.

In this essay, I have chosen to emphasize and focus on the unique nature of cultural resource management at CDF in contrast to that of other public agencies. I have not addressed interesting anecdotes or significant discoveries that have occurred as a result of the program, or many other things I could have discussed. My own particular interest in archaeology centers a great deal around the epistemology of the discipline, that is to say how we know what we know about the past rather than what we specifically know. Archaeologists engage in a lot of theorizing and interpreting, often with little regard for the realities of the nature of the subject they are studying. I am of the opinion that theories are only as good as the data upon which they are based. Much archaeological interpretation is not well founded, and therefore consists of little more than speculative scenarios about past human behavior. Archaeology begins with archaeological sites and too few archaeologists realize how important it is that we find and accurately document these before we leap-frog ahead with "proving" our pet theories. Archaeology is a statistical science which requires that adequate sampling be applied before analysis takes place and interpretation follows. Although it may not seem very glamorous, the basic work of finding and accurately recording archaeological sites is more important in the long run than any thing else we do. CDF trained Registered Professional Foresters in this sense contribute a great deal more to the discipline than the "research" of many purported professional archaeologists. CDF is to be commended, if nothing else, for the considerable contribution it has made to the field of scientific archaeology by its policies and programs that annually result in the discovery and documentation of hundreds of archaeological and historical sites.

Dan Foster
Senior State Archaeologist - CDF

Dan Foster

I am the manager of CDF's archaeology and historic preservation programs. My office is at CDF's Sacramento Headquarters and my duties include policy development, staff supervision, and program administration. I was first hired by CDF in December of 1981 and have been here ever since. In 1992 I was appointed by CDF Director Richard Wilson as CDF's Historic Preservation Officer. That job gives me additional responsibilities for managing CDF's historic buildings. I am really pleased to have received such a fine collection of articles, written by friends and colleagues from their own unique perspectives; they have made a valuable contribution to this volume. My article is a personal recollection of past events that led me to choose archaeology as my desired profession, and how and why I chose to come work for the California State Department of Forestry. An objective summary of the history of this program is presented in the other chapters within this volume. The other articles within this chapter, written by friends and colleagues from their own unique perspectives, have made a valuable contribution to it. This present article is a personal recollection of the events that led me to become an archaeologist, and how and why I came to CDF.

My first exposure to California archaeology occurred during the summer of 1971. As a 15 year-old high school student I participated in a two-month-long archaeological dig along the Fresno River east of Madera. The excavations were conducted by the California State University Long Beach (CSULB) and partially funded by the National Park Service. My brother John Foster, an anthropology graduate student at CSULB at the time, invited me to join the crew as its youngest and least experienced member. Our salvage archaeology project studied numerous prehistoric and historic sites soon to be lost by the construction of the dam for Hidden Reservoir (now called Eastman Lake) and the inundation of the foothill country behind it.

Dan Foster (standing far left) at Hidden Reservoir, 1971.

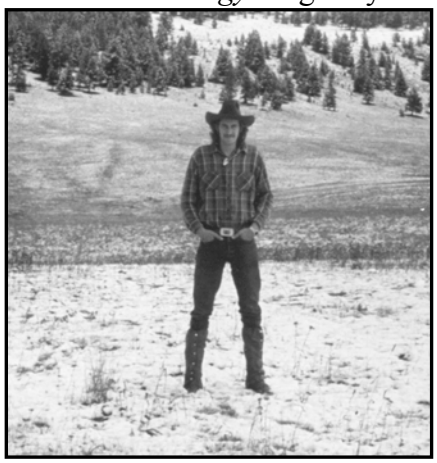
The Hidden Reservoir archaeological project was led by CSULB Professor Frank Fenenga and most of the 60+ crew members were either his anthropology students or their guests. We occupied a series of undeveloped camp spots along a mile-long stretch of the Fresno River pretty close to where the dam is now located. My brother John and I shared a camp directly adjacent to Professor Fenenga's, which gave me the opportunity to talk to him quite a bit. Frank was a wonderful, friendly man with an engaging personality that endeared him to all his students.

Early on during the dig, after one of his lectures at the midden site being excavated, I asked him a question that reflected my complete ignorance of both California Indians and of archaeology in general. Had he not answered it the way he did I might

well have become an accountant, a chicken plucker, or an engineer, anything other than an archaeologist. Looking at a small ground-level exposure of granite bedrock containing three perfectly symmetrical holes, I asked Frank if those holes were made and used by the local Indians to "secure their teepee poles." It sure looked like they would have worked well for that. Frank made certain not to embarrass me for having asked such a dumb question, explaining instead that California Indians didn't build teepees – those were Plains Indians that did. Then he went on to describe how Chuckchansi Yokuts houses were built. He had me sit down next to him so we could carefully inspect the ground surfaces within what I know now to be bedrock mortar holes. He explained how the mortars were used and how such use contributed to the dark midden soil that surrounded the feature.

In addition to California Indians and salvage archaeology, Professor Franklin Fenenga also taught me the correct way to treat people working as a team. Through Frank I met several other leading California archaeologists such as Dr. William J. Wallace and Dr. Clement W. Meighan, both of whom would later help my CDF archaeological program in numerous ways. I also first met Gerrit Fenenga, Frank's son, on the Hidden Reservoir project. He was 19 in 1971, and vastly more knowledgeable about archaeology than I was, having grown up at the foot of the master. Little did either of us know that some 28 years later he would join me here at CDF. Frank Fenenga became a lifelong friend and would later serve CDF as an instructor in several archaeological training courses. After his death, I was able to partially repay his kindness and the debt owed him for originally getting me into archaeology by helping to get a memorial volume published at UC Berkeley in his honor.

The archaeology bug bit me very hard at Hidden Reservoir, and the experience convinced me that my future lay as a professional archaeologist. After completing High School in 1973, I moved to Turlock so as to attend California State University Stanislaus (CSUS). I studied physical anthropology and human evolution under Carol Carson and archaeology under L. Kyle Napton. In the fall of 1975 I took a class entitled *Field Methods in Archaeology* taught by Dr. Napton; I was one of only 7 students. On the first day of the class the others had a discussion - considering the possibility of turning this class into a semester-long archeological field expedition, doing survey and excavation work in Nevada and Montana, and asked me if I was interested in joining them. After having just plowed through six hours of Basic English, Calculus, and other terribly boring courses, I said "Hell Yes - When do we go?" We left two weeks later. Just time enough to drop out of all of our other courses for that semester, and for Dr. Napton to change this field course into four courses worth 16 semester units. We conducted surveys on our way up to Montana - looking at Lovelock Cave and other world-class sites in Nevada, standing wickiups in Yellowstone, and Bison-Drive sites in Paradise Valley on the Yellowstone River. But the majority of time was spent excavating a terrific site on the DuPont Ranch near Avon, Montana, site #24-PW-340.



Dan Foster surveying in Montana, CSU Stanislaus archaeological expedition, 1975.

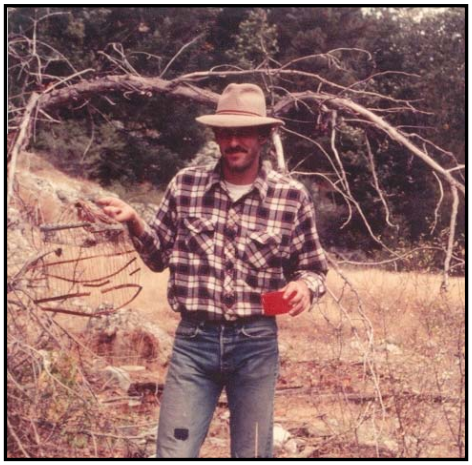
Not content to survive as a starving student, I also began my career as a state archaeologist in the winter of 1975, working for Department of Parks and Recreation (DPR). This was as a crew member on the archaeological excavation of the Monument Mesa Site (CA-SDI-222), a San

Dieguito-period site located on a coastal terrace on the Mexico-U.S. border.

Back in the '70's, CSU Stanislaus was on the semester system but offered an unusual one-month-long winter semester between the two large ones. Some students just took the month off, but others used it to focus on a favorite class. A full load for the winter semester was one class (4 units) but classroom and lab instruction was scheduled for 6 hours every day. Some classes were entirely out in the field. During January 1976 I participated as a student archaeologist-crewmember on the archaeological excavation at site CA-SDI-222, Borderfields State Park, under the direction of Jeffery Bingham. With Dr. Napton's support, a special class was created for me, in which I was assigned to compare and contrast the archaeological field methods practiced by the California State Parks programs with those practiced by CSU Stanislaus. This was also my first exposure to public agency archaeology and to cultural resource management, for the work completed at this state park unit was mandated by CEQA preceding major day-use facility and landscaping development.

I completed my B.A. in Anthropology in 1977 at Stanislaus State, having been encouraged every step of the way by Dr. Napton. He is a brilliant archaeologist and it was my very good fortune to have received such excellent field training in archaeological research methods from him. He is still teaching at CSUS and has been a contract archaeologist for CDF for over 17 years. After graduation, I went back to work for DPR as a seasonal archaeologist. For the next thirty months, I participated in a series of surveys and excavations throughout the California state park system.

In August of 1980 I changed from state to federal employ, accepting a position as a seasonal archaeologist on the Beckwourth Ranger District of the Plumas National Forest. I moved into the barracks at the Mohawk Ranger Station and stayed there for six months. Although my actual supervisor on the Plumas was a forester, my work was also overseen by the Forest Archaeologist. This person was a good archaeologist but, if he had a fault, it was his habit of always taking a confrontational approach when cultural resource management issues were involved. He trained his US Forest Service district archaeologists to follow this practice, which included secretly guarding the locations of sites, even from those USFS foresters and sale administrators that needed to know where they occur so they could ensure protection. On the Plumas National Forest, the federal archaeologists were not encouraged to make efforts to educate forest staff regarding cultural resources, or to recruit their assistance.



Dan Foster recording a historic site on Plumas National Forest in 1980.

Consequently some of the Foresters and Timber Sale Administrators began to develop markedly hostile attitudes towards archaeologists, viewing all of us as obstructionist pariahs. During my first week on the job I witnessed a Timber Sale Administrator violently throw a chair across a room while yelling "God Damn Those Archaeologists" at the top of his lungs. Curious to find out just what had motivated that display, I learned that he had just gotten in a bit of trouble for authorizing the harvest of a huge pine tree from within the boundary of a known archaeological site, in spite of recommendations contained in the Archaeological Reconnaissance Report that the tree be left standing. This particular fellow knew how to recognize an archaeological site and did not believe the tree was within a site. Looking at

the sale area sometime later, although there were a few basalt flakes nearby, I didn't think the site extended to the tree either, and I would have approved its harvest, if it was directionally felled away from the actual site.

This incident, and the attitudes that surrounded it, had a profound effect on my later career. I learned that foresters and archaeologists can teach each other many things about the woods, and that archaeologists and foresters can become powerful allies for each other by developing a cooperative working relationship based upon mutual respect. Many foresters have a genuine interest in prehistory, history, and archaeology, are well-skilled in field reconnaissance, can read the landscape, and with a little training and encouragement, can provide valuable assistance to the archaeologist. This approach was not realized on the Plumas – which was a mistake. When opportunities came to me later I was not going to repeat them. I was going to develop partnerships with foresters and recruit them to help find and protect sites.

It was during my time with the USFS that I developed a career-long interest in how archaeology could be included within the overall management of California's forestlands. Despite the confrontational climate I encountered upon beginning work as a federal archaeologist, I discovered that I enjoyed working with foresters: we had common goals, we loved working in the woods, and we wanted to protect forest resources. I also discovered that professional foresters were not trained to recognize archaeological sites and features found in the woods, and that significant damage to cultural resources sometimes resulted during projects overseen by foresters simply because these resources were archaeologically invisible to them. At the same time I realized that many archaeologists were just as lost in the forest setting as were foresters mystified by archaeology, and the germ of an idea that would chart my career in later years was born; if I could ever somehow make foresters of archaeologists or make archaeologists of foresters, then I could really make a difference in my chosen field. The most important lesson learned was that cooperation gets you much farther than unnecessary confrontation.

In February 1981 I left the Plumas National Forest, moved to Sacramento, and accepted my first permanent job in archaeology - working once again for the California Department of Parks and Recreation as a State Archaeologist I at the Sacramento Headquarters. This was another great job, in no little part because this is where I met Fritz Riddell, who would become my mentor and life-long friend. I learned many things from Fritz that would later help me establish a program at CDF. He opened many doors for me and introduced me to many archaeologists that have become firm friends; for example, it was Fritz who introduced me to Dr. Brian Dillon at UCLA, who would later come to help expand my CDF archaeological training program and serve as its longest-running instructor next to myself. More important than perhaps any other of his many talents was Fritz Riddell's ability to "sell" archaeology to those ignorant of its very existence, or even to "sell" it to those opposed to it on emotional or intellectual grounds. Fritz was famous for his knack of converting potential archaeological adversaries into archaeological allies, and, through working closely with him for many years, I believe that I too have managed to become proficient at this important skill. In fact, when the late Don Miller (founder of the USFS Archaeology Program in California) once told me how much my personality and style reminded him of Fritz, I considered that to be the finest compliment ever given to me, and still do.

At Parks I began to work on a series of archaeological projects within several state park units, including surveys at Big Basin, Cuyamaca Rancho State Park (CRSP), Plumas-Eureka Mine, and excavations at the Franklin House in Old Town San Diego. My assignment at CRSP was to support DPR's prescribed burn program and I worked closely with Dr. Harold Biswell. I recall

this experience as my first need to "sell" archaeology, to justify its role in state government, and convince park officials of the need to protect cultural resources in the development of operational burn plans. This was also my first exposure to CDF.

Like many Californians, I had never heard of CDF up until this time, and knew nothing about what the agency did. For their part, CDF did not have its own archaeology program, instead making use of state archaeologists on staff at DPR through a series of annual contracts. My brother John did much of this work, and in the the final year (1981) it was Jim Woodward that was assigned exclusively to work on CDF projects. One day while surveying in the East Mesa of Cuyamaca Rancho State Park I met CDF Forester John Gray who had positioned himself with a CDF engine and crew on a ridge top at the park's eastern boundary. He wanted to be prepared to respond to a potential escape should DPR's controlled burn get away. John was intrigued to meet a state archaeologist and see some of the archaeological sites I was finding. We had many lengthy discussions on how these sites should be managed during controlled burns, and I came to learn much about CDF. I knew I would enjoy working at CDF if ever given the opportunity. I found that CDF's area of responsibility covered some 30 million acres of California's privately owned range and timberlands, including most of the state's foothill country and all the non-federal timberland, where literally thousands of unrecorded sites were waiting to be discovered. I realized that any person fortunate enough to work as an archaeologist for CDF would have practically the entire state of California to work in, and that most of the land parcels under CDF's jurisdiction had never before been surveyed for cultural resources.

Although I had hoped to embark on a career as a state archaeologist working for the California Department of Parks and Recreation, issues of alleged nepotism forced me to start looking for work elsewhere. My brother John, a supervising DPR archaeologist, was under attack by a disgruntled archaeologist who claimed that I had been unfairly hired instead of him. The allegations weren't true, but both Foster brothers realized that it would be better for our careers if only one of us were employed by state parks: so, having less seniority, I left. Meanwhile, my good friend Jim Woodward was wrapping-up his CDF assignments and told me about an archaeologist position being established there. Jim thought that CDF and I would be a good fit for each other and I had already decided that CDF was the place I wanted to be. I wanted the chance to develop an archaeology program to support commercial timber operations and controlled burns across those millions of acres of private land.

Dan Foster's first office at CDF - 1982.

When DPR chose to discontinue the annual contracts that provided archaeology services for CDF, the agency successfully completed a Budget Change Proposal (BCP) which added one permanent fulltime State Archaeologist II position to its workforce. We have Cliff Fago and Brian Barrette to thank for preparing the BCP that created this first archaeologist position. Jim Woodward probably would have been offered the job but he had already decided to go back to DPR. His CDF boss, Audley Davidson, asked him who on the State Archaeologist II list might have the right mixture of abilities, enthusiasm,

and attitude to be successful. Jim told Audley about me, and told me about the CDF official that would be making the decision. Even before the interviews, I went over to the fifteenth floor in the Resource Building to meet CDF Staff Chief Audley Davidson, and told him how much I wanted this job. One of Jim's last assignments at CDF was to complete an archaeological survey of a timber sale area at Boggs Mountain State Forest (BMSF) near Clear Lake, and Jim asked me if I'd like to go with him. I took a week off work to volunteer on this project. Jim let me help him survey, record the sites, and write up the report so I could show CDF the kind of work I was capable of doing. In retrospect, both Jim's recommendation and my eagerness must have made a positive impression on CDF.

The interviews were held during the fall of 1981, and more than a dozen qualified candidates were interviewed. When asked to explain why I thought my experience and training would allow me to successfully perform CDF work, I discussed my recent survey at BMSF and presented a copy of my report. I remember Audley's long telephone call to me in December 1981 during which he engaged in small talk for what seemed like a half hour before he finally broke the suspense and revealed the Department's decision. With his words "Well, you're it" I was welcomed into the CDF family that day.

Dan Foster reviewing a THP near Boonville in 1997.

The CDF Director at that time was David Pesonen, and the Deputy Director for Resource Management was Loyd Forrest. I was assigned to work for the newly created California Forest Improvement Program (CFIP) under Audley Davidson, although my direct supervisor was Forester III Tom Randolph. In these early years I did little work for Forest Practice. My duties were to provide archaeological support for the CFIP program, for timber sales on State Forests, and to provide training for CDF staff. My only involvement with THP review was to make field inspections at confirmed sites, but more times than not these site visits took place after such sites had been clobbered by logging. CDF did not believe sufficient authority existed to require THP applicants to complete cultural resource surveys to locate and protect significant sites during plan development. It took several years to accomplish this. It required field visits and damage appraisals with an assessment of how the damage could have been prevented. Eventually the state decision makers came to realize the inadequacies of forest practice rules, and deficiencies in CDF's review and support staff. This led to the creation of CDF's certified surveyor program in 1991 and from that day on every THP in California then contained information about cultural resources and how they would be protected.

I take great pride in knowing that my efforts, and those of the outstanding colleagues I have worked with, have changed the way professional forestry is now practiced in California. Cultural resources are now given full consideration as an important part of the wildland and urban landscape we are responsible to manage. One of the accomplishments I am proudest of is having found and persuaded some of the most talented archaeologists in the state to come and work with me at CDF. My very good friend and colleague Richard Jenkins has been at CDF the longest, and he has made Northeastern California his own special research province to the benefit of all. He has also become a leader in this program and has taken us in several new and

exciting directions. My great friend, the late Mark Gary, was a dominant force in the archaeology of California's North Coast Ranges, and CDF lost one of its most unique figures when he left us so abruptly. Linda Sandelin delivers the program to places previously not well covered such as to the contract counties, the CDF Academy, fire personnel, and to THP review in the Southern Region. She ranges tirelessly all over the entire southern half of the state to support CDF projects and protect cultural resources. More recently, Steve Grantham and Chuck Whatford have moved from the State Office of Historic Preservation to become successful CDF archaeologists in the North Coast Ranges, and Gerrit Fenenga does a terrific job as instructor in CDF's statewide archaeological training program and covering three CDF units in the Mother-Lode region. I have several enlightened CDF administrators to thank for creating these additional archaeologist positions which strengthened our program and brought it to a new level. These are Ken Delfino, Ross Johnson, Jerry Ahlstrom, Steve Jones, Norm Cook, Duane Shintaku, and Dean Lucke. Truly, if the CDF archaeology program is something to take pride in, much of the credit goes to these outstanding and hardworking colleagues. And, I would also like to thank my brother John at DPR for his wise counsel over the years, and for dragging his gawky little brother onto that first archaeological site more than 33 years ago.

Dan Foster - 2003

My old colleagues at the Department of Parks and Recreation had warned me that the job at CDF would be rough, and had cautioned me that CDF lacked the sophistication to manage cultural resources. Boy, were they wrong! My acceptance of CDF's offer in December 1981 to become its first permanent fulltime staff archaeologist was the best decision I ever made. It led to an exciting, full, and rewarding career as a public archaeologist working for a terrific state agency. I take great pride in knowing that my efforts over the years have changed the way forestry is now practiced in California, and changed it for the better.

John W. Foster
Senior State Archaeologist - DPR

John W. Foster

I look back with great fondness on my years spent working with the Department of Forestry. I was a shiny new state archaeologist with Parks and Recreation when one of my first assignments in about 1977 was to help support a new CDF program for the identification and protection of archaeological sites. It was an extremely exciting time because I was assigned to a multi-disciplinary Task Force whose charge was to evaluate the effectiveness of a newly passed Forest Practice Act. That took me all over northern California to see logging operations and sometimes archaeological sites as part of a team dispatched by the Resources Agency.

One impression stays with me from those years and has been reinforced many times since: CDF's foresters are the most professional regulatory and management people I have ever worked with in State government. They really do care about balancing how the forests are managed, resources are protected and wood products are produced. I always knew I was interacting with professionals, and that my professional opinion was "valued" in CDF. I worked as a specialist but found foresters as a group to be highly interested and receptive to understanding how ancient societies made use of forest lands. I was privileged to conduct the first cultural resources training for CDF starting in 1977, learning as much from the students as they did from me. What I started as a one-day orientation class has become (through the efforts of my brother Dan and his dedicated colleagues) a model training program for resource professionals. It is the finest cultural resources training class in State government, and a must-do for serious resource people.

I want to briefly highlight three examples from my experience with CDF that are worth noting.

John Foster on a CDF assignment in 1979.

The Worm and the Bald Hills In the late 1970s the expansion of Redwood National Park was being proposed along Redwood Creek, called the "Worm." Arcata Redwood Company was the landowner and they had filed THPs for harvest of trees from the slopes above the creek to the margin of the Bald Hills. Groups opposed to logging were pressuring CDF to not approve those plans, and among the issues raised was archaeology. So I was dispatched to the area with instructions to identify and map significant archaeological sites, so they could be protected. Working with CDF foresters, I found some significant Chilula sites, and interesting historical features. These have since become part of a Historic Landscape designated by the National Park Service and open to public appreciation within an expanded Redwood National Park. The system worked; there was a legitimate public concern, and CDF did a good job in addressing it.

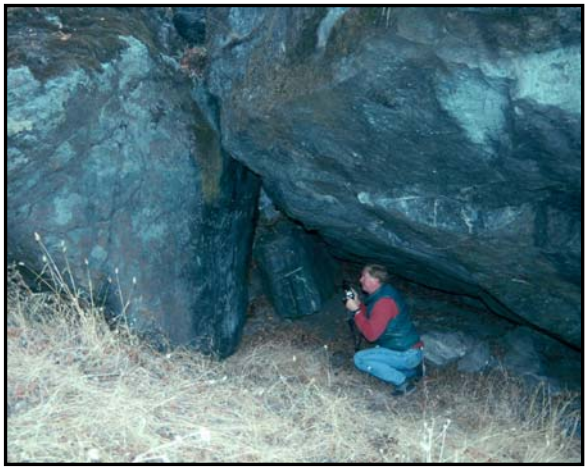
Legal Consequences of Archaeological Damage to Site CA- MEN-1631 In 1979 I was part of a team that evaluated THP 1-79-224M on Georgia-Pacific (G-P) land in Mendocino county. In the archaeological reconnaissance, two sites were discovered, mapped and recorded. They were encompassed in a Special Treatment Area, agreed to by the applicant, and provisions were made to fell the trees away from the archaeological deposits. This planning effort was wasted, however, when Men-1631 was destroyed by tracked vehicles which bladed up lay-outs for several large redwoods within the Special Treatment Area.

The case was prosecuted and went to court. The District Attorney and CDF worked very closely with me and with Milton Marks of the Northwest Indian Cemetery Protection Association (NICPA) and Yurok Tribe to explain the consequences of this error and the heritage damage done. On October 30, 1979, G-P was found guilty of violating Section 4591 of the Public Resources Code, a "substantial deviation from the THP." Although a minor violation, it was, I believe, the first time archaeological site damage had been cause for such a verdict with respect to timber harvests in California.

That wasn't the end of it. Under pressure to avoid a civil action by NICPA, G-P agreed on

January 15, 1980 to an Order of Probation issued by Judge Orr of the Long Valley Justice Court. The Order contained provisions by which archaeological sites needed to be inventoried, recorded and protected during timber harvest operations over the subsequent three years. This was a landmark decision inasmuch as it clearly set forth the landowner's responsibility for protecting archaeological sites on private land. The message was sent: these heritage sites are important, they have value, and if they are damaged through negligence or accident, there will be legal consequences.

Lost Petroglyphs at Slakaiya Rock One of my most enjoyable collaborative efforts with CDF involved working in 1993 with my brother Dan to record a significant petroglyph site on the Eel River in Trinity county. We would have never had that opportunity without the diligence of Dave Drennan. Not only did he painstakingly search for the site for several years while he performed preharvest inspections, he finally "found" the site, and remarkably, he obtained the owner's permission for formal documentation. In my mind, Dave epitomizes the outstanding dedication and professionalism of CDF. Without his efforts, the Slakaiya Rock petroglyphs would still be officially "lost."



John recording petroglyphs at Slakiaya Rock Panel 1 in 1993.

This elaborate Wailaki inscription was first noted in 1913 by a US government engineer and reported to Dr. A.L. Kroeber of the University of California. Kroeber passed on the information and location to his graduate student, Pliny Earl Goddard, who passed it along to other researchers as well as the compilers of the first archaeological inventory records for the state. Somewhere in the process, the location of Slakaya Rock or TRI-001 became confused and the site disappeared from official records. It remained officially "lost" for 80 years. Finally, during a THP inspection, Dave Drennan rediscovered the main panel in a protected rock enclave near the Eel River. He organized the survey team to document this feature, and bring life back to the ancient site. A highly accurate and scaled illustration of the main panel was made. This work has brought credit to CDF and to Dave Drennan for finding and preserving it.

Slakaiya Rock petroglyphs, CA-TRI-1.

In looking through my meager CDF files from 25 years ago, I find many examples of early steps taken to bring cultural resources into consideration when regulating timber harvests. In 1980, for example, we struggled to insure that photographs could be taken in the course of identifying cultural resources in a THP area. That's right!! CDF's Director had denied a THP because the inspectors and specialists (including the archaeologist) were not allowed to use cameras to record their findings. It was a struggle to find the right balance, and we were sensitive to the fact we were working mainly on private property, but slowly we established the public's interest in

protecting heritage sites for the benefit of all citizens.

Finally, in 1981, it was time to encourage CDF to develop their own program and end their reliance on DPR to provide archaeological expertise. With considerable sadness, I made a recommendation to Parks that the 5 year inter-agency agreement not be renewed. It was time for CDF to develop their own program, hire their own specialists, and integrate cultural resources into their mission and scope. They have done so and I take pride in my early role in that process.

Jill K. Gardner
Assistant Director, Center for Archaeological Research
California State University, Bakersfield

Jill K. Gardner

When Dan Foster asked me to contribute to this volume, I was not sure exactly what to say. After all, most of the work that the Center for Archaeological Research (CAR) at CSU Bakersfield has done for CDF is in the administration of about 11 annual contracts with CDF which provide part-time archaeologist positions at several CDF offices. These contracts, however necessary, I dare say no one on earth (at least no archaeologist) would consider the least bit interesting or intriguing as a subject of commentary in this chapter. However, after discussing it with my colleague, Bob Parr, I decided that we did indeed have some interesting projects that could be included in this volume.

The CAR and CDF have been working together for over 15 years. Beyond the administration of contracts, we have also conducted survey work for various CDF projects, such as those associated with Vegetation Management Programs, California Forest Improvement Programs, Forest Stewardship Projects, and Timber Harvesting Plans. Much of this survey work was performed along with Jack Ringer of the Kern County Fire Department as part of the planning stages for prescribed burns in the county. While many of the projects we have done for CDF have taken place in Kern County, we have also conducted work for them in the counties of Fresno, Madera, San Luis Obispo, Tulare, and others.

Several of these projects culminated in the identification and recordation of some interesting archaeological sites, both prehistoric and historical. The one that stands out in my mind, perhaps because it is one of the few CDF projects for which I have actually conducted fieldwork myself, is the Dillonwood Grove Site on the western slope of the southern Sierra Nevada in Tulare County. The fieldwork was conducted in the summer of 1996, and the site consisted of a lithic scatter composed of obsidian flakes, some milling tools, and a few flaked stone tools. Based on obsidian sourcing and hydration, protein residue analysis, and a sample in-field debitage analysis, the site was interpreted as a temporary camp associated with seasonal hunting and/or gathering forays into the mountains by lowland people perhaps as long ago as 1,800 years. But the real reason the site stands out in my mind is the "raging bear" incident. One of our students was holding the stadia rod for mapping purposes, and inadvertently encountered a black bear. I don’t know who was more frightened - the student or the bear - but the sight of this young man dropping the stadia rod and running at the speed of sound right through my lithic analysis unit is not one I am likely to forget.

Other projects illustrate the diversity of the work we have done for CDF, such as the Battle Mountain Ranch VMP in Tulare County, conducted in 1999. The two sites that were recorded there are believed to be associated with a group of Yokuts Indians who retreated to this area to defend themselves against local militia and U.S. Army forces during the Tule River War of 1856. Another example is the inventory of two historical can dumps at Enterprise Mill and Galena Mine Camp at Mountain Home Demonstration State Forest in Tulare County, the purpose of which was to determine whether they were contemporaneous with historical operations in and around the sites. Yet another example is the assessment of the Tollgate VMP in the Tehachapi Mountains in Kern County, where seven prehistoric milling sites were recorded, along with the Tollgate Lookout Tower. Rock art has also been recorded during our work with CDF, as evidenced by the Stevenson VMP project in Kern County, where a pictograph was discovered in Caliente Cave.

These are just a few of the projects we at CAR have completed over the years that we have been part of the CDF "family." Working with Dan and some of the CDF contract archaeologists has been such an enjoyable and enlightening experience. I applaud their efforts to ensure that the cultural resources of California receive fair and equitable treatment in the planning process, and I truly look forward to a continuing relationship with the folks at CDF.

Richard Gienger
Environmental Protection Information Center

Richard Gienger

I start this account that relates to archaeology and CDF with a brief and simplified story about the founding of Sinkyone Wilderness State Park. This gives a context for my main story. At certain times events pertaining to the more recent history of Sinkyone Wilderness Coast will be referenced to give some perspectives to the main account.

In 1975 the California Department of Parks & Recreation (DPR) bought the Bear Harbor Ranch, about 3500 acres along the Pacific Ocean in the northwest corner of Mendocino County. The local community breathed a sigh of relief because the ranch had almost been purchased by a developer for a newer version of Sea Ranch. Ostensibly the community would have benefited by helping to build the mansions of the wealthy on small plots, and the wealthy would have the run of that section of spectacular coast.

High hopes for comprehensive protection and restoration of the area were somewhat dashed shortly afterward, when the Department of General Services brought in 500 head of cattle to make money for the state while DPR decided how to classify and name the new park unit. The cattle swiftly and adversely impacted the riparian areas, knocking over the alders and fouling the water. Removing the cattle was one of the first major issues that engaged the public. It wasn't until around 1978 that the cattle were finally removed.

The Parks & Recreation Commission classification and naming hearing took place in Fort Bragg in September 1977. A fair number of people traveled from the area to witness and testify. At least half of the crowd were "back-to-the-landers" with assorted older people and officials making up the balance. Speaker after speaker gave eloquent testimony as the beauty and

heritage of that coast -- stressing both the natural and cultural heritage, wishing to honor both the land itself and the Native American ancestors and descendants of that land. That articulation of the intertwining of those values continues to be relevant today.

The Parks Commission combined its Usal and Bear Harbor acquisitions into a single project and discussed the naming and classification of it's new park unit. Of the classification alternatives defined by DPR that could allow both traditional hunting and fishing, while preventing motorized exploitation, was the Wilderness classification. Up until the last speaker, all had supported wilderness classification. The last speaker, an older gentleman unknown to most of those present, initially was expected to articulate the case for motorized access and unfettered recreational use -- for no one else had argued that case as had been expected. As it turned out he was the most eloquent spokesman for Wilderness. He was William Penn Mott, former California Parks & Recreation Director under Governor Ronald Reagan, who had focused state interest on the Coast from Rockport to Capetown in the late 60s and early 70s.

DPR Director Cahill spoke against wilderness protection, and the public was chided by Commissioner Ida Berk, from East Palo Alto, for hoarding such a grand resource from urban California. The Commission finally passed a resolution classifying the unit as a park with the provision that large areas would be set aside as wilderness as the planning and growth of the unit progressed. The naming of the park was postponed until October 1977 at Asilomar -- in deference to Commissioner Vivian Hailstone who was not in attendance. The two prominent suggestions were "Black Sands", by Ida Berk, and "Sinkyone," by an Indian man in honor of the ancestors and descendants.

View of the Sinkyone Wilderness.

Lo and behold, in October, the Commission with Hoopa Elder Vivian Hailstone present and with the support of Ida Berk, voted to named the unit Sinkyone Wilderness State Park. One Commissioner voted against that naming, citing the ambiguity of Wilderness and State Park. To our minds the naming officially and appropriately intertwined the Natural and Native heritage.

It was a long and continuing struggle by tens and hundreds of people, in many venues, by many organizations, for many years to achieve a semblance of protection and respect for the Sinkyone Wilderness Coast. Over 7,000 acres of land were acquired in December 1986 to add to the protected area. About half of that went directly into Sinkyone Wilderness State Park (SWSP) and the other half became InterTribal Sinkyone Wilderness in the early 1990s.

The struggle continues today as Parks & Recreation is in the midst of finally doing the General Plan for SWSP. 1980 legislation authored by former State Senator Barry Keene provides that Sinkyone Wilderness State Park becomes part of the California Wilderness System upon completion of the General Plan. The InterTribal Sinkyone Wilderness Council is actively planning and implementing their plans on their generally upland holdings.

Back in 1977 -- at the same time that the Parks & Recreation Commission was passing motions that affected the Sinkyone Wilderness Coast, Georgia-Pacific Corporation (G-P) was bent upon, and engaged in, relogging the isolated rugged coast and liquidating any surviving stands of Old Growth Redwood and Douglas fir. A Timber Harvest Plan (THP) was being reviewed by CDF

in September 1977, a plan to remove all the remaining Old Growth in the "Little Jackass"/"Little Wolf Creek" Watershed. [That became known as the Sally Bell Grove Watershed.] In the early 1960s, photos seem to show that almost all of the small watershed was still Old Growth. Boise-Cascade Corporation, one of G-Ps predecessors, logged parts of the watershed, but there still was around 300 acres of Old Growth remaining in the watershed.

CDF convinced G-P to clearcut the watershed in two or three stages rather than taking all the Old Growth at once. An 80 acre clearcut and a forty acre clearcut were separated by what became known as the Sally Bell Grove six years later. The steep watershed -- canyon, really -- surrounds

a beautiful cove and a rocky point call Mistake Point. The 1977 THP was a heavy blow -- much was on steep ground which had never before been entered for logging.

A lot of active research, writing, and interaction with a variety of agencies commenced in earnest by a coalition of Sinkyone Wilderness advocates. One of the main focuses of research and learning was the history and pre-history of the indigenous people of the area and region. When many "back-to-the-landers" moved to the area in the late 1960s and early 1970s, many were interested in finding sustainable and sane models for living in that place.

The present evident model of depleted forests, buried streams, and skid trails everywhere at a stone's throw didn't seem to look very viable. There was a conscious look to the millennia of indigenous relationships to the land. Locally, at the short-lived Briceland Store, a U.C. Berkeley monograph by Gladys Ayer Nomland called *Sinkyone Notes* was available and copies were widely purchased and read. It included the story of Sally Bell, a Sinkyone survivor of a massacre at Needle Rock, north of Bear Harbor. She and her husband Tom Bell lived into the 1930s at Four Corners, often traveling to Briceland and Westport. Local author, Ray Raphael's second book, *An Everyday History of Somewhere*, focused on "everyday" peoples' relationship and survival with the land, starting with the Sinkyone -- and included an interview with an "old timer" whose life had been saved at birth by Sally Bell.

Research was ongoing in the King Range, north of Sinkyone Wilderness, by archaeologists and student archaeologists. That work was widely followed and communications established with archaeologist Valerie Levulette, Bill Hildebrandt and others. A deeper awareness of the history and pre-history of the area was growing.

In 1978 or so G-P filed two more THPs along the Sinkyone Wilderness Coast. One was for upslope areas, mostly in the North Fork Wolf Creek Watershed, between the old town site of Kenny (headwaters of Usal Creek) and areas leading to Bear Harbor. The other THP was for an extensive area in the ridgetop valley of Waterfall Gulch Creek (a North Fork Usal Creek tributary) and included 2/3rds of the Old Growth knoll adjacent to the 1977 THP on the south and extended into the Wolf Creek Watershed on the north.

By luck and fate, I and my family, found ourselves leasing the Needle Rock House for most of 1978. There were three gatherings, one large, that were held there during that year. The gatherings included people from the North Coast in general, and from Humboldt and Mendocino Counties in particular. Topics of interest were far ranging, but protecting the Sinkyone Wilderness Coast was emphasized.

During that time a small group embarked on a hike from the Bear Harbor area up to the proposed THP area around Kenny. Those on that hike that I can now recall were King Range/Sinkyone advocate Mel Lynn and his son Thorin, Sonoma County Sierra Club activists Sue Estey and Julie Verran with her daughter Katherine, and myself with my 5 year old son Maceo. As we clambered up toward the THP and Kenny, Katherine all of a sudden found a perfect obsidian arrowhead. We hadn't gone many more yards when Maceo found a perfect chert arrowhead. It was a seminal moment for all of us. All of a sudden we were struck with the reality of the Sinkyone living on this land for 1000s of years. The site spoke to generation after generation of preparation for the hunt -- the abundance of elk and deer and sustenance of the people.

We returned in the dark to the Needle Rock House stumbling and sliding down the steep slopes from the Usal Road Ridge. The next day the necessary steps were discussed and began to be undertaken. Jim "Deerhawk" Ekedahl took the site issue to the Mendocino Archaeological Commission. G-P forester Jere Melo assured the Commission that operations wouldn't begin until protections for the site and/or other sites were established. As far as I know operations commenced without adequate evaluations or protections. Sometime during that period Val Levulette registered the site we had discovered.

Several people scouted out the other THP in the Waterfall Gulch area. The whole area appeared to be one extended site -- acorn preparation tools were everywhere. We argued with CDF and the archaeologists that got involved with this plan, but only four discreet areas were given site protection. Several years later the larger extent of the site was conceded, but the upshot with the THP was that at least one of the four designated sites was bulldozed for a pad to soften the fall of an Old Growth tree. DPR Archaeologist John Foster, working under contract to CDF, who inspected and verified the destruction, reportedly was advised by G-P forester Melo that he would never be allowed on G-P land again.

This site destruction resulted in charges against G-P for site destruction. There were two or three hearings in Judge Orr's Court in Leggett. I missed the first hearing, but was told that G-P was somewhat apologetic, saying that it was a mistake -- the site hadn't been flagged for fear of pot hunters disturbing the site. Apparently there had been no communication with the Licensed Timber Operator (LTO) either. By the last hearing, which I attended, G-P was getting surly and making comments about getting artifacts into brown paper bags as soon as possible.

The Northwest Indian Cemetery Protective Association was represented at these hearings by Million Marks and Walt Lara Sr. This was very heartening in a bad situation. Letters were sent to the court encouraging required consultation with Indian representatives for all operations which might impact heritage sites. Unfortunately the court didn't go that far, but the terms of penalty and probation did include the requirement for archaeological surveys to be done in probable areas in the entire G-P "Usal Unit", which contained at that time about 40,000 acres -- from near Pierce to Leggett, and between the South Fork Eel River and the coast. This was good, but too often the results were that previously disturbed sites were disturbed further or obliterated.

Contentions continued as more G-P THPs were proposed and carried out. Communications with the Native American Heritage Commission were started. Jim Deerhawk and I went to the local Indian organization, XIT (Crossing of Indian Tribes) at Alderpoint. They were informally supportive of Sinkyone Wilderness protection, but felt constrained by members or relatives employment at the L-P mill that was operating at that time in Alderpoint. After the closing of

the mill XIT became the Wailaki Aboriginal Society which still meets from time to time.

Legislation relative to Sinkyone Wilderness was passed in 1980 as mentioned above. Then Assemblyman Doug Bosco got $3.2 million allocated for acquisition which made the issue real and actually ended up being the largest portion of funds that made the purchase happen in 1986. Field trips happened from time to time. One typical sidelight was that G-P argued for a long time over terms of a lease for a coastal trail until Robert "Man-Who-Walks-in-the-Woods" Sutherland pointed out that G-P had agreed to an easement in 1975 as part of the conditions for approval of a THP near Usal.

Things came to a critical juncture in 1983 when G-P filed a THP for what became known as the Sally Bell Grove. It was the last straw, and all that had been learned in the years before was brought to bear on that THP. It's quite a story in itself that is too long and complex to related here. The short of it was that the Environmental Protection Information Center, the International Indian Treaty Council (IITC), Wailaki Fred "Coyote" Downey, Robert Sutherland, and Richard Gienger sued for a Writ of Mandate against the California Department of Forestry (& Ross Johnson in his official capacity) and Real Party Georgia-Pacific Corporation. Attorneys for the Plaintiffs included Sharon Duggan, Jay Moller, and Michael Solomon. The Old Growth grove was named the Sally Bell Grove to honor Sally Bell and indigenous peoples. Non-violent civil defenders stopped operations twice in the Grove -- the second time with help of a Stay issued by the California Appeals Court. The Mendocino Superior Court had ruled against the Plaintiffs but the case was appealed -- and a Stay was in effect from the fall of 1983 until the Appeal Court made its ruling for the Plaintiffs in the summer of 1985, which overthrew CDF's approval.

There were four parts to the Appeals Court ruling: (1) CDF failed to consider cumulative impacts; (2) CDF failed to adequately consult with Native American; (3) CDF failed to assure the citizens of California that the Native American Cultural Heritage was being protected; and (4) CDF failed to issue their Response of Comments in a timely manner. The first three parts of the ruling remain in contention to this day. Part of the mission of several people involved in this is to see that remedies inherent in this decision are finally implemented.

Part of the irony of the EPIC v. Johnson case (the Sally Bell case) was that up until that decision CDF was insisting that logging in the Sinkyone Wilderness was not a Native American issue. Indian people that helped to make the issue were many. Bill Wahpepah, Tom LeBlanc, Dennis Jennings, "Coyote" and others were key during the early 1980s. Native American involvement has been unbroken in real life time, and has grown in an "official" way from September 1977, and continues to grow into the future.

While the Appeals Court was pondering its potential decision, a number of people including "Coyote", Ricardo Tapia, and Priscilla Hunter helped to start the InterTribal Sinkyone Wilderness Council (ITSWC). In a general sense it is a consortium of Indian Tribes from Hoopa to Hopland. In a specific legal sense it is composed of approximately 7 federally recognized tribes in a non-profit organization. Negotiations began to take place amongst various stakeholders, especially after Trust for Public Land acquisition in 1986, and the ITSWC pressed its case for the upland acres of the acquisition that Mendocino County wanted kept in "multiple use". In about 1994 the ITSWC purchased title to the upland areas of the 1986 acquisition.

After the Sally Bell decision CDF began to slowly try to comply with the decision. As regards cumulative impacts, it took about six years to get an inadequate checklist in place. Cumulative

impacts remains an unresolved high-profile issue.

CDF, which had been trying to come to grips with the archaeology and Native American Heritage issue at the time of the EPIC v. Johnson decision in 1985, stepped up it's efforts to improve it's process. An agreement was forged with the Native American Heritage Commission to have some sort of interim consultation process until more formal rules and procedures could be established. Harvest plans received more attention regarding protection of archaeological sites, but a more rigorous and formal process wasn't in place until 1991.

The 1991 rules package was quite contentious with a lot of arguments over the determination of significance of a heritage site -- what factors applied and who would be involved. The time for passage of the rules package was extended to provide for more review by the Native American Heritage Commission. No satisfactory and functional consultation process was established for Native Americans in the harvest plan review process.

In 1997 and 1998 the archaeology rules were amended and the amendments went into effect in 1998 and 1999, respectively. Certain improvements were made, but no ongoing and workable process was attained to assure Native American involvement in the review process -- in the field, or through written or oral communication. Exceptions to these shortcomings usually involve active participation by larger tribes that have people with a designated responsibility for environmental and cultural review. One shortcoming, that was chronically aggravating to Native Americans and others, was the lack of a regional map which would clearly show the location of the proposed plan. The Board denied the inclusion of such a simple and yet vital request in the rule amendments.

The latest archaeological rules changes were established by the Board of Forestry in 2002, and which went into effect in 2003. CDF put together a pretty comprehensive package that tried to address significant problems, such as bringing the program into compliance with CEQA. One of the new requirements for such compliance was to notify Native Americans of sites that were found during the review process -- not just notification at the start of plan preparation, or if a site is discovered after plan approval.

Another highlight of the latest rules package was the inclusion of a regional map clearly locating the project area. It was amazing to me and others that such an obvious need, so simply met, was resisted by the Department and Board for over 12 years -- and finally included as "essential".

There is so much left to be done -- issues to follow through on with the assurance of meaningful Native American consultation and participation. The Native American Heritage Commission is the responsible agency in California for protection of California Indian cultural sites. Fulfillment of their responsibilities has often been made difficult through lack of interagency communication and through lack of adequate resources. The legislature has become involved in trying to correct these difficulties, and others, and several bills have come close to passing that would overhaul the consultation and site protection process in California.

The former Native American Advisory Committee to the Board of Forestry has been reconstituted as the Native American Advisory Council to CDF. Some good work has been done over the years, such as a brochure describing the protection process as regards harvest plans, but more work remains -- especially that which increases ongoing and effective consultation on heritage and cultural matters.

As previously stated, some large tribes, and a few others, have been able to develop -- in conjunction with CDF and other agencies -- a consultation and cultural protection process that works. There are large areas of California private and state forestlands where the process isn't functioning adequately. While archaeology, *per se*, done by CDF and private foresters has greatly improved over the last two decades -- much of it is completely separated or isolated from those it pertains to the most, California Indians.

The Department of Fish & Game has the responsibility and capacity to inspect harvest plans that may adversely affect fish and wildlife resources -- and DF&G is often present on inspections of such plans. The Regional Water Boards have the responsibility and capacity to inspect harvest plans that may adversely affect water quality -- and WQ is often present on inspections of such plans. The Native American Heritage Commission, listed individuals and entities, and sovereign tribes have the responsibility to protect cultural heritage sites -- but are usually rarely present on inspections of harvest plans that contain such sites. Until this problem of consultation, participation, and authority is corrected, the CDF archaeological program will fall short of legal and ethical success.

Mary A. Gorden
CDF Contract Archaeologist

Mary Gorden

My exposure to CDF's Archaeology Program has been as an outsider. I am an educator with a particular interest in rock art conservation and preservation. I teach archaeology to elementary students for the Tulare County Outdoor Education program. I assist Dr. John Pryor in Continuing Education classes in archaeology and history at CSU, Fresno. I serve as the Society for California Archaeology Education Chair. I worked with BLM and Southern Sierra Archaeological Society to establish and run a volunteer site monitoring program for the Bakersfield Office. The Fresno Archaeological Society, Bay Area Rock Art and the Kern County Archaeological Society support this monitoring project. Currently I am working part time for CDF Archaeologist Linda Sandelin out of the CDF office in Fresno through one of eleven contracts funded by Sacramento and administered by Dan Foster through a series of annual contracts with CSU Bakersfield.

My first contact with CDF was in the early 1980s when I met Dan Foster. He was engaged in a cooperative effort that included professionals, local landowners, and fire departments, which resulted in the formation of Coalinga Archaeological Research Group (COALARG). The purpose of the organization was to pursue interests in the archaeology of the Coalinga area. COALARG was so successful that it spawned Tulare Lake Archaeological Research Group (TULARG) and the Fresno Archaeological Research Group (FRESNARG). I was involved with the latter two groups. Members of these groups catalogued private artifact collections, recorded sites, shared research and published newsletters.

The detailed recording of the Cupule Point Site near Coalinga by Foster and Betts and other COALARG members has been significant event in my career development. I have used the story of the tragic destruction of this site by an illegal rock quarry operation and CDF's role in

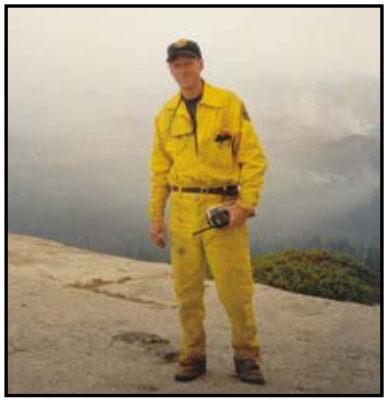
assisting Fresno County Sheriff's Office in the investigation and prosecution in teaching and public lectures many times over the years to illustrate several points. First, ignorance can be a big factor in site destruction. Second, sites cannot be replaced once they are destroyed. Third, historic and archaeological sites are protected by law. In this case, photographs of boulders at the recorded site led to the identification of the boulders at a Coalinga apartment complex. Because it happened in the southern valley, people in the area can readily identify with the site. The fact that the recordation of the site allowed the perpetrators to be caught, shows the value of site recordation.

Through the years, CDF archaeologists have contributed to the public and professional community though presentations and articles. For example, Dan Foster gave a program to the Fresno Archaeology Society. The CDF web site also has articles available on various topics that are available to the interested public. CDF archaeologists have participated in professional organizations by giving papers at annual conferences. John Betts' drawings have made a significant contribution to the archaeological and rock art record. John and Dan also worked with the Friends of Sierra Rock Art in recording and conserving rock art sites, such as Wabena Point.

CDF is one of the government agency contributors to the Rock Basin Research Project sponsored by the Southern Sierra Archaeological Society. The goal of this research is to amass existing site reports, record sites, and conduct research on rock basins (the so called "Indian Bathtubs") in the Southern Sierra. Linda Sandelin has been involved in compiling basin site information. She has participated in several basin recording sessions.

CDF archaeologists have made a concerted effort to reach out to the public. The Archaeology Program has furthered archaeology conservation and knowledge out of proportion to its size.

Steve Grantham
Associate State Archaeologist - CDF



Steve Grantham

When I joined the CDF Archaeology Program staff in 2001, I did so with an eye on the opportunity to do historic preservation at a local level, and I wanted to work in the woods. For seven previous years I reviewed from an office chair thousands of compliance documents for the California Office of Historic Preservation (OHP) in Sacramento. After 13 years in the business of cultural resources compliance review, I really wanted to get back to my roots. I basically felt a little detached from my profession, and wanted to get back. At OHP I would only read about archaeological sites and I almost never got to look at them. I started in Humboldt County in the mid 1980s and my first job out of college was with the US Forest Service. Finding and recording sites and chasing fires in the forests of the Sierra Nevada were my first jobs. I wanted to get back.

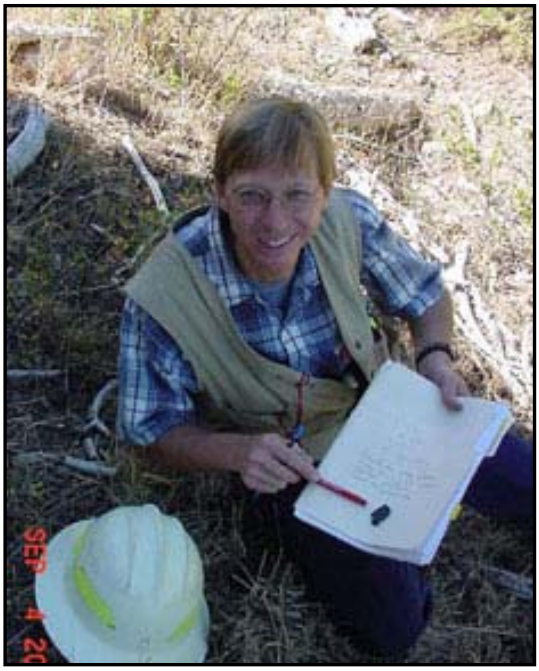
Ten years of college, both graduate and undergraduate anthropology work in the California State University system prepared me for a career with the State of California as an archaeologist. With that background, I have been able to work as an archaeologist for CalTrans, OHP, and the CDF, as well as in the consulting arena. Over those handful of years my career's focus, and not necessarily by choice, has been my ability to navigate the swamps of the cultural resources

regulatory process.

That first year with the CDF was a lot of fun. I was assigned to the Humboldt-Del Norte Unit in Fortuna, California. I was out of the office environment and out in the woods. I got to see properties in my daily fieldwork that most people would pay to see. I had always suspected that Humboldt County possessed some pretty nice archaeology. Indeed, sites I was seeing on preharvest inspections were impressive. It was great to be back in the woods. I would have moments, when I would sit on my ATV, and take in some of the views overlooking this beautiful place that I live and work and just feel blown away. What a cool job.

A resource professional working for the world's largest fire department has drawbacks as well as opportunities. That first summer with the CDF's Humboldt-Del Norte Unit, I experienced the loneliness and boredom of a fire season when most of my forestry colleagues were away on fire assignments. I was here, they were gone, and forestry related work came to a grinding halt. Foresters would come back from fire assignments, share their stories, and my mouth would water. By the end of that summer, I resolved to take whatever training I needed, to get in on next fire season's action.

During the summer of 2002, I took on the Unit's 67-hour Basic Fire Fighter I Course, as well as the Incident Command System series of courses. The training was time well spent. That same summer, both Richard Jenkins and I had ample opportunity to represent the CDF Archaeology Program on the fireline at two major incidents. At both the McNally Fire and the Pines Fire, Jenkins and I teamed up to spend nearly 100 person days actively involved in fire suppression, site protection, and rehabilitation work. We worked with dozers going "direct" and with Native Americans doing rehabilitation after suppression. The work was hard core and pretty darned exciting. We were tired and dirty, but it was the most fun I had had at work in a long time. The summer of 2002 fire season revealed that the CDF should evaluate its approach to archaeological site protection during campaign fires in the state responsibility area. A number of archaeological sites were damaged with direct and indirect strategies on the Pines Fire.



Steve Grantham recording a site in CDFs Humboldt-Del Norte Unit.

Jenkins and I were successful in the 2002 fire assignments, as we seamlessly incorporated ourselves into the Plans Section at both McNally and Pines fires and became viable and important team members at both incidents. We had a positive influence, and provided valuable information to the Plans Section as well as folks on the ground fighting the fires. We discovered that with our fire training and our archaeological field skills we have abilities that are useful to equipment operators as well as others on the fireline. We began to jokingly refer to ourselves as the "CDF archaeological strike team." In fact when asked "who are you guys?" we responded that we were the CDF archaeology strike team. The battalion chief that asked didn't even know that the CDF had archaeologists, let alone a strike team. We thought that was pretty funny.

While it remains to be seen, Jenkins and I may have opened a window of opportunity for the CDF Archaeology Program during the summer 2002 fire season. Our presence on the fireline, in our CDF nomex, interacting with heavy equipment operators, battalion chiefs, fire captains and firefighters, most of who didn't even know CDF had archaeologists, spread the word of our work and why it is necessary. The feedback on our participation was largely supportive and positive. I think we were viewed as part of the CDF team and if all goes well our role will grow as will our team.

Blossom Hamusek
Caltrans Archaeologist

Blossom Hamusek

My first encounter with Dan Foster and the CDF Archaeology Program was as the Assistant Curator for the California Historical Resources Information System (CHRIS), Northeast Information Center (IC) at California State University Chico. Although I do not remember the exact day in 1984 when we first spoke, I will not forget the contents of our conversation. I was responsible for the curation of archaeological site records for eleven counties in northeastern California and as part of that duty I was in charge of reviewing all archaeological site records which were submitted by local archaeologists in order to assign them a state trinomial prior to entering the records into the statewide database. Being the young and dedicated student of archaeology that I was, I took my job very seriously and one of those jobs entailed checking all the locational information on each record and providing the correct UTMs if they were found to be in error. Of course, I would report these errors back to the submitting archaeologist so that they could include these corrections in their copy of the records. Well, one of those records with incorrect UTMs happened to belong to a Mr. Dan Foster who took some exception to having some young whippersnapper who did not know who he was correct his work (I think that the conversation went something like this "Do you know who I am?" – "Not really, but I do know that your UTMs weren't correct"). Needless to say, after that inauspicious introduction we began a working relationship that lasted until I left Chico State in June of 1995.

Between 1984 and 1990 my involvement in the CDF Archaeology Program primarily centered on the review of the aforementioned site records and calling either Dan or Rich Jenkins with the aforementioned "corrections" as well as -- starting in 1986 -- conducting record searches for RPFs for the various timber harvest plans which were located in our region. Although we would often groan at the sheer number of these new THP record search requests knowing that we needed to respond to the requests with a two week turn-around, the money was good as they say and the additional income from these requests helped to keep the fledgling ICs in the northern half of the state up and running at a time when our yearly operating budget from the State Historic Preservation Office was only two thousand dollars.

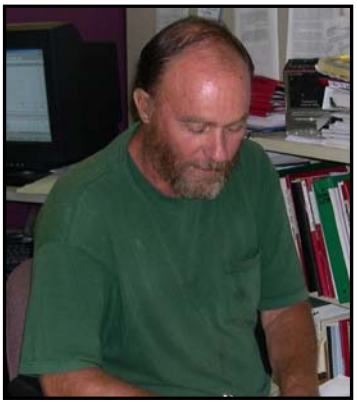
The fact that Dan and Rich have always been very supportive of the IC system and Chico State University Archaeological Research Program can not be understated. Dan always had a creative side to him when dealing with money issues and frequently assisted the ICs with their precarious funding status in these early years through various special contracts. Being as we had no money

to purchase supplies, Rich even once had the nighttime janitor at CDF headquarters collecting three-ring binders for us out of the trash so that we would have something to store the thousands of archaeological site records in. Some of those same binders are still in use almost twenty years later!

Beginning in April of 1988 my association with the CDF Archaeology Program changed from being that of a "reviewer" to that of a "doer." During a routine field review of a Vegetation Management Project (VMP) near the town of Manton, in northern Tehama County, Rich encountered a Late Period Yana hunting camp that possessed a subsurface cultural deposit. Unfortunately, the identification of the overall extent and nature of the surface deposit was severely hampered by the fact that prior to the controlled burn, the entire site area had been impacted by heavy equipment under the consent of the CDF Forester in charge of the project. Although the Northeast IC had recommended an archaeological survey prior to any project operations, mechanical brush crushing and fire control line construction took place without the recommended survey resulting in the destruction of approximately 80% of the site. While it is all too easy to ignore mistakes that one's own department has made, Dan and CDF acknowledged the breakdown in the review process and contracted with the Archaeological Research Program (ARP) at Chico State University to conduct an archaeological investigation at CA-TEH-1490 in order to determine the extent of the damage as a result of the VMP. This project served as a first for me – my first project being in charge of an excavation, my first experience at analyzing cultural materials from a site deposit, my first time producing an evaluation report, my first time dealing with rainstorms that fill your units with a foot of water overnight, and my first job-related sexual harassment at an isolated location by an angry CDF Forester.

Despite these "firsts" I continued to work with Dan and Rich as a contract archaeologist through the ARP until June of 1995. These projects, too numerous to list, have provided me with many memories, some good (e.g., recording prehistoric rock rings in Fandango Pass, being able to take my dog and husband [also an archaeologist] with me on surveys, seeing the headwaters of Spring Creek near Big Lake) and some not so good (having to justify the need for protecting archaeological sites on private land to very disgruntled foresters and land owners, dealing with numerous snakes, hornets, dense brush, two mountain lions, and the occasional bear trap set up by growers for unsuspecting surveyors in marijuana fields). I think that my experiences as a CDF contract archaeologist are not that different from the many others that have served in this same capacity. While not all of these memories have been necessarily pleasant, I have always thought that what doesn't kill you only makes you a better archaeologist – right??????

Philip Hines
Associate State Archaeologist - DPR



Philip Hines

I am an Associate State Archaeologist with the State of California Department of Parks and Recreation (DPR), Off Highway Motor Vehicle Recreation Division. During the late 1980s and early 1990s, CDF and DPR entered into several interagency agreements whereby DPR was to provide CDF with cultural resource management personnel to assist in identifying and evaluating cultural resources for timber sales, acquisition of land for conservation camps, and construction projects at existing CDF

facilities. I was fortunate enough to work on a variety of projects including an extensive cultural resource inventory of the historic logging features in the Jackson Demonstration State Forest, timber harvests plans, and land acquisitions for future conservation camps.

CDF produced a detailed report including the history of the Jackson Demonstration State Forest (Gary and Hines 1993), descriptions of the historic resources, and evaluation of the historic resources in terms of their significance under CEQA. The report is used by foresters when planning projects so they can avoid potentially significant cultural resources. The project was quite interesting from a cultural and historical perspective. The lumber was shipped by steamers. The initial logging occurred near the coast and moved inland as stands became depleted. Camp buildings were built on skids and moved inland on the same rail line used to transport lumber to the coast. Trash scatters at the camp and mill sites provide archaeologists with insight into how the loggers lived and how logging evolved along the Mendocino coast.

One of the more interesting experiences during the survey occurred when I locked myself out of the state vehicle along the entrance road into a nearby conservation camp. It had been raining so my clothes were pretty dirty. I walked into the conservation camp and borrowed a clothes hanger to trip the car door lock. As luck would have it, I had just popped the car door lock on the passenger side of a vehicle when a camp guard returning from town happened to drive by. My initial fear was the guard would assume I was an escaped inmate. He got out of his truck and asked what I was doing. I told him the story about how I had locked myself out and borrowed a clothes hanger from the camp office to break into the vehicle. He didn't question the story.

The most exciting find made during a CDF project on which I was involved occurred during a 160 acre survey for a proposed conservation camp south of Independence. Independence is located in the Owens Valley along State Highway 395 about 30 miles south of Bishop. We had recorded a dense prehistoric flake scatter during the last week in September 1990. We returned in late October to complete an extended Phase 1 (detailed) study. We set up several grids marked by units defined with string and nails and identified all of the artifacts in each grid to help identify different activity areas. We were taking the last of the equipment back to the car when the Native American monitor working with us picked up a piece of obsidian and asked if it was anything. My eyes got real big. It turned out to be the base section of a large fluted point suggesting the site had been occupied during the Paleoindian period some 10,000 years ago.

Mark G. Hylkema
Associate State Archaeologist - Santa Cruz District - DPR

Mark G. Hylkema

During the mid 1980s while in graduate school at San Jose State University, I participated in many different CDF sponsored archaeological projects. I recall how exciting it was to go out on archaeological investigations in some very remote places, and sometimes I even got paid to do it. The Department of Anthropology allowed a few grad students to have access to a state credit card for fuel and a 1980 vintage gas guzzling white Chevy suburban with E-plates. That vehicle faithfully served those of us who were sent throughout Central and Northern California to conduct archaeological evaluations for timber harvests, complete field surveys for controlled burns, and participate in many other tasks through

an interagency agreement between CDF and the university. Thanks to Dan Foster at CDF, Dr. Thomas Layton (my graduate committee chair) and the Chevy, it was a time when I could freely wander and conduct surveys and excavations in a variety of different geographic areas. Consequently, I saw many fabulous artifacts and a variety of historic and prehistoric archaeological sites. Unexpectedly for me, some of the more interesting finds were from the hinterlands of the central region of the Diablo Range. I conducted several different surveys in that region - all were related to range management projects involving controlled fires. I later synthesized the results of these surveys in an article published in the Proceedings for the Society for California Archaeology, Volume 6 (1993).

My first survey in the central Diablo Range involved a range management plan at the Carney Ranch, which was located in the uplands east of King City, north of Coalinga where several ephemeral drainages merge to form the headwaters of the San Benito River watershed. The ranch consisted of 5,800 acres with elevations ranging between 1700 and 4000 feet, which for the Diablo Range is a moderate height. The terrain was remote and consisted of steeply folded ridges interspersed with oak woodland, lodge pole pine and chaparral vegetation. Patches of open grasslands were scattered among the valley bottoms and stream terraces. Each of the many multi-directional ridges was separated by a canyon with a typically dry creek bed traversing its length. The poison oak and chamise, along with manzanita and other shrubs has progressively encroached on the upland grassy meadows, inhibiting browse for cattle. In order to remedy this, the rancher, Mr. Otis Carney sought a permit through CDF for a controlled burn. This triggered the need for the cultural resources survey which had to be done prior to initiating the burn.

In the heat of the summer of 1987 I embarked with the cavernous Chevy and brought along my friend and colleague, Jeffrey Hall to survey an area that neither of us had ever heard of before. Typically, when seen from the lowlands of either the San Joaquin Valley side or the Salinas/Santa Clara Valley side, the central and southern regions of the Diablo Ranges with their nearly tree-less low rounded grass covered hills present an arid and frequently forlorn impression. It surprised me to find that the interior uplands were well wooded with many springs and drainages, and yet was so sparsely occupied. Leaving Hollister on Route 25, just a little beyond the hamlets of Tres Piños and Paicines, homes or other ranch houses become few and far between. This survey was even farther south than the Pinnacles National Monument and was in an area virtually unknown in the archaeological record at that time.

Jeff and I piloted the suburban along an extensive dirt road leading from the paved route to the Carney Ranch house. The ranch "headquarters" was situated within one of the more broad valleys nestled between the surrounding hills. Five creeks meandered out of the higher regions and joined at the ranch house, which, as it turned out was built a hundred years ago right on top of a prehistoric cemetery. This became our first recorded site, SBN-155. Something about the region compelled me to feel that very "old" archaeological sites might be found in the vicinity. It did not take long to confirm this hunch as we readily observed cupule dotted boulders in the adjacent streams along with numerous hand stones and milling slabs, abundant primary and secondary reduction flakes of Franciscan chert, and fragments of human bone.

Otis Carney was evidently a very wealthy rancher; I believe that he mentioned he had formerly worked as a speech writer for President Ronald Reagan. Together with his wife Teddy they impressed me as being the very image of gentility and old California hospitality. Although they were in their 70s, they could still handle the management of a sprawling ranch and supervise the many non-English speaking ranch hands. Spanish rolled off his tongue in gentle tones when Otis

spoke to the workers, and they appeared to all get along very well. The interior of their house was immaculate and looked like it could have fit in at any upper-class urban neighborhood, which stood out in stark contrast to the surrounding territory visible beyond each window.

After looking over the tangle of topographic maps and establishing property boundaries, we departed from Otis and Teddy and set our sights on an area above the ranch behind some ridges that seemed to contain level stream terraces where we thought it might be possible to find surface indicators of archaeological interest. We found ourselves scrambling up very precarious jeep trails, and more than once I was thankful for the immense bulk of the suburban and its downward gravitational pull. Somehow we found ourselves in a high canyon that narrowed to a distinct precipice at its mouth with yet another valley some distance below the abrupt drop. As the road snaked into the upper canyon we found that it gradually broadened out beyond its mouth. It turned into a short, beautiful little valley and I could sense that something important was about to be found in this box canyon.

Picture 1. Surface collection from site SBN-156. Center object is half of a polished jade pendant.

No sooner did I park the truck and open the door than my sentiment was confirmed. Given the high carriage of the truck, when the door is opened one must necessarily look to the ground or risk dropping to a jolting stop on the earths surface below. As I looked down I saw that I was about to step on a long red colored Franciscan chert knife with a blade measuring over 10 cm in length. A portion of the tip was missing, an indication that the blade had once been longer still. Skillfully knapped, it had a contracting stem, with two strange protruding tangs on opposite sides of the lower blade margin. It did not resemble any late period artifacts I had ever seen but did look like forms with an affinity to archaic south coast range archaeological assemblages. Before long we found many other points and bifaces scattered over the sparsely vegetated ground surface (see picture 1). These finds continued right up to the abrupt drop at the end of the canyon where the dry stream bed draining it plunged below through a narrow rocky gorge. During heavy rains when the stream would contain water, the gorge must make a spectacular flume into the lower valley, which was a couple of hundred feet below.

Picture 2. The dimensions of the neck widths and overall size of these points suggest big game hunting.

Surface visibility was very good and we soon plotted the site boundaries of what was to become site SBN-156. We noted that many of the points resembled those described in the 1960s for sites excavated during the construction of San Luis Reservoir (Olsen and Payen 1969) and at other sites along the foothill lowlands of the ranges eastern flank. At those sites they were assumed to be associated with archaic assemblages. They were also identical to types found at sites along the central California coast, particularly the Monterey Bay area. The Rossi Square-stemmed type (defined by Jones and Hylkema [1988:163-186]) is a robust, heavy-duty point form that has been dated at sites on the Monterey Peninsula, having a temporal span ranging in age from the end of the middle Holocene to the early part of the late Holocene (circa 2,500 BC to about AD

500). Picture 2 shows two Rossi specimens found during the survey at SBN-156.

At SBN-156 the Rossi points co-occurred with some other very large, wide side-notched points that are now known to have the potential to be older still. It was clear that we had found a place of significant antiquity. Another unusual find was a half of a highly polished circle of translucent green jade that had evidently been a pendant. It was so nicely made that had it not been broken it would have looked at home in a store selling jade jewelry. Other items included lots of good quality Franciscan chert debitage, some hand stones and a portion of a pestle. We documented the site and were very reluctant to leave because of the intense excitement that occurs when making such easy surface finds.

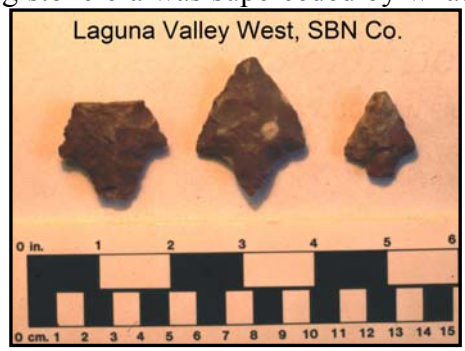
Returning back to the ranch, Otis and Teddy readily appreciated the discovery and it surprised me to hear that Otis had never seen such things up there before! It goes to show you how attuned to the ground just below our feet we archaeologists are. Fortunately, we were able to concur that the location of SBN-156 would not be affected by the proposed burn. Before we departed, Otis and Teddy suggested that I might want to attend one of their locally famous barbecues where many of the local ranchers might be induced to bring some of the artifacts that they had found on their ranches. That interested me very much because long-time ranchers frequently have interesting artifact collections. The opportunity came to fruition several months later, and at the Carneys' invitation my future wife, Linda and I showed up. As it turned out, many ranchers did bring their "arrowheads" having been encouraged by the Carneys who assured them that we would not confiscate their artifacts. Ranchers are often secretive about their resources- most have sites on their lands and suspect that outsiders will try to stop their free use of the landscape or have some kind of authority to take their things away. I have found that once you succeed in winning their confidence they will often go to great lengths to display their collections. On the day of that barbecue, Linda and I saw hundreds of points- and what struck us most was the fact that none of them were arrowheads, and none were obsidian. All of them were similar to those from SBN-156 and they included dart tips, spears and knives. Where were the late period markers for the Diablo uplands?

We wondered about the high frequency of these archaic heavy-duty points and the noticeable lack of late period markers. It was clear that hunting was an important economic pursuit and that it centered on some big prey species. Bedrock mortars were not uncommon nor were milling slabs and hand stones, an indication that a variety of vegetal foods augmented hunting. Given the possible range of animals that might qualify as eligible for such large chipped stone tools, elk or bears seemed like the principal prey species. I could imagine that the elk, lured into the uplands in late Fall when acorns were readily available on the ground, might have been expeditiously obtained by hunters driving them into the box canyons where they could use their heavy hunting weapons to dispatch the animals. Perhaps SBN-156 with its precipice at one end of the canyon served as a natural corral and slaughter ground. That would account for the abundant chipped stone tools scattered all over the place and the volumes of chert debitage. The milling tools probably indicate that women were also there, perhaps to help process the game while doing other culinary tasks. I should mention that my general impression of the terrain was that it was a deflating land surface, and the limited area of ashy dark loam soil containing the cultural deposit was no longer very deep. It did not appear to be a residential site, unlike SBN-155 with its cemetery located at a lower elevation. I could imagine that the ancestral Native Americans found the co-occurrences of elk and acorns to be very satisfactory.

Not too long afterwards, Linda and I were asked by Dan Foster to do another controlled burn

survey at a place called La Gloria Valley just north of the Pinnacles National Monument. This setting was also in an upland valley and was some twenty miles northwest of the Carney Ranch. Again after traversing the requisite jeep road the dauntless suburban took us to a bowl-shaped valley where we soon found boulders displaying cupule rock art and a few bedrock mortars. As I surveyed the small valley floor I pondered the question of elk hunting in the Diablo Ranges and thought about how Rossi points, found both on the coast and inland mountains, might be connected with the early cultural chronology proposed by D.B. Rogers (1929) for the Santa Barbara area. Rogers identified a three phase chronology where the earliest milling stone era was superceded by what he called the hunting culture, which in turn gave way to late period cultures (the Canaliño). The hunting culture, he proposed, was characterized by mixed milling tool assemblages and a high frequency of large projectile points. Unfortunately for Rogers, radiocarbon dating was not yet available and he could not accurately date these temporal components. As I thought about this I soon stumbled on yet another Rossi Square-stemmed point (see Picture 3). Like the others, it was well made from Franciscan chert and quite robust.

Picture 3. Rossi Square-stemmed point at La Gloria Valley.



Picture 4. Barbed contracting-stemmed forms.

Sometime shortly after this survey, Linda got a job with the BLM as their Hollister District archaeologist. Over the next several years she became intimately familiar with the Diablo Range and the reclusive ranchers. She examined additional collections and began to formulate a research goal for her Masters degree and often brought home numerous artifacts on loan from the ranchers. We soon discovered that the Rossi Square-stemmed type, in addition to another form characterized by short contracting stems with very pronounced tangs, were among the most common styles in the central Diablo Range. Picture 4 shows some of these barbed contracting-stemmed forms.

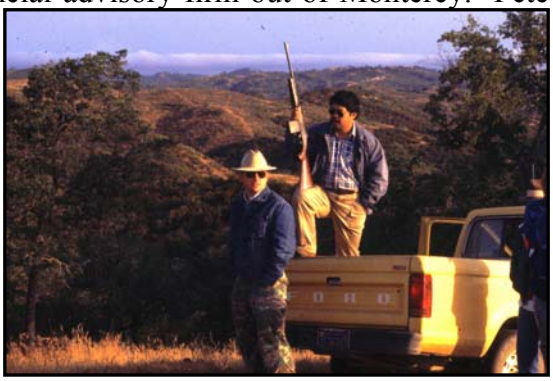
Given the propensity for brush fires to spread quickly and consume all tinder in its path, CDF must gauge the weather conditions very carefully before implementing a burn. Processing burn applications submitted by local ranchers and completing CEQA mandated cultural resources evaluations prior to the burns can backlog the application process and delay the timing of controlled burns. Therefore, the arrangement with San Jose State was of great value to CDF and the number of projects began to grow. It was not long after the Carney and La Gloria Valley surveys before I was assigned another project in the uplands of the central Diablo Range. This new project targeted chaparral encroachment on the 6,000 acre Andresen Ranch along the headwaters of South Fork Pacheco Creek, many miles north of the previous survey projects. This area was above Pacheco Pass and was only slightly

Picture 5. View of La Gloria Valley.

less arid than the more southerly surveyed ranches.

Once again we launched the suburban. After finding a gated dirt road off the shoulder of Highway 156, we found ourselves traveling along a canyon through which Pacheco Creek meandered its way into ever increasingly remote territory. Passing through several varieties of jury-rigged ranch gates, we entered a broader terraced stream bottomland with mature oak woodlands that looked very promising in regards to finding archaeological sites. Picture 5 shows the first open area encountered just before reaching the old ranch house complex, and the location turned out to be a very important archaic site, which we recorded as SCL-680.

Arriving at the ranch house we were met by Mr. Pete Andresen. Pete managed the cattle ranch for his father who was a member of a multi-partner consortium that owned the property as "Pacheco Land and Cattle, Inc." No one lived at the house and it was used as a sort of vacation cabin by the consortium members. Pete was not your typical rancher. He was an ex-Navy Seal (still on the active reserve list) and ran his own financial advisory firm out of Monterey. Pete and I became friends from the start: he is honest, forthright and very environmentally aware. He worked to keep the cattle out of the many springs that dotted the surrounding steep slopes, and was very protective of the ponds containing rare Tiger Salamanders. In all my years hiking and surveying in California, I had never before seen these elusive creatures. The area was rich in wildlife: while surveying there I have seen deer, bobcat, many raptors and even a cougar. Pete also knew where the arch sites were. He had grown up on the ranch and the barn, corral, and house were situated on a prehistoric cemetery. The house area was also formerly the site of a Mexican period adobe from ranching days past. For years Pete hid bowl mortars near the sites where he found them because his father and the other owners who frequently hunted wild boar and deer on the property might take them away (not being as environmentally aware).



Picture 6. Pete Andresen and his armed friend during survey.

Pete traveled around in a beat-up ford pick-up or rusted jeep and always packed a pistol or a rifle. On several occasions, he had been charged by wounded boars and more than once he had tracked poachers on the property, which made him a little edgy when out alone. Also, I think that the Navy Seal training was deeply rooted in his persona. He would occasionally invite his seal pals from Fort Ord to come over with their latest weaponry and shoot on the property. One time, at his request, I taught a group of grim-faced burly seals how to chip stone tools and make arrows, knives and the like. They enjoyed that very much (I'm scarred to admit) and insisted that I fire off some rounds from a very heavy caliber, sniper-scoped tripod supported gun. They later sent me a photograph in which I'm lying prone on the ground with ear-muffs and long hair shooting that mini cannon at some distant target. What I don't have a picture of is

Picture 7. Milling tool assemblages from SCL-679.

the enormous bruise on my shoulder from the guns recoil. Pete loved to drive up the various ridges, in defiance of gravity itself, looking for new sites and was enthralled by the arch survey (see Picture 6).

We recorded half a dozen sites and once again I was struck by the over-all antiquity of the assemblages. Cupule rock art was visible on many boulders scattered all along the creek bed and narrow stream terraces. We often found milling slabs and hand stones in addition to mortars and pestles (see Picture 7). Everywhere, ground squirrel burrowing brought up Franciscan chert debitage, *Olivella* beads and human bone fragments. The *Olivella* were all spire-lopped except for one "barrel" shaped specimen. Several of the sites containing burials were on slopes and low knolls, above stream terraces where I would not normally have expected to find them. It seemed to me that erosion over many years must have deflated the topography, leaving these sites higher and in a stranger way than would have been the case at the time when they were occupied.

One of the site locations that we recorded as SCL-680 had been known to Pete's father as the "dance-ground." No one knew why it was called that, but at that place we found a raised mound of midden, with a bulldozed trench cut into it from some grading done many years ago, and Pete said that several tiny mortars had been found there. To my knowledge, such small mortars were used to process tobacco or to grind minerals into paint pigments. Pete had recently found a very large obsidian biface at SCL-680 and loaned it to me for obsidian sourcing and hydration. This point was very interesting, being one of the few obsidian artifacts yet noted for the various surveys. It had distinctive ribbon type thinning flake scars that ran diagonally across both faces of the blade at uniform intervals. As it later turned out, the tool was from the Casa Diablo source on the east side of the Sierra Nevada Range, and had a hydration rim value of 6.7 microns. That was a very considerable reading that argues for a very old site indeed. Picture 8 shows this artifact.

Picture 8. Obsidian biface with diagonal ribbon flake detachment scars.

It has been many years since I last visited sites in the uplands of the central Diablo Range. I really enjoyed the experiences I had surveying for CDF and participated in many more projects than those described here. But for me, the Diablo Range sites were the most intriguing. I wonder if the old suburban is still available at SJSU…

Richard Jenkins
Senior State Archaeologist - CDF

Richard Jenkins

I am the current CDF Northern Region Archaeologist. My office is located at the Northern Operations Center in Redding where I review the archaeological component of all timber harvesting plans, controlled burn projects, reforestation plans, and construction projects within the 12 counties that comprise northeast California. I also supervise two of the Department's other archaeologists - Chuck Whatford in Santa Rosa and Steve Grantham in Fortuna, who perform similar project

reviews in the western portion of the region. I have been working in the Redding office since 1990.

Prior to moving to the Redding office I worked in Sacramento Headquarters for eight years. I began there in 1984 as a seasonal archaeologist on loan to CDF from the California Department of Parks and Recreation. CDF's single staff archaeologist, Dan Foster, had created an interagency agreement with State Parks to "borrow" an archaeologist from time-to-time and one day I got the assignment. I was fresh out of graduate school, eager to try something new, and hit it off well with Dan.

After a few project-specific assignments CDF made a request to State Parks that I become the subject of a permanent loan. State Parks agreed but after a period of 2 years advised CDF that the loan arrangement would end. CDF went to work trying to create a second permanent archaeology position and came up with a temporary solution - I was offered a position as a Forestry Technician in 1986 with the provision that I could perform archaeological duties half time and reforestation plan contract review duties the other half of the time. I was eager to take the position as it was permanent and offered benefits important to a young married couple that had just been blessed with their first son.

After nine months on the job a better solution to CDF's quest for a second full-time archaeologist was realized. The Department had been working on a Budget Change Proposal (BCP) for a second full-time archaeology position and was advised that they were successful in July of 1987. I was on the correct employment list, was reachable, and was offered the job as a State Archaeologist I. The reforestation contract reviews were no longer required and I joined Dan in the full-time archaeological review of CDF's numerous projects. Over the next three years I had a wonderful opportunity to see the varied archaeology of California as my territory included the entire state. In 1990 I jumped at the chance to become CDF's first Region archaeologist when CDF's third archaeological position was created (at the State Archaeologist II level) at the former Sierra-Cascade (Region II) Headquarters in Redding.

Rich Jenkins standing in a housepit during a PHI in Shaver Lake in 1987.

One aspect of the job that I'd like to highlight involves workload. When I first began working with the Department in 1984 there were few rules regarding archaeology in any of CDF's programs. As such not many requests for archaeological assistance were fielded and the two archaeologists had to pick up the telephone and call the various CDF offices around the state looking for project reviews in an effort to stay busy. Archaeology Program manager Dan Foster has since done a great job bringing the Department's various programs into compliance with the California Environmental Quality Act (CEQA) with the result being 1) Department compliance with mandated law 2) increased protection of the State's priceless cultural resources and 3) more work than the staff of 6 archaeologists can handle!

Another important example of change in the CDF Archaeology Program is taking place as this is being written. Up until this past year the CDF archaeologists have worked almost exclusively within the realm of the Resource Management side of the Department dealing with timber harvesting, reforestation, vegetation management, and other related issues. The Archaeology Program has historically had little interaction with the larger Fire Protection side of the

Department due to a pervasive feeling that archaeological site protection was not required during emergency situations. While I have personally been participating in wildfire assignments on a hit-or-miss basis since 1990 (only when the assigned incident command team thought there might be an issue), I am happy to report that the Archaeology Program is in the cusp of formalizing a relationship with Fire Protection that includes archaeological input on all major fires that occur within CDF's area of responsibility. These are exciting times!

Bill Johnson
CDF Battalion Chief

Bill Johnson

My first encounter with the CDF Archaeology Program occurred in 1986 and it was not a pleasant experience. I was the Ranger 1 of the CDF Coalinga District at that time. I was responsible for carrying out a series of controlled burn projects in Los Gatos Canyon. This was under the Department's VMP Program. I had authorized a firebreak (bulldozer line) construction at one of the VMP projects (on lands owned by Jack James) but unbeknownst to me, I had put that dozer line across an archaeological site. A CDF person in uniform with a CDF Archaeologist badge arrived from Sacramento to inspect the project. His name was Dan Foster. At that time I didn't even know that CDF had an Archaeologist. Anyway, this Archaeologist tells me how I had done everything wrong and was pushing my patience to the limits. Eventually Mr. Foster made his point and I realized that I too wanted to preserve the Archaeology that was in the Coalinga area. We united in our efforts and a friendship began. At that time Dan helped me with a plan to mitigate the damage that was done. This was a week-long archaeological dig at the Corral Site which was attended by over 14 volunteers including several local landowners. This site dig, and our numerous archaeological surveys that followed it, converted me to become a full supporter of the Department's programs to protect archaeological sites.

In fact, with Dan's help, and the partnership we made with an enthusiastic retired oil worker in town named Lou Deford, I was able to organize the Coalinga Archaeological Research Group (COALARG), a group composed of local landowners, museum officials, agency archaeologists, and members of the public. We conducted numerous surveys of this rural backcountry and identified nearly 100 new archaeological sites. These included rock shelters, petroglyph boulders, village sites, chert quarries, and temporary camps. The sites were recorded and studied, artifacts from local collections were documented or given to the local museum, and basemaps were prepared to protect the sites during fire suppression efforts while fighting wildfires in this rugged part of California. Our group was active for six years until my transfer to the Shaver Lake Battalion and Lou Deford's death left the group without the local leadership necessary to continue.

I was one of the first CDF Battalion Chiefs to complete Department's archaeological training course (Course #15 – 1988) and also the first CDF Firefighter have received the Board of Forestry's Golden Trowel Award which was presented to me in 1989.

Russell L. Kaldenberg
Archaeologist - China Lake Naval Weapons Center

Russ Kaldenberg (center) and colleagues

I cannot remember a time when I did not know Dan Foster. It seems like we have known each other most of our professional lives. The truth of the matter is that much of the time we knew each other through others or through each other's work, opinions, and participation in various archaeological organizations. Dan and I started working together after I became State Archaeologist for the Bureau of Land Management in 1993. I had taken over when Bill Olsen retired. He spent 17 years in the position. I spent 10 years, but it seems like half a lifetime. It was like trying to paint a speeding freight train.

Along the way Dan and I started working together for the benefit of archaeology and archaeological resources. He and I both shared the idea that the best archaeological programs are those which are shared with the public. When Dan began bringing in his foresters to share data with and to train as paraprofessionals he sold me on his program. Anyone who can think beyond the paranoiac adage of not sharing with the public our resources (even though we admit freely and frequently that most sites we know about we were told about and that pothunters and looters know about many more sites than we know about, yet we have the philosophy not to tell anyone about the location of archaeological resources, it is just plain silly) is ok with me. Dan supported the CHRIS data base and allowing access to those with a need to know. He was one of the first ones to see the value of such a data base.

At the time I was a Governor Pete Wilson appointee to the Historical Resources Commission. We held a lot of meetings that went nowhere fast. But one of the objectives of a Commissioner was to hold meetings and listen to people talk. Dan came to most of the meetings and most of the time he talked and had great ideas, sometimes his ideas didn't go anywhere like the one which suggested that the SHPO staff quit fooling around at meetings and get to work on the CHRIS data system so that we could all use it before we retired. Well, today is almost 2004, Dan and I are both contemplating retirement and the electronic system is about as fully developed as it was in 1999, it is just that more money has been spent and more meetings have been held. But as I started out this paragraph, that is part of the objective of a Commissioner to hold meetings and I held a lot of them and now Bill Hildebrandt holds a lot of meetings where a lot of words are said and sometimes Dan talks and sometimes he listens. All in all Dan is a good person to have at meetings because he volunteers to do things. Like the time he volunteered to get a list of interested people together for the next meeting and indeed, at the next meeting a lot of interested people got together but they were primarily architects and historians and we had to start at the beginning again and I am not certain that we ever reached the middle again while I was a Commissioner. Oh well, we tried and sometimes things work and sometimes they don't.

Another time we worked together was when Congress gave local fire districts a bunch of money but did not tell them the process to go through to spend it. After all it was a federal undertaking even though the trees to be trimmed and the roads to be widened were all on private land. So Dan calls up and asks me my opinion and I am of the same mind that he is; lets streamline the process, work on an agreement document that outlines the process by which the money can be spent and have the SHPO and the Council sign it. Everyone had their pet projects. One was the purchase of a fire truck that couldn't be purchased until we had the agreement document in

place. So we hurried and got a document that must have been 80 pages in order to send to the SHPO and the Council and to BLM and to all of the local governments for their signature. It shouldn't have worked because the document was so blasted long and every time someone reads a long document something had to be changed, but it worked, the folks got their fire truck, got their trees trimmed and their roads widened. All because of Dan's ability to smile. He called me up to tell me that it was all ok, had been signed and thanks for my help. I said "are you sure it has been signed by Hans and everyone else." Dan responded "Who are you going to believe, me or your own eyes?" How does one argue with that logic?

Dan is one of those fellows who walks into the room and you know he is in a position of importance. He just has that wonderful smile that makes you think he ought to be in politics. So I hope that he can retire one of these times soon. And if anyone quotes me from any of these paragraphs please let them know that I was misquoted!

In summation, as we were leaving a meeting at the BLM State Office, where we had a meeting to discuss our expectations about data management, Dan was heard to say "I have had a perfectly wonderful afternoon, but this wasn't it." That is one of the reasons we have always gotten along, is that we can and have been Frank, (I don't know where Bill and John were) with each other over issues involving our resource and the public and have made decisions on the resource base that we can both live with. The highest honor is peer recognition. I am proud to consider Dan as a peer and as a friend and I am looking forward to staying in contact with him as long as my aging bones continue to work. He is a good human being, a good friend and a good archaeologist.

Deidre Kennelly
Student Assistant - CDF Archaeology Program

Deidre Kennelly

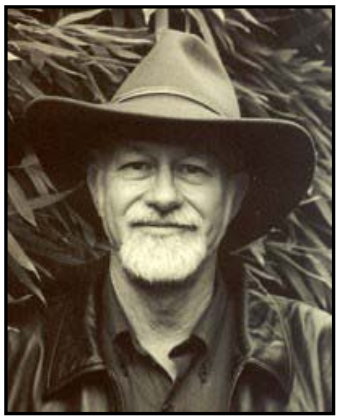
My involvement with CDF has been recent, yet poignant. I have been looking for some kind of involvement in the broad field of anthropology, and I met Dan Foster by pure chance at jury duty in July of 2003. He was enthusiastic about his work with CDF and very willing to tell me all I wanted to know about what he does. I felt it a good idea to keep in touch with him because he was very resourceful and helpful.

We set up a meeting to talk a little bit about what I was interested in and if CDF could fulfill that in some way. From my standpoint, I wanted all the information I could get! I am a student at California State University Sacramento, working on my BA in Anthropology. As graduation is nearing, I have felt the need to get out in the “real world” and get some hands-on experience in my field of interest. I really didn’t know what to expect from my meeting with Dan, seeing as how I have such little experience in the field. At most, I was hoping just to get some information on possibilities for the future. As it turns out (to my advantage), Dan found a place for me working alongside Gerrit Fenenga as a student assistant in October of 2003. Recently, I have been learning the in’s and out’s of the Timber Harvesting Plan reports and how the CDF Archaeologists review them. Gerrit has set aside a weekly meeting time to work with me and show me what he knows. He has made a point to help correlate what I learn here with my classes at Sac State, as well as work out ways to give me a variety of hands-on experiences in the many

areas CDF is involved with.

As I said, my involvement with CDF has been a recent occurrence, but I have gained a great deal of insight thanks to Dan and Gerrit because they have been so willing to give me as much information as I can ask for. I have no doubt that the experience I have gained and continue to gain at CDF will directly help me in my education and beyond.

Thomas F. King, Ph.D.
Consultant in Archaeology and Historic Preservation



Tom King

I practiced California archaeology, as an amateur and as a professional, from 1958 until 1973, when I fled across the Sierra all the way to the east coast. During my time in California I participated in dozens of surveys and excavations, ran university programs, published papers and monographs, helped form the Society for California Archaeology, and did all kinds of archaeological odd jobs virtually all over the state – and I never encountered the CDF.

Oh, I knew there was a CDF, and as the U.S. Forest Service began to gear up a program to comply with federal historic preservation laws, those of us working on it shook our heads over those "state timber guys" who were running roughshod over sites in the forests that the feds didn't control. But I left the state without ever doing anything with CDF, and have spent the last thirty years doing cultural resource management for the federal government, in the Micronesian islands, and as a private consultant, teacher, writer, and once again, performer of odd jobs – and had just about forgotten CDF except when Native American friends in California grumbled about it.

So it was with real surprise and pleasure that I got a call from my old friend and colleague Gerrit Fenenga – field boss on my dissertation project along the Chowchilla River, and now a far more experienced California archaeologist than I ever was, asking permission for CDF to republish my long out-of-date handbook, *The Archaeological Survey: Methods and Uses.* In 2003 it was inserted into CDF's comprehensive (1200 page – two volume) Archaeological Training Manual and posted on the CDF Archaeology Program website. Not only was I flattered, but I was intrigued by the fact that CDF now actually has an Archaeology Program, and – as I found when I visited the web site – quite a good one at that.

In establishing and supporting the Archaeology Program, CDF has exercised a high degree of responsibility toward the state's cultural resources, and for that CDF – notably its talented, capable, and no doubt hard working archaeology staff – is to be much congratulated. However – since as my antique colleagues will tell you young folks, I *never* just applaud things; I always *criticize* – I want to challenge CDF and its archaeologists to take the next step.

The next step? Recognize that you ought not just be doing archaeology; you ought to be taking responsibility for the full range of cultural resources affected by forestry – not just archaeological sites and maybe old cabins and roads and logging camps, not even just Native American spiritual areas, but the cultural value that tribes and other users of the forests ascribe to the forests, to the trees, the rocks, the streams, the wildlife. Take a more holistic view of what

you're about. Become more than archaeologists. You can't find tribal spiritual sites through archaeological survey; you have to talk to people, and you're not making a serious effort to find such sites when, in the words of the web site, "it is not required (though) it is recommended that LTOs send a letter of inquiry to the local Native American contacts….." Even if letters were required, they wouldn't be effective tools for communicating with folks, or learning their concerns. And the folks who may have concerns aren't only Native Americans – I'm sure there are others who've traditionally used the forests for cultural purposes, and who use them today, whose interests are at least as important as are those of us archaeologists.

I've already written more than I was asked for, so I'll leave it at that. Great program, CDF; keep up the good work, but go that next step. Archaeology is important, but it's not the only thing in the forest environment that's got cultural value, and a truly responsible manager ought to deal with the whole ball of wax.

Mark Lancaster
Consulting Forester
Natural Resources Planner - Trinity County

Mark Lancaster

In 1988, Trinity County's Planning Department became the first Planning Department in the north state to require its land use planners to attend CDF archaeology training. It also required Information Center record searches as part of project planning. Since then the Planning Department has located or relocated a number of historic and prehistoric sites, protecting them with designated non-developable areas.

The commitment to train planners in archaeological site recognition came about from the great septic system debacle of 1987. Prior to the debacle, the Planning Department worked on a few projects to protect Native American and historical sites and had a desire to preserve sites identified by other people. Unfortunately, not being trained in site recognition themselves left planners in a precarious position.

In 1987 that became readily apparent when the Planning and Health Departments reviewed a subdivision proposal in an area with high ground water. Septic system suitability was the primary issue with the subdivision. The solution seemed to place the septic systems in a series of higher mounds outside the high water table area. During CDF's review of a proposed timber harvesting operation on the same property, CDF Forester Steve Dunlap and CDF Archaeologist Dan Foster inspected the area Trinity County had recommended for septic system installation, and determined that this area contained the remains of a prehistoric Native American village site with a series of very distinctive housepits, midden, and abundant surface artifacts. After many phone calls, much effort and cooperation with the landowner, new septic disposal areas where designated outside the archaeological site, which was then designated an undevelopable area.

The story, however, does not end there. Dan Foster has used this Trinity story at subsequent archaeological training sessions to demonstrate the value of the site recognition. Dan, unfortunately, connected me as the septic planner and, being a forester, it has stuck for 15 years. For the record, I was not involved in the project until after the discovery of the site, but I still get ribbed for being "the forester that put septic tanks in housepits." So with this article I can once

and for all set the record straight.

I am happy to say that from that auspicious beginning, I have been fascinated with archaeological resources and have located several more village and housepit sites, a cupule site on a granite peak (unrecorded at the request of a Tribal Council), Chinese camps, dams and other artifacts, mining sites, dumps, trails and numerous other sites. I have gained knowledge and understanding of the human condition in the area to a level I would never had if not for the CDF training. In fact, I am working on the outline for a historical novel based on a number of the sites I have found. There won't be any septic tanks in the novel.

Scott Lawson
Director, Plumas County Museum

Scott Lawson

In June of 2002 I participated in CDF's Archaeological Training for Resource Professionals, a 4-day class held in Redding, California. A part of my job at the Plumas County Museum entails working with foresters when they come in for information on historic sites that are within a project they are working on. I felt the training offered by CDF would benefit the museum by putting me on the "same page" as the foresters. My only archaeology training was about 25 years ago in college, and so a refresher also seemed in order.

I worked in the woods as a logger in the 1970s and 1980s and so am familiar with how logging operations are conducted. By walking out the ground with the forester and looking at sites, or potential sites, I can help the forester develop a better understanding of what is being looked at, and how we can protect it. As a historian, I am very passionate about protecting and preserving our historic and prehistoric resources, so I also felt the training would give me a better idea of what the foresters were learning and how they were dealing with these historic sites.

Scott Lawson at archaeology training.

Although I do not have the time to go out on every job that comes through the museum, I am able to many times point things out on the map that I am aware of. This is due to many years of researching our county's history, as well as extensive hiking and site hunting over the years on my own time. I am always willing to share the information I have developed if it helps protect or preserve a site and contributes to the publics' better understanding of it.

On one occasion, I was on vacation, driving around through the woods of southern Plumas and northern Sierra counties when I came across a group of timber operators looking over a private job. One of them recognized me and so we had an impromptu historical hike to look over various sites on the property. Although I haven't been back, I am confident it resulted in the protection of sites they were not aware of.

One thing of great interest to me was the difference in how the State of California looks at sites

and potential sites, versus the way the United States Forest Service looks at theirs. I must say I prefer the State's method of giving the site the benefit of the doubt. Not only does it protect the site, it does it without all the associated costs and time factors that performing an intensive site study, or doing a dig, would and do result in.

I found the training to be very informative, well orchestrated, and very comprehensive for the small amount of time allotted to it. As a historian who is focused on Gold Rush history more than anything the actual site exercise was particularly useful, as it gave me a better understanding of how to look for prehistoric sites, which generally are less obtrusive than historic sites.

Thomas N. Layton, Ph.D.
Anthropology Professor, San Jose State University

Thomas N. Layton, Ph.D.

My twenty year association with the CDF Archaeology Program began with Dan Foster's June 1984 visit to my San Jose State University archaeological field camp at Albion on the central Mendocino Coast. Dan wanted to get me involved with the archaeology on some of the interior lands under his jurisdiction, and he asked me for a wish list. I told him that all of our excavations had been on prehistoric sites and we needed a protohistoric site, preferably with visible house pits, to attach our sequence to an ethnographically recognized Pomoan group. About a week later Dan took me on a tour of god-awful raped, scraped (from road grading) and horribly disturbed sites located in Jackson Demonstration State Forest (JDSF) including two flake scatters, one in the infield of a baseball diamond and another subsumed in the bulldozed confluence of two logging roads. He saved the good site for last: A pristine village site, with distinct housepits, high on a ridge in JDSF. That site was Three Chop Village. And our discovery of Chinese ceramics in those housepits not only changed the direction of my career, but they led to the archaeological delineation of a world commercial system linking Boston merchants, Bombay opium producers and Chinese consumers, with San Francisco entrepreneurs and the intrepid northern Pomo people of Mendocino County.

Tom Layton's 1984 excavation of housepit #1, Three Chop Village at JDSF.

That excavation lead to my participation as an instructor in ten years of CDF archaeological training courses developed by Dan to train foresters and loggers how to identify and protect archaeological sites in the timberlands of California. Graduates of that course found and protected other sites that I was to excavate. Indeed, Brian Bishop, a graduate of one these classes, was to discover two village sites within a Timber Harvesting Plan on Lincoln Ridge, near Westport. Brian's discovery led to an expansion of my work into Coast Yuki territory. Meanwhile, CDF Forester, Jim Purcell, another graduate of Dan's course, recorded a major

village site on Zeni Ridge in Central Pomo territory. San Jose State excavations conducted on that site led to Patricia Dunning's 1996 masters thesis, *On the Trail to the Coast, A View from CA-MEN-2136: The Zeni Site.*

To mention some of the results of the synergy fostered by the enlightened CDF Archaeology Program that has guided my research into productive venues, I mention the following.

1) Our CDF sponsored work on Lincoln Ridge led not only to the excavation of two village sites currently being researched, but also to an oral history project with Mark Walker, who was 100 years old when I began interviewing him in 1992. Those taped interviews continued until Mark's death at the age of 107. They will result in a book in which Mark tells the story of growing up near Westport and working most of the timber trades.

Tom Layton's SJSU students excavating HousePit #1 at Three Chop Village, JDSF in 1984.

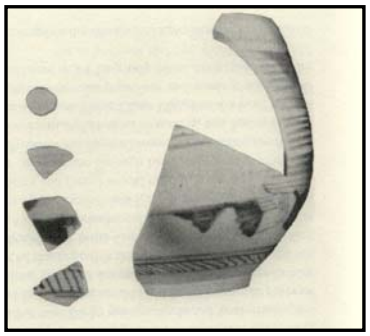
2) Our work at Nightbird's Retreat and Three Chop Village, both sites recorded by CDF staff, led to my publication of *Western Pomo Prehistory* (Layton 1990).

3) Our discovery of Chinese ceramics at Three Chop Village led to two books, published by Stanford University Press: *The Voyage of the Frolic: New England Merchants and the Opium Trade* (Layton 1997) and *Gifts From the Celestial Kingdom: A Shipwrecked Cargo for Gold Rush California* (Layton 2002).

4) The China trade connection led to four major museum exhibits, a historical play, a television program on the Learning Channel, and even a beer! The Frolic Shipwreck Repository now is permanently housed at the Mendocino County Museum in Willits.

5) The Frolic Shipwreck Project received a "Governor's Historic Preservation Award" in 1998.

6) And, in the year 2003, we are developing yet another Frolic exhibit -- at the Point Cabrillo Lighthouse, less than half a mile from the Frolic wreck site.



Frolic wreck site artifacts recovered at JDSF.

The California Department of Forestry Archaeology Program, designed and perfected by Dan Foster and his staff, stands as a unique model of what a resourceful administrator in a State agency can accomplish through hard work and creative outreach.

Editor's Update.
Tom's book, Gifts From the Celestial Kingdom: A Shipwrecked Cargo for Gold Rush California, flowing from CDF sponsored research, has just received the first ever James Deetz Book Award, created by the Society for Historical Archaeology to encourage and honor powerful, accessible writing that reaches the public as well as the profession.

Don McGeein
Volunteer Archaeologist

Don McGeein

My interest in California Archaeology began when I was about eight years of age. I lived in Mill Valley, California and would go with my father occasionally to a large shellmound near the family home and search for Indian artifacts. In those days (early 1930s) literally tons of the midden were hauled from the site to be used for paving city sidewalks and private driveways and during that activity it was possible to find some artifacts usually fashioned from stone (obsidian and chert) and bone (usually bone awls).

Early in 1948 I took a specimen made of high grade black steatite to the Anthropology Department at U.C. Berkeley to have it identified. While at the museum on that memorable day (for me) I was introduced to Frank Fenenga and several graduate students who became lifelong friends during the following years. Among the student archaeologists involved were Clement Meighan, Francis "Fritz" Riddell, Bob Squier, Dave Fredrickson, Art Freed, Bill Olsen, Norman Wilson, and many others that I worked with on many archaeology digs over the years.

I worked with Fritz Riddell on many archaeology projects and it was because of our working together for over 50 years that he made it possible for me to sign-on, so to say, as a volunteer "digger" on several CDF digs in various places in California. These CDF-sponsored archaeological excavation projects are high on my list of "favorite digs" that I was fortunate enough to be a part of: Methuselah (CA-TUL-1173), Sunset Point (CA-TUL-1052), Dad Young Spring (CA-PLA-689), The Corral Site (CA-FRE-1346), and Lime Kiln Gulch (CA-TRI-942).

Like all "digs" that I have been on, most of which involved U.C.B. archaeologists and graduate students, the people who made up the crews on these CDF-sponsored projects were always very compatible and had fine senses of humor. While working for Brian Dillon at the Sunset Point Site I thought Brian would surely send out for a replacement for me. First while doing some fairly long measurements with a 100-foot tape, which was a version that was marked with metric numbers, Brian would ask me for a reading and I was having a helluva time trying to interpret the numbers and fractions thereof that I was looking at. The second thing was when I was asked to dispose of some dish-water and I, not knowing it contained one of Brian's most prized cooking utensil, a rice-steaming device, tossed it out with the water. A fairly lengthy search, using a flashlight that night finally discovered where the steamer had come to rest which made both of us feel much better.

In addition to these, I had the privilege of being a member of a group of archaeologists who were taken on a truly fantastic tour onto some land in the Coalinga area to be shown many former Indian habitation sites that were incredibly rich with surface artifacts, most of which are flaked stone. On another day, I believe the group was taken to one of the most impressive petroglyphs sites in California, a site called Swallow Rock. The tour, led by Dan Foster, was exceptionally interesting, and made during August 1991. The sites visited included the Lone Cottonwood Site, Swallow Rock, the Cupule Point Site, the Corral Site, and Mitchell Springs. This tour and the excavation work at the Corral Site, as well as visiting a local rockhound and Indian artifact collector was one of the most enjoyable and fun-filled archaeological surveys I have ever been on. Those who were fortunate enough to attend this really memorable event were: Dan Foster, Lou Deford, Bill Johnson, Bob Parr, John Betts, Phil Hines, Brian Dillon, Fritz Riddell, Mark Sutton, Frank Fenenga, Bill Wallace, Edith Wallace, and Don McGeein. The entire area covered

by the Coalinga area tour is a tremendously rich area for California archaeology and I was, and am, very sorry that the organization developed and led by CDF known as the Coalinga Archaeological Research Group (COALARG) had to be disbanded - a real loss.

Fritz and I were invited by CDF to take part in a site survey project in an area in the Sierra foothills in northern California where a forest fire had recently (a few days before we arrived) burned hundreds of acres. I believe Rich Jenkins was in charge of this project.

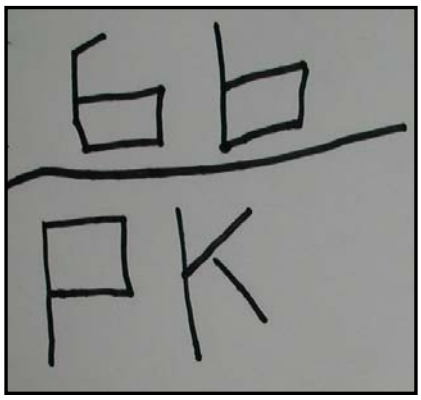
One of the things about the CDF archaeology projects, without exception, which really impressed me was the quality of the lodging which was provided. Some of us were housed in the CDF Fire Station facility in Coalinga. For the Dad Youngs Spring dig, the crew was housed in a truly wonderful facility which is a University of California Center for Blodgett Forest research personnel. For the Mountain Home State Forest work a very comfortable cabin was available for the archaeology crew. The CDF projects that I was allowed to be part of made it possible for me to visit places in California that I never would have, if it hadn't been for those projects. CDF should be proud of the tremendous amount of archaeology work that was accomplished throughout California, oftentimes through coordinated volunteer efforts under the leadership of the CDF Archaeology Program.

Dan Murley
Curator, Healdsburg Museum
DPR Ranger/Archaeologist - Retired

Dan Murley

As a Ranger and Archaeologist for the State of California for over thirty years I have had the good fortune to work closely with many other agencies regarding natural and cultural historic properties in the state. One exciting, challenging and puzzling cooperative effort came in the winter of 1997. I received a call from CDF archaeologist Dan Foster regarding an anomalous discovery in a Timber Harvest Plan area, near the small coastal town of Point Arena. While cruising the site for harvesting in the drainage of one of the unnamed tributaries to Hathaway Creek a boulder was discovered with the following inscription: ***Robert Piper 1876***. The panel on the nearly vertical face of the boulder was about 1.5 feet wide by .75 feet tall. Interesting to say the least, yet not unusual, an interview of local resident Billy Piper by the forester produced a logical result. According to Billy, a relative, Robert Piper, apparently homesteaded in Hathaway Creek in approximately 1870 and one could imagine the solitary man with time on his hands chiseling his name and the date into the available medium. When the indefatigueable forester decided that where there is smoke there might be fire he intensified his search and was duly rewarded by another similar find. In the same desolate locale, another boulder bearing another inscription was discovered. At a height of about 5 feet above the ground surface on a slightly overhung south facing surface were inscribed the numbers ***66*** underlined, directly above the letters ***PK***. To answer the riddle of the inscription CDF Archaeologist Dan Foster and the inquisitive forester David Chalfant began their detective work. Historical records, folkloric accounts, informant interviews and sheer determination, revealed no clue to the curious cryptic petroglyph.

In a type of needle in a haystack grasp, Dan called me at Fort Ross and asked if there had been any similar inscriptions left by the Russians who had established a settlement on the Sonoma Coast about 35 miles south of Point Arena. Under the auspices of the Czarist commercial entity, The Russian American Company, the adventurers and hunters who were mostly Alaska Natives ranged up and down the California coast hunting marine mammals. A small camp had been set up near Point Arena after the shipwreck of a Company ship headed for Ross from Alaska bearing provisions and manufactures. The reason for my particular interest in the inscription was that in Cyrillic or Russian writing the often-used abbreviation for the company was "PAK". Also the Russian word for California began with a "K".



Dan Murley's drawing of the strange inscriptions.

Armed with our vivid imaginations and dogged determination we climbed and crawled, slipped and slid, and chatted and conjectured about the rock inscription. I noted that it was documented that many Russians and Alaska Native men left the company's type of indenture to live in the nirvana of California with native women. Could this have been the mark left by one such California pioneer? We will never know. The comradeship we experienced among the members of our State team and the private sector participants was a testament of cooperation and conscientious resource protection. The whole experience was an enjoyable and informative detective adventure.

Ethnographic photographer Bill Heick, Dan Murley, and Eric Wilder, Pomo Tribal Chair, during a consultation at the Healdsburg Museum.

Larry Myers
Native American Heritage Commission

Larry Myers

CDF's Native American Advisory Committee (NAAC) was originally created as the chief advisory group for the California State Board of Forestry regarding the protection and preservation of Native American cultural resources. The NAAC arose in 1994 in response to various concerns of the Native American community regarding the identification and mitigation of cultural resources by the California Department of Forestry (CDF). These concerns included the failure on behalf of the CDF and professional foresters to identify the presence of cultural resources on sites and the lack of Native American participation in this process. Realizing the need for an advisory body dedicated to addressing these concerns, Larry Myers, Executive Secretary of the Native American Heritage Commission, and Dean Cromwell, Executive Secretary of the Board of Forestry, initiated the establishment of the NAAC.

On January 19, 1994, the NAAC met for the first time as an official agency of the California State Board of Forestry. Its six Native American members included Leaf Hillman, Andrew Jackson, Walt Lara, Leonard Lowry, Susan Masten and Larry Myers. These members were selected based upon their knowledge of cultural resources, the Native American community, and forestry practices. In addition, Dean Cromwell, Lisa Wolfe, and Dan Foster served as representatives for the Board of Forestry. According to its charter, the Committee was given the responsibilities of evaluating the effectiveness of existing CDF rules, regulations, and practices as regarding to cultural resources, as well as assisting with the development of a consultation program between Native Americans, the CDF, and foresters. Furthermore, the NAAC was responsible for increasing awareness regarding the protection of cultural resources in CDF projects and counseling the California State Board of Forestry on issues regarding cultural resources.

Larry Myers in his office at the NAHC in Sacramento

Over the course of its existence, the NAAC has contributed much to the protection of cultural resources. Among the most pressing issues it initially faced was the amending of California's Forest Practice Rules. The NAAC successfully accomplished this on September 11, 1996, when the California State Board of Forestry approved a series of amendments leading to greater protection for Native American cultural resources. Moreover, in 1998, the NAAC developed the *Native American Guide to Timber Harvesting on Non-Federal Lands in California* as a tool to help Native Americans become involved in CDF's practices. An important byproduct of the NAAC's work is the growing understanding between CDF archaeologists, foresters and the Native American communities, as well as in increased awareness within the forestry community regarding Indian concerns.

The NAAC became dormant for several years, but in 2001, it was reorganized and its affiliation was transferred to CDF. An important component of this reorganization was the manner in which it achieved tribal representation. CDF sent letters to federally recognized tribes requesting their active participation with the committee. In addition, CDF expanded the mandate of the committee, allowing it to provide advice to CDF on all issues affecting Native American people; not just the protection of cultural resources. The NAAC, which today includes nine members, continues to work toward the protection and preservation of California's cultural resources. Through its efforts, the voices of California Native Americans will continue to be heard, not only within the CDF Archaeology Program, but also by CDF Management and throughout all the Department's programs.

L. Kyle Napton, Ph.D. and Elizabeth A. Greathouse, M.A.
Institute for Archaeological Research, California State University, Stanislaus

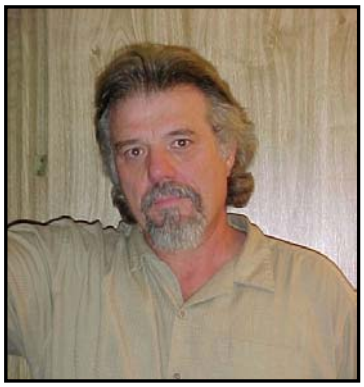
Elizabeth A. Greathouse and L. Kyle Napton, Ph.D.

The thing that strikes us most forcefully at CSUS is that an Archaeology Program actually exists at CDF, and thrives, and we are proud to have played a part in its development. In the years before this program got underway we watched helplessly as sites on private forest land were disturbed or nearly destroyed during timber harvest operations. We remember one site, where a big boulder with numerous bedrock milling cups was bulldozed over the edge of a deep river canyon (not much was left of the site after that) and other instances where log removal roads went right through archaeological sites because it was the expedient thing to do. That has changed, thank heaven: sites are still damaged or destroyed, but the number of such instances has been greatly reduced and, we feel, this is very much a direct result of the CDF program. We were fortunate enough to be involved in the program from the earliest days: it seemed there was hardly an area that we surveyed or inspected that didn't have either prehistoric or historical cultural resources: the value of the program was apparent from Day One. As we went along we thought we'd total up the reports and the sites; we have written one hundred reports and probably recorded ten times that many sites, including more bedrock mortars than one can imagine; and these, thanks to the program, are recorded and hopefully will be available for future research. Among the CDF projects that come to mind are excavations at CDF's Hurley Forest Fire Station east of Fresno: it was bitter cold, foggy January; the CDF battalion commanders showed great kindness in letting the crew warm up a bit by the stove during dismal days. At CDF's Ishi Conservation Camp east of Red Bluff we enjoyed test excavations that revealed one of the deepest known prehistoric sites in Tehama County, and we were impressed with the enthusiasm of Rich Jenkins, Walt Williams and Roy Dowdy, who did everything they could to make the experience a pleasure -- at least as much as could be, given the weather, which could charitably be described as awful. While we're recalling some awful field conditions, how about chest-high star thistle on a project near Dobbins in Yuba County? There was over 100 acres of dense star thistle, amid which were well concealed bedrock mortars. In better times, we were in the hands of outstanding CDF personnel while we surveyed the CDF Academy grounds near Ione--they were always helpful and went out of their way to offer whatever assistance we needed. Another project that we found vastly interesting was the study of the Altaville Schoolhouse, an old-time structure saved and rehabilitated for public visitation through the cooperative efforts of CDF and the people of Altaville. Other projects in the Sierra foothills were expedited by CDF Foresters Bill Schultz, Steve Hollett, and Bill Snyder.

The CDF Archaeology Program has provided a wonderful opportunity for students from CSUS to conduct practical field exercises. Again, it would be difficult to say how many of our students have been involved in field archaeology, finding, recording, measuring, writing, while conducting surveys for CDF -- a fair estimate would run well into three figures. During spring 2003 alone we fielded crews varying from four to 12 people, including some comparative beginners and some very old hands who keep coming back for more, simply because they enjoy it; the best troops to work with. With them we've kicked the dust of at least 25 California counties. Lastly, it wouldn't be out of

place to offer just a few words of praise for the man who made all this happen -- Dan Foster, who daily goes forth, sword in hand, to do battle for California archaeology. Seconding him are Rich Jenkins and Linda Sandelin -- very nice people to work for. Dan reminded us that we have been a part of this for over 20 years. We can't believe it -- seems like yesterday when we did our first THP survey. It's a real pleasure to look back on those years, but it is an even greater one to contemplate the future: there are more sites out there to be found, recorded, and protected -- many more.

E. Breck Parkman
Senior State Archaeologist - DPR



E. Breck Parkman

In October 2003, Californians witnessed the most devastating fires in our state's history. Hundreds of thousands of acres were burned, thousands of homes were lost, an untold number of wildlife was destroyed, and there were many human casualties as well. For me, personally, the most devastating of the fires was the Cedar Fire, which burned 280,000 acres in San Diego County. This was the largest wildfire in the history of the state.

The Cedar Fire burned all but a few hundred acres of Cuyamaca Rancho State Park on October 27. The park measures 28,000-acres, and straddles the Peninsular Range between coastal San Diego and the interior Colorado Desert. Archaeologically, Cuyamaca is one of the most spectacular parks in all of California. There are over 400 known archaeological sites within the boundaries of the park, and undoubtedly many more awaiting discovery. The diversity of the sites is absolutely spectacular, with everything from Native American soapstone quarries, village sites, and rock art, to historic homesteads and a 19th Century gold mine. It's still unclear what affect the wild fire had on the park's archaeological record, but we know it was bad. At the time of this writing, State Archaeologists from both CDF and DPR are in the field assessing the archaeological damage.

I have been feeling melancholy ever since learning of Cuyamaca's destruction. In telling you why, I'll talk about the beginnings of CDF archaeology and the passion of a few of their archaeologists.

I joined California State Parks in January 1981, as a State Archaeologist assigned to the Resource Protection Division in Sacramento. My first assignment was inventorying cultural resources at Olompali State Historic Park in Marin County. Olompali is one of the great sites in California archaeology, and I felt fortunate to work there. But Olompali paled in comparison to what I found at Cuyamaca, when I was sent there a few months later.

During the years 1981-1982, I made regular trips to Cuyamaca as part of the cultural resources survey for the park's prescribed burn management plan. During that time, I visited many of the archaeological sites within the park, and personally recorded a good number of them. I also participated in meetings with the Kumeyaay, including fieldtrips to Cuyamaca with the late Tom Lucas, the renown and beloved Kumeyaay elder. I was very impressed with Cuyamaca, and it became a significant research interest of mine (not to mention my favorite State Park).

Over the years, I have often thought about Cuyamaca. When I do so, I almost always think about Daniel Foster, CDF's Senior State Archaeologist. In 1981, Dan was also assigned to Cuyamaca's

burn plan, and had already initiated much of the archaeological fieldwork there. That year, he and I teamed up to survey the park. In doing so, we found many important archaeological sites, and had some great adventures along the way. All these years later, after working as an archaeologist throughout California and on five continents, the time I spent at Cuyamaca working with Dan and others on our crew remains my favorite archaeological experience.

Dan has a passion for archaeology, and that was very apparent at Cuyamaca. In the field, day after day, he never lost his enthusiasm for the job. Every day held promise for some exciting discovery, and if the Archaeology Gods didn't take pity on us that day, then there was always the next. Dan was usually the first to be ready in the morning, and the one we always had to talk into retiring from the field at the end of the day. The fact that the sun was still high enough in the sky to see was enough for Dan to keep surveying.

Dan was an energetic field worker, and he used a lot of energy every day. Because of that, he had to eat a lot. When we ate out, Dan occasionally ordered two meals. When the waiters brought our meals out, they would look at the two of us (Dan was very lean back then, and I wasn't), then place the extra meal in front of me. I used to hate that! I think Dan always got a kick out of it. There are many other stories I could tell you about working with Dan at Cuyamaca (including the stories I've entitled "Who Took the Last Piece of Bologna!" and "The Crew Wants to Go to Julian for a Strawberry Milkshake, But Dan Wants to Keep Walking His Transect") but they are probably best left for telling around a campfire someday. For now, I'll just stick to telling you the serious things about Dan.

Few archaeologists are as gifted at finding sites as Dan. He always had a nose for sites. Fritz Riddell was a lot like that, too. I'll talk more about Fritz later. Not only could Dan find sites (and probably still does), he could also do a terrific job of recording them. A lot of archaeologists could learn from Dan in this area.

Dan and I were working at Cuyamaca as a result of litigation involving the State's prescribed burn policy, and the potential impact that burning might do to archaeological resources. After working to exclude fire from the ecosystem for a century, the State had finally realized what Native Americans and old-time ranchers had known since the beginning: Fire is a natural component of any healthy ecosystem. Of course, fire has to be carefully utilized when used as a tool, thus the need for the burn plan that Dan and I were working on. At Cuyamaca, we had to decide what effects fire might have on the park's archaeological record, which sites to burn, and which sites not to burn. Dan took the lead in coming up with our plan. He used science and common sense to come up with a plan that made sense. The State used that plan as it ventured into prescribed burning at Cuyamaca. Many sites were protected due to Dan's good work. But by that time, he was no longer with California State Parks, having left to become CDF's first State Archaeologist. In the years since, Dan has built a fine archaeological program at CDF. It was built on science, common sense, and a lot of passion.

I first met Chuck Whatford in 1984. I was giving a lecture on archaeology to the Valley of the Moon Natural History Association (VOMNHA) in Glen Ellen. The VOMNHA is California State Park's cooperating association for three parks in the famed Valley of the Moon: Annadel SP, Sugarloaf Ridge SP, and Jack London SHP. Chuck was training as a VOMNHA docent. He lived near Annadel, and was a good friend of the park ranger, Bill Krumbein. Chuck and Bill were long distance runners, and often ran in the park together. Chuck developed a keen interest in archaeology, perhaps in part because of the many archaeological sites he saw as he ran at

Annadel.

Shortly after I met Chuck, he approached me about becoming a volunteer. As a volunteer, he assisted me by recording some of the archaeological sites he had discovered at Annadel. Before I knew it, Chuck had enrolled in an archaeological field class at Santa Rosa Junior College. The class, under the direction of Tom Origer, worked on an archaeological dig at Annadel. Chuck would later co-author the final report. With an appetite for archaeology, Chuck enrolled at Sonoma State University, where he took his B.A. and M.A. degrees in Anthropology. Chuck's Master's thesis was a cultural resource management plan for Annadel. While engaged in his studies, Chuck worked on a number of archaeological projects at Annadel, both as a SSU student and as a Graduate Student Intern and then a Seasonal Archaeologist in my office. Chuck's passion for archaeology changed his life. Following graduation from SSU, he became a State Archaeologist with the State Historic Preservation Office in Sacramento, and more recently, with CDF in Santa Rosa.

The position that Chuck now holds in Santa Rosa was originally filled by Mark Gary. Mark died of natural causes in 2001, at age 50. His passing left a void in the lives of his many friends. He also left a vacant position at CDF's office in Santa Rosa. Fortunately, that position is now in the good hands of Chuck Whatford.

I first met Mark in 1986, when he volunteered on a dig at Anderson Marsh SHP. It was a very large excavation, with over 100 volunteers. Mark, although quiet and shy, stood out from the others as someone passionate about life, and especially passionate about archaeology. He had been befriended by Dan Foster, and his brother John, a year or so before, when he turned to them with questions regarding archaeology and timber harvests. At that time, Mark lived on a ranch in Mendocino County. In many ways, Dan became Mark's mentor, and through his influence, slowly turned him on to archaeology. Mark began volunteering for Dan, and later for Francis Berg of the local BLM office in Ukiah, and for me, too. Mark was always fun to work with. He had grand ideas, some of which were brilliant, and some of which were not. He was eclectic and very eccentric. Fortunately, archaeology has always been welcoming of the eccentric. Mark found a home with us. Like Chuck before him, Mark slowly made the transition of someone interested in archaeology, to volunteer archaeologist, student of archaeology, and on to professional archaeologist. Like Chuck, Mark enrolled at SSU, where he took a degree in Anthropology. By then, he had become a contract archaeologist working for Dan at CDF. Soon after, he transitioned to being a State Archaeologist with CDF. He was very proud of that accomplishment, as were his friends and mentors. When he died, Mark left behind some unrealized plans in archaeology. But there was so much more that he had accomplished. I am enriched today by some of the conversations that Mark and I had regarding the past. I continue to appreciate his ideas, and have begun to pursue some of them professionally.

Mark Gary

And then there's Fritz. When I think of archaeology, no one comes to mind so fast as Fritz Riddell. As most readers know, we lost Fritz to cancer in 2002. It was a huge loss. I first met Fritz in 1979, at the Society for California Archaeology meeting in San Luis Obispo. I had the good fortune to be staying in the hotel room next door to Fritz when he was awarded the

Society's original Harrington Award for Conservation Archaeology. Man, was there a party in Fritz' room that night! I've never seen so many archaeologists drink so much beer in such a small room! Once I pried myself out of the room, and returned to my own, I sat and watched the wall vibrating from the joy and commotion coming from the room next door.

When I joined State Parks in 1981, I got to know Fritz a lot better. He was our original State Archaeologist, and he was a great one. Fritz probably forgot more about archaeology than most of us today will ever know. And the many battles he fought to protect the archaeological record would overwhelm most of us today. Fritz was very passionate about archaeology from an early age. In fact, in many ways, he was the poster boy for California archaeology. People couldn't be around him without catching the fever. He was an archaeologist even when he wasn't trying to be.

In 1987, I went to Peru to work with Fritz. I am so glad that I did. Fritz loved Peru, and I believe it was Peru that helped him survive his battles with failing health for so long. It was in Peru that I really learned to appreciate Fritz. In the field, he was an archaeologist like the ones we dream of becoming when we are children.

Fritz was involved in a long term study of the Acari River Valley, located on Peru's desert South Coast. He had begun working there in the 1950s, prior to joining State Parks. The archaeology on Peru's South Coast is unbelievable. When I was there, we spent weeks recording and excavating Nazca, Ica, and Inca sites characterized by well-preserved ceramics and textiles, and the remains of once impressive architecture. But in spite of the grand archaeology to be seen there, my memories of Fritz in Peru all involve his interactions with the crew, and especially with the local people. I'll always remember riding into Acari beside Fritz in the back of a small pickup truck, with a dozen of the village children running beside the truck shouting "El Gringo, El Gringo…" They were excited because Fritz had returned to Acari for another season of work. His presence there each year meant employment for some, economic benefit for many, and excitement for all. I can still see Fritz removing his white cowboy hat, and waving it slowly at the children, like some dignitary in a parade. The people of Acari loved Fritz, and he loved them. He was a great American ambassador of good will. In Peru, I realized that Fritz was what is good about our country and the profession of archaeology.

In later years, Fritz often assisted Dan and CDF, by helping to teach CDF foresters and others about archaeology. His passion and knowledge moved so many of those who met him. His passing touched all of us.

The history of CDF archaeology is in large part the story of a few archaeologists. In time, that history will expand until it is more about a process than the personalities of the few who are engaged in it. For now, though, it is about those individuals who have created and maintained the process, people like Fritz, Mark, Chuck, and especially Dan, among others. CDF archaeology is enriched by the passion these people feel for the job they do. I hope that CDF is always so fortunate.

Jim Purcell
CDF Division Chief - Forest Practice - Retired

Jim Purcell

I have been a CDF Forest Practice Officer since 1977 and I was recently recalling many of the challenging and sometimes difficult issues I have faced during my career. That same day I also spent time thinking of some of the more enjoyable experiences I have had in the woods. I have always enjoyed the work we do as it relates to archaeology and for my contribution to this chapter on the history of CDF's Archaeology Program I would like to briefly describe the events that took place during what I consider to be one of the most satisfying days in my career.

While conducting Forest Practice inspections in 1985, I had been speaking with various landowners and learned of a number of archaeological sites in southern Mendocino County. With the landowners' permission, I scheduled a day with CDF's Chief Archaeologist Dan Foster to meet with the landowners and have the sites recorded.

Dan and I first met with a rancher in the Anderson Valley. Dan catalogued the rancher's extensive collection of artifacts and viewed nearby springs and midden soil exposed along a creekbed cutting through a long-abandoned 1950s-era log landing. Dan discussed his observations with the rancher, who was very interested to learn that the site might be the location of a Native American village discussed in historical accounts of Pomo village sites.

We then traveled to the rancher's brother's property to search for possible housepit sites known to him. Soon after arriving, we spoke with the rancher and discovered several housepits in his barnyard near the confluence of two creeks, and Dan documented them for later recording. We then documented a separate large housepit location which I had previously discovered while looking out my truck window as I drove on State Highway 128.

Dan Foster with Jim Purcell, recipient of the 2002 Golden Trowel Award.

During archaeology training provided by CDF, and now attended by all CDF Forest Practice Inspectors and RPFs preparing THPs, we are advised to look for names on maps which might indicate possible archaeological or historic sites. I was aware of a large petroglyph boulder called Squaw Rock and assumed that it had surely been recorded since it was directly adjacent to a county road and had a government survey marker set in it. I had noticed recently scribed etchings and new cupules in the rock and wanted Dan to see it so he could document the new etchings and cupules versus the old ones. When we arrived, Dan impressed me with his thorough measurements, photo documentation, and interpretation of the etchings and cupules. Dan was less than appreciative of one vandal's etched rendition of a romantic heart recently scratched into the historic boulder. His muttered comments will go unrecorded here, but they make me laugh every time I think of them. We were later surprised to learn that the petroglyph boulder had not previously been recorded, and Dan undertook to record the site which has been given the official designation of CA-MEN-2019.

We then proceeded to a pleasant meeting with the late George Zeni, a rancher, logger, Christmas tree grower, and one of the nicest persons I have ever had the privilege of knowing. I had seen George's artifact collection and obtained permission for Dan to view it. I will never forget the look of awe on Dan's face when George displayed his collection on the kitchen table. After photographing the extensive collection, Dan and I were treated to a tour of the nearby tree plantation, vineyard, and woods, during which more petroglyph boulders were observed and an additional artifact was discovered. Dan later arranged for George to meet Dr. Thomas Layton, Professor of Anthropology at San Jose State University, and site excavations were eventually conducted on the ranch.

It is very evident to me that the excellent training provided to resource professionals through the CDF Archaeological Training Program has been invaluable in attainment of the goal to protect California's archaeological and historical resources. I see the positive results of this training every month as I perform my duties for CDF.

During my career as a Forest Practice Officer, I have become familiar with the location of many archaeological and historical sites found by RPFs and others associated with enforcement of the Forest Practice Rules. That particular day in 1985 was one of the most enjoyable in my 28 years with CDF, and it illustrates just a few examples that can be shared with readers of the significant contributions to California Archaeology that have resulted from the implementation of this statewide program.

Allen S. Robertson
CDF Deputy Chief - Environmental Protection

Allen S. Robertson

Reading the other *Voices* articles gives one the impression that all CDF's Archaeology Program deals with is archaeology. However, the Archaeology Program has more on its plate than merely the protection of the State's prehistory; it is also the protector of the Department's history in the form of hundreds of unique historic buildings. In 1994, CDF contracted with Mark Thornton to conduct a historic significance evaluation of CDF's inventory of 2300 buildings. The significance evaluation was completed on all 189 CDF buildings constructed prior to 1946 (50 years old). This, in conjunction with a similar inventory of CDF's 77 fire lookouts completed in 1993, identified a total of 260 historically significant structures that warranted protection by the Department.

CDF is proud of its history, yet it became increasingly evident that this aged collection of relics, in many instances, no longer met the department's operational needs. Today's engines often can't fit in a historic apparatus building. The modern workforce has conflicts over restrooms and sleeping quarters designed for all male crews; circuit breakers trip when the microwave and PC are fired up together; the energy bill goes through the roof as does the heat; taxiways buckle as loaded S2-Ts maneuver for departure; wooden communications towers sway under the weight of microwave dishes; well water and sanitation facilities no longer meet health standards; and engines must negotiate urban sprawl in order to reach the wildlands they were intended to

protect. The Department's infrastructure was in need of a substantial update.

Throughout much of CDF's history, improvements to facilities had been accomplished through the efforts of department construction staff and fire crews. Funds had been extremely limited and work had been focused on the most urgent needs including emergency repairs, minor renovations and additions as well as routine maintenance. Impacts to the Department's historic buildings inventory were minor and infrequent. But, as the inventory aged and the maintenance funding remained static the backlog of maintenance needs and infrastructure improvements increased. Everything was about to change.

In response to the well documented need, the legislature supported huge funding increases commencing in 1995. The result has been an aggressive program to update the firefighting infrastructure through the reconstruction, relocation and replacement of many of CDF's facilities including fire stations, administrative offices, conservation camps, communications sites and air attack bases. However, many buildings are considered historic and under the California Environmental Quality Act the demolition or abandonment of historic buildings is a significant impact, requiring public disclosure and mitigation. The Department's Archaeology and Environmental Programs quickly found themselves at odds with those responsible for new construction activities.

There were some early battles over historic building issues and each taught us new lessons: the ranger residences at San Bernardino Unit HQ – documentation is not adequate mitigation and demolition requires an EIR; the "Cat Barn" at Jackson Demonstration State Forest – the potential collapse of a building is not an "emergency" under CEQA; the Hammond Forest Fire Station – the abandonment of a historic building is a significant impact; Stirling City Forest Fire Station – historic compounds may be impacted by new construction. We were quickly headed down a road where every project would require a costly EIR addressing impacts to historic buildings. Each battle taught us new lessons and quickly convinced those involved of a need to address CDF's historic building issues comprehensively.

In 2001, Dan Foster and Mark Thornton completed a *Management Plan for CDF's Historic Buildings and Archaeological Sites*. This document identified 29 significant historic buildings in CDF's inventory that could be feasibly preserved and maintained while affording public access, maintaining architectural diversity and at the same time meeting the Department's operational needs. The significance of the potential removal of the remaining historic buildings was discussed in the accompanying EIR prepared by Dan Foster and Maria Sosa, a planner with the Department of General Services. The EIR gave the CEQA clearance necessary to deal with historic building demolitions programmatically rather than on a case-by-case basis.

Today, issues still exist about the feasibility of protecting particular buildings and identifying funding sources for maintenance, but the Plan and EIR have established a common understanding within CDF about the Department's historic building preservation responsibilities.

Judy Rose
Heritage Program Leader
Pacific Southwest Region
USDA Forest Service

Judy Rose

In 1995, Dan Foster, Manager of CDF's Archaeology Program, contacted Sonia Tamez, State and Private Forestry programs, and me at the Heritage Resources Program of the Pacific Southwest Region of the USDA Forest Service, about developing a Programmatic Agreement (PA) for federally funded projects. Dan recognized that CDF administered several programs that received federal funds from State and Private Forestry, and that those programs, and the projects implemented under them, required Section 106 consultation pursuant to the National Historic Preservation Act. I was essentially unaware of the state administered federal programs until Dan's contact. Dan was the primary mover and shaker, working with Sonia and me, drafting and negotiating the PA, helping the Forest Service meet its federal responsibilities. The PA was executed December 4, 1996.

In 2002, Dan contacted me about amending the 1996 PA. He recognized that many of the programs covered by the PA had changed, several new programs had been added to deal with forest health and fire safety, and other federal agencies were now providing funds to CDF for similar programs. We worked together for almost two years redrafting the PA to accommodate all existing and future federally funded CDF administered programs; tailoring it to add new participating federal agencies; consulting with the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, Tribal Historic Preservation Officers, several interested Native American groups; and other federal agencies; and coordinating with all the affected staffs within our two agencies.

The PA developed by CDF and the USFS has roots in common to both agencies, particularly the need to accomplish agency program goals while doing a careful job of preserving heritage resources within limited budget constraints. Thus, the PA emphasizes the identification and protection of historic properties. It recognizes that significance evaluation, part of the normal regulation process under the National Historic Preservation Act, is expensive and not routinely affordable. Therefore, the agreement treats all identified sites as though they are eligible to the National Register of Historic Places, avoiding them with project activities. It incorporates a strong educational component, training foresters and informing land owners about heritage values and how to recognize cultural resources and avoid effects to them. With these efforts, the wealth of recorded sites is thus effectively preserved for future generations, to research, understand, interpret, value, and enjoy. The PA works efficiently and effectively. As a result, it has become a model for similar State and Private Forestry needs elsewhere in the Forest Service, in other regions and states.

The Forest Service credits Dan Foster's managerial skills for successful negotiation and implementation of the current PA that enables joint state and federal agency cooperation in delivery of federally funded programs in California. The archaeology component he has helped develop for the state's forest practice rules is essential to the PA, providing state guidelines that meet standards for federal law and regulations. The cadre of professional archaeologists he oversees in the CDF program provides the needed quality control for inventory and

identification. The cultural resource training program he supervises and provides for foresters and field personnel is critical to the identification and protection of heritage resources. Finally, Dan's persistence and abilities at drafting, negotiating, and administering the PA are essential to its effective implementation.

In its early years, the CDF Archaeology Program had little professional oversight. That opened the program to criticism, particularly when cultural resources were adversely affected--a criticism CDF is successfully overcoming. The program has steadily gained improvements, enforceable archaeology guidelines in its forest practice rules, and a professional staff to oversee them. As with any agency, periodically the guidelines and quality control fall short, but CDF makes a concerted effort to investigate the reasons why and make corrections. The CDF Archaeology Program is also gaining ground in its agency fire suppression activities, with cultural resource protection being integrated into those efforts. The Forest Service is confident in CDF's ability to manage its Archaeology Program and preserve heritage resources, and looks forward to continuing the cooperative effort formalized by execution of the PA.

Linda Sandelin
Associate State Archaeologist - CDF

Linda Sandelin

I received my B.A. degree in Anthropology from U.C. Davis in 1992 and first learned about the CDF Archaeology Program that same year. At that time my fiancé, now husband, Tom Sandelin was a practicing Registered Professional Forester (RPF) in California, one of several hundred RPFs that have received archaeological site recognition training from CDF. Wanting to learn more about CDF's programs and how archaeology fits into them, I enrolled and attended CDF Archaeological Training Course #30 held in Redding during May 1993. What I saw at this class had a profound influence on my career. I was exposed to a program where RPFs were being trained how to recognize cultural resources and the need to protect them during the development of land management projects. But more than this, I witnessed the powerful effect of efforts made to develop cooperative working relationships. The CDF and consulting archaeologists, the RPF, and the Native American teaching the course were recruiting the students to assist in a cooperative effort to develop better projects, not only because protection of cultural resources is required by law, but because it is the right thing to do. They were teaching the "why" and inspiring a group of people to change the way they thought about cultural resources – to appreciate their significance, rarity, and vulnerability to irreparable damage if not managed correctly. So intrigued by this program, I signed-up for another class, and attended CDF Archaeological Training Course #36 held in Los Angeles in December 1994. Although several state and private RPFs were in attendance, that class also included several CDF, Los Angeles County, and Ventura County Firefighters who were interested to find out more about cultural resources located in California's wildlands and how they might be protected during wildfire suppression activities. I wanted to be part of this program, and was committed to gain the experience necessary to compete for one of these CDF jobs, if one were ever available. Up until that time, I had conducted some archaeological surveys for timber harvesting plans in Humboldt and Mendocino counties, but most of my work was surveying for lot line adjustments and subdivisions.

In 1995 Dan Foster needed an archaeologist to help the contract archaeologist working in Humboldt County. Timber harvesting plan preharvest inspections were needed, but the contractor was unavailable most of the time. I jumped at the chance, and have been working with CDF ever since. I spent a year as a contractor for CDF conducting archaeological inspections and surveying some engineering projects in the Humboldt-Del Norte Unit. I interviewed for the new CDF Archaeologist position in Santa Rosa, but Mark Gary, who had worked as a CDF contractor for many years, was hired. After leaving Humboldt County, I was able to continue my contract work for CDF, this time working at CDF Headquarters in Sacramento. I was hired to review work conducted on the lookouts and telecommunication towers. I also conducted some field inspections to help CDF Archaeologists Rich Jenkins, Carlys Gilbert, and Mark Gary.

Linda Sandelin instructing students at archaeology training course in 2002.

When Carlys Gilbert, CDF Archaeologist based in Fresno, retired from state service in the fall of 1996, I competed for her vacant position and was fortunate to have been offered the job – which I eagerly accepted. The transition from contractor to permanent employee was made easy as I was allowed to work in the Sacramento office until my move to Fresno in July of 1997.

Once in Fresno it didn't take me too long to realize that I had the best job of any archaeologist in California. My area of responsibility extends from Monterey and Mariposa Counties south to the Mexican border. While the size of my area, the entire Southern Region, at first seemed daunting, the workload is manageable because there are many colleagues that help get it completed. Typically, the project manager has already completed a records search, consulted with the NAHC and local Native Americans, prior to contacting me. After reviewing their initial work, we discuss the survey strategy. On the more complex or archaeologically sensitive projects I help the project manager conduct the survey and develop the protection measures. I review 100 timber harvesting plans a year which is a relatively small THP workload compared to the other CDF archaeologists. Most of my project workload lies in all of the other CDF programs administering projects on private and state lands. These include vegetation management (controlled burns) and forest improvement (tree-planting, thinning, stream repairs, etc.) and engineering projects on CDF fire stations, lookouts, and other facilities. There are hundreds of these CDF projects each year located throughout the Southern Region. I also help manage cultural resources on three state forests and on CDF wildfires statewide. In addition to this project workload, I also serve as co-lead instructor in CDF's statewide archaeological training program, now doing the work that inspired me to join this Department in the first place. Between the full four-day courses and the one-day refreshers, I help deliver archaeological training to about 200 people each year including CDF and private foresters, firefighters, Native Americans, and many others that have some involvement with the incredibly diverse collection of CDF's programs.

Linda Sandelin recording a Cahuilla fish trap in Imperial County.

The quantity and diversity of archaeological and historic resources located on CDF projects throughout my work area is staggering. There are Native American archaeological sites over 10,000 years old, villages that were in existence into the late 1800s and early 1900s, and sacred sites still in use today. We also have early exploration, gold rush era, logging, and ranching sites. Most of the counties have over a dozen contacts for Native American tribes and individuals. It's not unusual for a timber harvesting plan in the Southern Region to have 25 archaeological sites within the project area. During the 2003 Coyote Fire in San Diego County over 500 known archaeological sites were located within the fire perimeter or along nearby contingency firelines that were built to contain it.

Linda Sandelin and USFS Archaeologist Bill Matthews recording archaeogical site at Badger FFS in Tulare County in 2000.

My job requires a great deal of travel, driving about 2,500 to 3,000 miles per month. I take pride in knowing that I respond to all the Units in my work area, not just those that are convenient to my office. I conduct field reviews for most of our Vegetation Management Projects and Engineering projects. Half of the CDF facilities are in the Southern Region, and they all need to be surveyed for the presence of cultural resources. When I arrive at each fire station I introduce myself and give everyone a short archaeology lesson. I am amazed that there are people who have worked at CDF for many years who didn't know that our Archaeology Program exists, or why CDF would even need archaeologists.

In addition to training private and state foresters, I also became involved in CDF training through the Academy. Newly hired firefighters who go through the CDF Basic Fire Control class learn about archaeology and why CDF needs archaeologists. Since bulldozers can damage more archaeological sites on one fire than an entire season of logging throughout the state, I also teach the dozer operators each spring. That class is a fun course to teach as we not only talk about archaeology while in the classroom, but we also take a field trip to see an archaeological site. During the winter of 2002-03, CDF Archaeologist Gerrit Fenenga and I taught ten classes for company officers in the San Bernardino and San Diego Units. In 2003 alone, over 400 CDF employees learned about archaeology and what CDF's responsibilities are toward archaeology. I know that this type of training really pays off. On the Coyote Fire during the summer of 2003, the CDF personnel assigned to the fire were really tuned-in to cultural resources and the need for their protection. They were looking out for the known sites that we mapped for them to avoid, and they also kept an eye open for new sites. One of the most exciting sites discovered by the archaeologically trained staff during this fire was a mining site which included an ore cart, a mine entrance with metal doors, and a dilapidated wooden building.

CDF has been very supportive of our archaeological staff. Since we conduct so much training for others, our department understands that our attending both in and out of state archaeological conferences is necessary for us to keep current in our field of expertise. While attending these conferences, we are able to learn much about new archaeological discoveries, changes in theory, survey methods, and regulation. I personally have attended conferences in Seattle, Chicago (where I presented a paper on Style 7 petroglyphs coauthored with Dan Foster and John Betts), Denver, Milwaukee, and Pendleton, Oregon.

One extraordinary experience I had was working on the Murphys Fire Station construction project in 1998 and 1999. This was a parcel that the state acquired for the purpose of building a brand new fire station. What should have been a rather routine construction project turned into quite a huge undertaking. The archaeological excavation that was conducted was not up to CDF or the Office of Historic Preservation standards. There were also complaints lodged by some of the local Native Americans. We also needed to acquire a Caltrans right-of-way and Caltrans had not been satisfied with the quality of archaeological work that had been conducted on the property. All of this contributed to what could have been a potential disaster: CDF almost lost the entire project. It ended up that the archaeology cost for this project was one quarter of the entire construction budget. I worked for over a year on this project, moving my office to a trailer set up on the property. I worked as a liaison between the archaeological firm hired by General Services, local Miwok tribal monitors, a Caltrans Archaeologist, the Office of Historic Preservation, our engineering staff and heavy equipment operators, and the weather. Not all were cooperative. But we persevered and got the job done. We now have a wonderful station to serve the Murphys area and have learned a lot about the prehistory of Calaveras County.

Linda Sandelin with Steve Chambers and Anthony Farmand discussing grading at Murphys in 1999.

As a result of my successes at Murphys, taking over the archaeological duties in two units in the Northern Region, and my diligence toward my work in Southern Region, in May 2000 I received the 1999 Lewis A. Moran Director's Award for Superior Accomplishment, CDF's highest honor. I saw this award as not only the recognition of my contribution to CDF but also as CDF's acknowledgment of our Archaeology Program, and its importance not only to the Department but to the people of this state.

Afterthought: It has been almost six months since I wrote my original article for this chapter. I was asked by Dan Foster to take another look at it, to make sure that the edits that had been made had not changed the intent or character of my writing. My original article was cheery and upbeat, reflecting on my usual disposition. After all, I really enjoy my job here at the Department and didn't have any major criticisms of our program, it's not perfect, but the Department was on the right path to make cultural resource protection stronger and stronger. After reading over my article I realize that in six months the situation changed tremendously here at CDF. I decided not to make changes my original article, and instead added the following additional paragraphs which will now voice my concerns about the health of our Archaeology Program in its entirety.

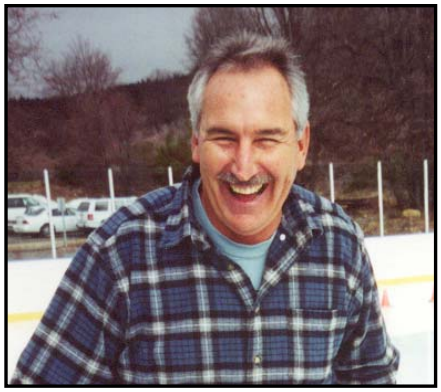
The bug-kill problem in Southern California has caused tremendous concern for the potential fire threat to the region. Although the southern part of our state had a horrific fire season, losing over 20 lives and 3000+ homes, only about 15% of the potential fire acres actually burned in those areas where the homes and dead trees coexist. At risk are hundreds of thousands of homes and maybe millions of lives. Trying to incorporate cultural resource protection into this picture has been nearly impossible. CDF does have a cultural resource protection agreement with many Federal Agencies who provide money to help rid the state of these dead trees. When the foresters are out marking dead trees to be logged they should be looking for archaeological sites, so that those conducting the logging will keep their equipment out of the sites. The orders from

the State are that regulation is not to slow down the process of getting these trees removed. The CDF Foresters don't even have permission to flag watercourses or meadows for protection; it won't be easy to convince those in charge that per our agreement in receiving the federal funds archaeological sites must be protected.

At this point in time, the State budget is in a mess due to a downturn in the economy (although it is now recovering) and many years of adding additional programs (expenses) to the state budget. Our expenses here at CDF must be monitored carefully and cuts are proposed within our Department. At the moment, three of the six archaeologist positions are on the chopping block. This may change, but for now, this doom and gloom hangs heavily over our heads. In order to spare the expense, we are being asked to do less travel; to not protect the resources as well as we have in the past.

The budgetary problems have also brought up concerns that our travel is only associated with "essential" work. I haven't quite figured out why I would spend any time away from home, due to my job, unless it was essential. Up until recently I looked at most of the prescribed burn projects and technical services projects, and about 30% of the timber harvesting plans. I have been told that I must now only go on the projects that I have grave concerns about. Most problems are not due to grave concerns but because a site boundary was inadequately identified, or the protection measure, while sounding good on paper could not possibly be accomplished in the field. These problems can only be found, and resolved, in the field. Of course, I will try to convince those in charge of the budget that what I do is essential, and it must be done because the citizens of the state demand that cultural resources are protected. If I am not successful I expect damage to cultural resource sites will rise, although no one will be monitoring the sites, so no statistics will be available to prove this is true.

Grayson Sorrels
CDF Fire Captain



Grayson Sorrels

I met Dan Foster and his staff during CDF Archaeological Training Course #86 in Redding, but that was not my first exposure to the CDF Archaeology Program. I have a law enforcement background and participated in a CDF operation intended to apprehend individuals illegally looting the Dad Young Spring Site (CA-PLA-689). Dan asked me to write up my recollections of that operation, to provide another dimension to the CDF Archaeology Program which planned this operation and secured approval for its implementation. The incident described below took place over Memorial Day weekend in 1996.

It seems that under the cover of darkness, "Desperados" were trespassing on private timberland and digging in an ancient Indian village site, 20 some odd miles east of Georgetown. An inspection of the looted area indicated that the "perpetrators" were filling their truck with soil, hauling it away, and presumably screening it elsewhere for artifacts. This horrible activity had been taking place for years and previous efforts made by both CDF and the USFS were unsuccessful in stopping it. This site, at an elevation over 4000 feet, has a rich midden area over 6 feet deep, which is now dotted with dozens of pothunters holes – some old, some fresh. Some

of these holes are large enough to bury a Volkswagen. Although CDF required protection of this highly significant site during logging operations, it was being destroyed by pothunters. So what do we do? A flash of inspiration in someone's mind dictated that armed officers sworn to protect, should be deployed. The "Archaeological Swat Team" was assembled in Auburn for a briefing. After a quick swing through a fast food restaurant for sustenance, and a second stop at a quick mart for snacks and other provisions to last the night, the four officers in two vehicles stealthily sped toward the anticipated showdown to get into position before nightfall.

There was a locked gate denying access to the site to the law-abiding, but it had proved no obstacle in the past to the "hoodlums" we were seeking; they had found a way around it. On this day the gate was locked and we decided to open it to help control ingress. Little did we suspect that this would present our first challenge. The gate had a tube which surrounded the lock, making it impossible to defeat the lock with bolt cutters. No problem for trained professionals though, for we knew the combination. The only problem was that not one member of the "Over the Hill Gang" had brought their reading glasses, and lying in the dirt underneath the tube, we were too close to the combination lock to be able to read the numbers. At the CDF Academy, Eichmann hadn't specifically told us *NOT* to shoot off the padlock and we all carried plenty of firepower in the form of 9mm Sig Sauers, and 12 gauge "Scatterguns", but somehow, it just didn't seem like a very good idea.

One option would be to dig a hole to lie in, putting the lock at arm's length and gaining a more distant and clearer perspective. But, the thought of physical labor had a sobering effect on all of us. Finally, the third or fourth officer to squirm in the dirt managed, after repeated attempts, to open the lock. Following cheers and high fives all around, we took a solemn oath to include a younger member in our next stakeout.

Now that we were on the site, the plan went something like this:

Two members in full camouflage clothing would hide in the woods near the looting site, and report on the activities of the lawbreakers via handy-talkie radio. The remaining two members (including yours truly) in full uniform and full battle regalia with shiny badges were parked down the road out of sight, poised to "swoop" in with red lights flashing to make the arrest. Suddenly a "light bulb" from someone – remembering their officer safety academy training. "Won't we be a perfect target sitting in our red flashing vehicle, and after all, we don't really know what kind of "snakes" we're dealing with here; they are looters, but they could also be felons with guns, and it's hard to predict what someone might do when surprised." "How about locking the gate behind the bad guys, letting then fill their truck to the brim, so they will be tired, and "ambushing" them back at the locked gate when they try to leave?" I certainly would have felt better about the prospect of talking them out of their vehicle at gunpoint while we not only enjoyed concealment, but true cover and protection afforded by rocks and trees. Well, the argument that carried the day was – "That's not how it was planned downtown, so that's not how we are doing it." Gulp. I could almost see it on my tombstone – "Brave Officer of the Law Gunned Down by Arrowhead Thieves."

Discussion over, we took our positions. Conversation eventually wound down, the novelty of night vision goggles quickly wore off and before the night was half over, we were out of snacks. Forays into the night to stretch cramped legs showed that not a creature, good or bad, was stirring. Daylight brought a return to civilization, motels and restaurant meals.

The next evening, after reprovisioning, we again headed for the wild frontier in our Bronco. The second night was pretty much a carbon copy of the first; but, while still discontent with "the plan", I found myself wishing something would happen – anything to relieve the spirit crunching boredom. At daybreak, our camo-equipped comrades, losing the concealing darkness, decided to drive down the road a bit, and soon reported a pickup truck with two Asian subjects headed our way. I was out of the vehicle, walking around, so decided to lie down behind a bush where I could see the turnaround near the gate. The pickup slowed near the gate, turned around and stopped. The driver got out of the vehicle, looked off into the woods in my direction, and suddenly, without warning, the stillness of the morning woods was assaulted when he blew his nose. He then got back into the vehicle and drove out the way he came in. A short time later, we met with our "dressed down comrades" and they told us about their contact with the subjects as they tried to leave the area. The vehicle was flagged down. Rifles were sighted inside the vehicle and a request to put hands in plain sight met with puzzled looks and noncompliance. The request was reinforced with a drawn gun and the startled subjects finally figured out what "reach for the sky" meant. It seems that English was not the universal language between this foursome that fate had introduced, but it was determined that they were squirrel hunters, not members of the dusty "hole in the ground gang." The "Over the Hill Gang" wrapped up the detail without a single notch in their guns, but as I write this, I am reminded of a quote I heard once, probably from someone famous – "They also serve, who only sit and wait."

Mark V. Thornton
Tuolumne County Supervisor
Former CDF Contract Historian

Mark Thornton

I suppose my interest in CDF began in fifth grade when I received my official "junior ranger" badge. I still have it and a number of fire prevention posters from that same time. My awareness of the dangers of wildland fire were cemented a few years later when my home was in an evacuation area as a raging, wind driven fire raced toward the subdivision I lived in. So, from childhood I have had an ongoing interest in wildland fires.

In the 1980s the U. S. Forest Service's Region 5 office "sponsored" me as I conducted a state-wide thematic study of fire lookouts. During that experience, I visited fire lookout stations in every nook and cranny of California. Despite the inter-agency rivalry that fire fighters often feel, CDF personnel welcomed me on "their turf" while I did my Forest Service work and so began my role as a fire lookout historian.

In the late 1980s, Dan Foster called upon me to see if I would do a "survey" of the fire lookouts under CDF control. I jumped at the opportunity to revisit my "old friends" --- the buildings I'd seen during my Forest Service research, and so it was that in 1991 I recorded 77 stations.

I was met with skepticism and out right fear by some agency personnel. Battalion chiefs and division chiefs were concerned that my project's findings might force them to spend funds from already stretched budgets to protect old buildings. Fire fighter staffing and other higher priority

budgetary items would suffer if this held true. Fire lookout operators, already jittery about their futures, saw my visits as foreshadowing the permanent closure of their station. However, most of the CDF officials and crews I met during this project had a real fondness for the folklore that surrounded "their" lookouts. Once past the initial shock of having a Sacramento sponsored historian show up, I found myself being royally treated. Battalion chiefs chauffeured me to sites, in one instance ranger unit overhead arranged a helicopter ride to their lookouts, and agency personnel were remarkably hospitable to me (read that "free lunches were easy to find"). My tour of the CDF fire lookout system is something I will always treasure.

My job was to simply record the lookout building and note the condition of the structure and site. I was then to research unit records and engineering files to verify construction dates and major alteration dates. With a very limited budget I could not avail myself to the numerous "leads" I was given on how to locate retired employees that had stories and pictures that would greatly enhance my history. To be sure some leads were followed and the results always proved rewarding. In the end, I was pleased with the experience of sleuthing out the history of CDF's fire lookout collection but frustrated that out of 77 locations only three or so lookouts would find their way into the "preservation" management category.

In 1994 Dan Foster enlisted my services again, this time to visit historic fire stations and other administrative facilities. The survey was undertaken as a direct result of Governor Pete Wilson's executive order that directed all state agencies to undertake surveys of buildings that were considered potentially historically significant. This project had a much better budget and field reconnaissance was far easier than the lookout project. I was met with the same professionalism and kindness that I encountered in the fire lookout work, and had even more leads offered. CDF's "family ambiance" is not as strong as it was in earlier decades but make no mistake a lot of pride and espirit de corps was still to be found.

It was sad, however, to see that most of the old ranger chief houses were vacant or converted to office use (at least many of the buildings were still standing) and that on-site residency was no longer required of overhead. Also disappointing has been Sacramento's unwillingness or inability to support local efforts to preserve the history of CDF. One of the most notable issues was the difficulty in getting the Ione museum project fully supported and funded by Sacramento. Also troubling is that in over seventy years of acquiring fire engines, only about three pieces of rolling stock have been saved, and none of this by actions from Sacramento.

I advocated, and still believe, that each of the old CDF regions should have a museum for old engines, miscellaneous equipment, documents, and other memorabilia. The old administrative maps from the 1950s, the telephone maintenance equipment, and the old prevention signs all add to the rich tapestry of CDF's heritage. Maybe, as we celebrate the centennial of CDF we can see these goals realized. There are also some very fine "specimen" buildings that should be preserved, and opened to the public. Preserving the past, noting the tremendous contributions that have come from CDF, builds public awareness and support. The men and women, past and present, that have dedicated their lives (and given their lives) to protecting the public and protecting our State's rich natural resources from the devastating effects of wild fire deserve that recognition.

Polly Tickner
CDF Contract Archaeologist

Polly Tickner

I started with CDF in July 2001 as a part-time contract archaeologist working for CDF Archaeologist Richard Jenkins in Redding. I work about 12 hours a week for CDF and about 32 hours a week as Staff Archaeologist for Coyote & Fox Enterprises (CFE), an archaeological consulting firm also based in Redding. Although the hours worked for me, and I was working in archaeology, I admit that when I started working with Richard I had some misgivings, and he and I had a few heated discussions regarding the CDF archaeology training program. My attitude along with many others who do not work for CDF was that the program was a slap to professionals who have spent years earning their college degree to work in this field, and foresters are trained in four days. Then there was also the attitude that it was a conflict of interest to think that foresters, whose job is to cut trees will really be looking for archaeological sites so that they can "protect" them during their timber harvest; a kind of "fox guarding the hen-house" theory.

First I had to learn the way that the Archaeology Program at CDF functions. As I gradually started working *into* the program instead of fighting the program, I realized a lot about the way that it really works. It did not take long to realize that each Timber Harvest Plan has an Archaeological Addendum and each of those is reviewed by the five CDF staff archaeologists, one of which is Richard Jenkins, with me as his assistant. These Addendums have most of the same information that we find in any Archaeological Survey Report. The forester that has taken the 4-day training course and completes the Addendum is required then to obtain a current Record Search from the appropriate Information Center, do pre-field research, send appropriate Tribal Contact letters, conduct an intensive field survey for sites, prepare site records, and develop site protection measures. After this process, there is always a preharvest inspection (PHI) done by a Forest Practice Inspector, and one of us (a CDF Archaeologist) goes out on about 30% of the time. During these inspections, besides the water, biological, geological and other issues, they evaluate their survey, evaluate the proposed protection of sites, and ensure that site recording is accurate.

On my first PHI, and accompanied by Rich Jenkins we met RPF Tom Harrington and spent an entire day inspecting his proposed THP area we were assigned to review. The majority of the plan area was quite steep, and late in the day, we had one possible site to look at and the only way to get this location was to double back to our starting point (which the others did not want to do), or to proceed ahead having to cross a watercourse with a huge waterfall. The survey party carefully jumped across the top of 20-foot waterfall. I do not like heights and was appreciative for the helping hand that one of the foresters gave me that day. On another field inspection in Modoc County my task was to assist RPF Wheeler Birdwell define the boundaries of an archaeological site he discovered so the site could be fully protected through avoidance. On this day I injured my back while crossing over a barbed wire fence and eventually had to have back surgery about three weeks later. These field assignments are not for WIMPS!!

Through all of this, Richard and I have worked out many differences of opinion, I try to see his, and he tries to see mine, and we work together quite smoothly now, and I enjoy my time at CDF,

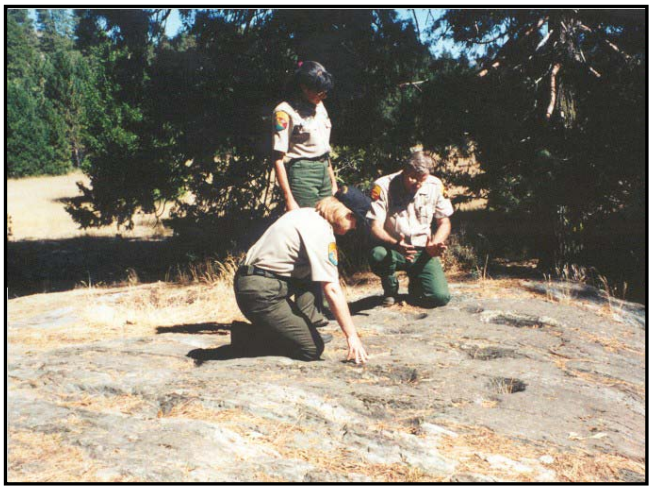
both the staff and the many foresters from the north state that I am getting to know first-hand. Some of them really grumble through the process, but we try to work with them, and remind some of these young 20-40-ish age foresters how difficult the changes in laws must be for the somewhat older 60, or even some 70-ish age foresters. They smile and even sometimes reluctantly agree.

Andrea E. Tuttle, Ph.D.
CDF Director

Andrea Tuttle, Ph.D.

From the office of the Director, one has the privilege of overseeing the tremendously broad range of activities and responsibilities encompassed by the Department. All parts of the organization intertwine to meet our mission of protecting lives, property, watersheds and resources. Though small, CDF's Archaeology program performs a key role in fulfilling our social responsibilities for protecting our cultural heritage, and for meeting our legal responsibilities required under the California Environmental Quality Act and the National Historic Preservation Act.

While I'm often trapped at a desk, I've also been able to see the Archaeology program in the field. In September 1999, three of CDF's staff archaeologists Dan Foster, Gerrit Fenenga, and Linda Sandelin took me to examine typical archaeological resources located in the forested backcountry in the upper reaches of the Bear and Yuba River drainages. These included two petroglyph sites containing ancient carvings in granite, a prehistoric village with bedrock mortars and a rich midden deposit, a log cabin, and Gold-Rush-era mining sites. This field survey illustrated the range of cultural resources found in these locations, and the difficulties involved in their identification and protection. On many trips to the Units, firefighters have been proud to show me the Native American mortars protected behind their station, state forest managers have interpreted the history of old trails and structures, and private industrial foresters have shown sites they have discovered and worked to protect.



Director Tuttle examining bedrock mortars at a village site in Bear Valley during 1999 field trip.

CDF is fortunate to have an excellent team of dedicated, enthusiastic, and highly-skilled state archaeologists to deliver this program. Several have received the Department's *Superior Accomplishment Award* during the past few years, and Linda Sandelin was recognized in 1999 with the Louis A. Moran award. This team brings passion to their work, and is a powerful force of influence to other resource professionals within CDF and the regulated public. As a result, the Department better appreciates the values associated with cultural resources, takes exhaustive steps to identify and document the existence of such resources during project development and

review, and is committed to protecting these important, non-renewable, and precious resources of California's heritage.

The full mission of CDF is touched by archaeological concerns, from site avoidance during wildfire suppression wherever we can, to protecting historic and prehistoric sites during the siting and construction of fire stations and all our facilities. The archaeologists are trained as firefighters so they can go to the front line of the fire, evaluate the situation, and work with the fire suppression command staff to avoid damaging archaeological sites where possible. CDF Archaeologists have also taught over 1600 Registered Professional Foresters and other resource professionals in the private sector how to identify, describe and protect cultural resources to comply with the Forest Practice Act and Rules, thus reaching a broad audience and providing trained eyes over a big part of California's forest landscape.

CDF Director Andrea Tuttle presented the L.A. Moran Award to Linda Sandelin in 1999.

The program has also worked side by side with the U.S. Forest Service in developing cooperative regulatory policies that satisfy both state and federal regulations so that the use of federal grant money does not get tied up by differences in approval language. The program maintains a close working relationship with the California Department of Parks and Recreation's Office of Historic Preservation, which maintains all of California's official archaeological records, and is committed to providing them with information on every site that CDF records. In return, CDF has direct access to all recorded sites within the state when that information is needed during fire suppression activities and there is very little time to decide where the bulldozers should cut the fire lines.

CDF Director Andrea Tuttle and Dean Lucke presenting Dan Foster with CDF's Superior Accomplishment Award in 2002.

CDF's archaeology program has made great efforts to maintain close communication and interactive consultation with local Native American Tribes and the Native American Heritage Commission. Developing a list of local Native Americans to contact for review of sites prior to fire suppression or logging activities is an example of the outreach effort that has fostered a level of trust and confidence with the tribes regarding ongoing cultural activities and respect for sacred sites. Native Americans have used, and continue to use, natural settings in the conduct of ceremonies and spiritual practices that are essential elements their cultural traditions. Tribes consider these sacred sites, used by generations, as vital to their existence.

The continued support of the CDF archaeology program helps to improve communication between the tribes, the public and the government, and will move beyond regulatory requirements to an increased mutual understanding and respect for one another, and enriched appreciation about our past. This is an example of government at its finest, working with the

public and the tribes for the benefit of all concerned. As part of the tremendously wide range of skills that come together in this Department to form our "total force" dedicated to the CDF mission, the archaeology program is a key piece of what distinguishes this department as the premier firefighting and resource protection agency that it is.

Steven Valencia
CDF Student Assistant

Steven Valencia

I began working for CDF in October of 2002 in its Resource Management Division at Sacramento Headquarters. Although my primary task is to assist the Resource Coordinator facilitate Board of Forestry meetings and handle other Board issues, I often had the opportunity to work with other programs as well. Over the past two years I have worked with Dan Foster on a number of projects and have had the opportunity to assist in the completion of many different projects associated with the Archaeology Program.

One of my assignments was working on the 2003 revisions to CDF's two-volume Archaeological Training Manual. This project was especially interesting because I scanned both text and figures from a lengthy report written by Thomas F. King, Ph.D. to convert this into electronic format to be inserted in the new CDF Training Manual and for posting on the web site. This was interesting because the text discussing archaeological surveys methods, although written in 1978, describes methods and issues that are still valid today. I was also involved in numbering the pages which gave me the opportunity to view the whole manual, which contains important California history. Other tasks included re-imaging historic CDF photos, mailing notices to California Native American tribes, as well as other responsibilities.

I have enjoyed working on these assignments for the Department's Archaeology Program. There is so much history within California, and these experiences have exposed me to aspects to the Department's work that I did not previously know about. Although my work with this program has been limited, it pleases me to know I have contributed to it in a small way.

Charles E. Vaughn
The University of California
Hopland Research and Extension Center

Charles E. Vaughn

I have worked at the University of California Hopland Research and Extension Center for more than 30 years. I am not an archaeologist, but how folks have made a living in this part of Mendocino County through time has always fascinated me. The hills here are full of stone artifacts which students and staff had picked up until we had a sizable collection of surface-collected bits and pieces about which we knew nothing. In 1988 we contacted the County of Mendocino about local

archaeologists who might help us put some of it into context, and they turned us on to Mark Gary. This proved to be a most fortuitous happenstance for the Hopland Center, as well as for me. One blistering day in August, 1988, Mark and his wife, Deborah McLear-Gary, visited the Center and gave the staff a fascinating presentation on southeastern Mendocino County archaeology. Their sincere enthusiasm, knowledge, and on-the-ground experience had a profound effect on all of us. I remember personally being so excited about my introduction to the science of archaeology that I had a difficult time sleeping that night thinking about stratigraphy, point styles, hydration, and other "visions of sugar plums". Mark and Deborah visited the Center often over the next several years (Mark didn't drive at the time so Deborah drove everywhere and they were inseparable- "joined at the hip" was how Deborah put it), cataloging, surveying known sites, preparing site records, and encouraging us to preserve the cultural resources on the Center. Eventually they helped us to identify and/or record more than 20 sites here.

Mark and Deborah were cordial and generous and so absolutely unpretentious. We had fun talking about the Giants and 49ers and The Grateful Dead, and I learned a lot from them. They were involved in a number of other archaeological projects in Mendocino County at that time, and invited me to tag along to some of them. I visited the Frolic site at Point Cabrillo, and Tom Layton's excavations at Three Chop Village and Nightbird's Retreat. I went on a number of rock art tours with them, and assisted them at their Caballo Blanco site. After Mark started working as a State Archaeologist for CDF in the mid 1990s, the Hopland Center became a regular stop on the CDF Archaeological Training for Foresters field exercises. Mark and Dan Foster invited me to participate in the classes whenever I had the time. Meeting and learning archaeology first-hand from people like Fritz Riddell and Brian Dillon was such a wonderful opportunity.

It had always been our hope here at the Hopland Center to have a thorough archaeological survey of the 5300-acre property, and that someone might examine some of the prehistoric sites here as part of a research program. Mark continued to encourage us toward that end. In 1999 we received a small grant to begin surveying the entire property for cultural remains. We hired 3 undergraduate students from the UC Davis Anthropology Department, under the guidance of Dr. Robert Bettinger, and they spent part of the summer conducting surveys. Our entire collection of surface-collected artifacts was cataloged by Lisa Dietz of the UC Davis Anthropology Museum. Then during the following 3 summers from 2000 to 2002, Taryn Wise-Harthorn, a doctoral student of Dr. Bettinger, directed the UC Davis Department of Anthropology field school at the Center. Taryn and 50 enthusiastic young students spent the long, hot summers intensively surveying the Center and excavating 8 different sites. Taryn's research into the prehistoric land use of the Center and local area continues. On June 25, 2001, the second summer field school started. That afternoon in Ukiah there was a memorial service for Mark following his sudden and untimely death on Memorial Day. In the morning I said hello to a group of eager young archaeology students; in the afternoon I said goodbye to an old friend who made their visit possible. Mark no doubt appreciated the wonderful irony in that. Thank you, friend Mark.

Richard G. Wade
RPF, Sierra Pacific Industries

Rich Wade

My perspective on the CDF Archaeology Program is that of an RPF who has been employed in the California forest products industry since its inception. Since CDF is the primary agency enforcing forest practice laws and rules, some might assume that the RPF's relationship to CDF is simply that of the regulated interacting with the regulator. While indeed the CDF's duties and powers as a policing agency are often brought to bear, the true relationship within the framework of the archaeology program is much more nuanced, and in my view is essentially cooperative in nature.

So that the Timber Harvesting Plan serves as a functional equivalent to CEQA, the Forest Practice Rules provide for a CDF-trained person to carry out archaeological surveys on THPs and related forestry projects, with oversight by CDF professional archaeologists. The RPF in charge of the project is responsible for the adequacy of that work, and most often it is the CDF-trained RPF who performs this function. That the Forest Practice Rules accommodate the application of this "paraprofessional" archaeology work is an advantage to the landowner or project proponent, who would otherwise have to hire an archaeologist to cover the same ground that has typically already been exhaustively examined by the RPF. Since determining that a found site is "insignificant", and therefore expendable, requires the evaluation of a professional archaeologist, almost all sites found by RPFs are protected from damage and documented with at least a primary record. Hundreds of sites are found and protected in this manner every year. It is therefore ultimately in the interest of all parties that the CDF archaeological program both motivates and enables the RPF to do thorough and professional work in locating, protecting, and documenting archaeological sites.

In my experience RPFs are well qualified to perform the task of identifying archaeological sites, since they are trained to observe the subtleties of forested landscapes, and think across a temporal scale of a few centuries. Many are students of the history and prehistory of the lands they manage, enjoying not only the intrinsic value of this resource, but applying that knowledge to achieve a broader understanding of the landscape.

Since the inception of the program, the CDF archaeology staff has always demonstrated an impressive belief in it and commitment to it. I remember working on a THP near Jarbo Gap in Butte County in the very early days of the program. I thought I'd found my first prehistoric sites and called Rich Jenkins in Redding to ask what to do about them. Both he and Dan Foster scheduled a field day to come up to see them. After each had driven several hours to the project area, I triumphantly showed them my two sites, each consisting of a single, shallow little mortar cup on an isolated outcrop. I can only imagine how underwhelmed they must have been, yet they congratulated me on my find and were full of nothing but encouragement. Dan Foster later confided to me that at that point in the life of the fledgling program they were making every effort to demonstrate its importance to the RPFs in the field, and their investment that day certainly succeeded with me.

The other CDF archaeologists with whom I've worked, Linda Sandelin and Gerrit Fenenga, demonstrate a practical and effective approach to concerns in the field, most often arriving at

effective mitigation measures that accommodate the overall objectives of the project while protecting the archaeological resource. In this regard they often rely on the RPF to provide detailed planning, layout, and supervision of harvest activities on the ground to assure that operations near sensitive areas are carried out without impact. It's been my experience that a logger (Licensed Timber Operator or LTO), when such an operational challenge is set before them by the RPF, typically responds by bringing to bear his often superb skill in falling and removing timber around the site, often displacing nary a twig on the area of concern.

Board of Forestry and Fire Protection Chair Stan Dixon presenting Rich Wade the 2003 Golden Trowel Award.

Another key element to the success of the program is that the CDF arch staff holds the RPF to a high standard of performance. Most of my work over the last several years has been reviewed by Linda Sandelin. She categorically expects the work submitted under her purview to be accurate and professionally prepared documents that meet the standards of the archaeological community. I am convinced that most RPFs respond well to these imposed high standards, providing documents that reflect a sense of pride and professionalism.

The CDF archaeological training course has always been instrumental to the success of the program. I've attended three courses over time, and each has provided excellent instruction and motivation to trainees. Dan Foster has a knack for finding instructors who can relate to and respect the work that field foresters do, neither condescending to the trainees for their lack of an academic background in archaeology, nor slighting their potential to ably perform these duties to the extent of their responsibility. The message of instructors like Brian Dillon, who is at once astoundingly knowledgeable, yet down to earth; irreverent, yet committed to the program; and respectful of his audience's abilities, resonates deeply with the typical RPF and is very motivating.

Sharon Waechter
Archaeologist, Far Western Anthropological Research Group

Sharon Waechter

From 2001 to 2004, the Cultural Resources Management firm of Far Western Anthropological Research Group has been "on-call" to CDF for various tasks related to the agency's Archaeology Program. Far Western (www.farwestern.com) is one of the largest and most experienced CRM firms in the western U.S., specializing in the archaeology of California and the western Great Basin. Our work includes inventory, site recordation, evaluation, data recovery, the development of research designs and management plans, consultation with local Native American groups, and close cooperation with various state and federal agencies. In California, we have carried out archaeological studies from Humboldt and Modoc counties in the north, to San Diego, San Bernardino, and Inyo counties in the south; and from the Pacific coast to the eastern Sierran front. Our broad knowledge of California is especially valuable for working with CDF and other state agencies.

Far Western's work with Dan Foster and his staff of CDF archaeologists began with the Highway 88 Fire in 2001. As a result of this fire near the town of Ione, in Amador County, CDF hired Far Western to record a large prehistoric site that had been burned over, and to determine what kinds of damage might have occurred during both the fire and CDF's fire-suppression activities. It was a unique opportunity to explore an important site on private land, a site which under normal circumstances would not have been open to us. As it turned out, the Highway 88 site included a large dance-house pit that had special meaning for the local Miwok Indian community. Far Western recommended to CDF that the site be investigated more completely, working with the Miwok Tribe, to better understand its significance. As often happens, however, the private landowner denied further access. Instead, Dan Foster asked Far Western to produce an article for the CDF web site about the archaeology of the Highway 88 Fire which can be found on the CDF Archaeology Program Web Site at www.fire.ca.gov. This would lead to other web-site articles, including one on the huge Pines Fire in San Diego County, and another on a burn experiment at an archaeological site near Jackson.

A huge wildfire in southern California in the summer of 2002 (the Pines Fire) presented a different kind of challenge for the Far Western and CDF archaeologists. The first problem was one that CDF faces often – because much of the area was privately owned, both access and information were seriously limited. While other agencies had records to tell them where archaeological sites were known to exist on their lands, no comprehensive data base was available to the archaeologists from CDF. Instead of working with fire managers to avoid the destruction of cultural sites in the first place, they could only come in afterward and assess the damage.

Once the fire was out, Dan Foster and Linda Sandelin asked Far Western to inventory portions of the burn, to record sites and document the damage caused by this devastating, 65,000 acre, wildland fire and by suppression efforts required to contain it. A crew of trained archaeologists, led by John Berg of Far Western, surveyed 570 acres and found eight new sites; they also re-visited seven sites that had been documented earlier. At the same time, CDF archaeologist Linda Sandelin was recording three more sites. The archaeological finds included prehistoric hunting camps and villages, milling stations, can dumps, homesteads (one with a small winery), and the remains of a 1930s gold mine. Of these, 12 had been burned over but showed no appreciable damage (milling features); four others had obvious bulldozer damage, sometimes extensive; one was badly burned over, and the homestead/winery had suffered serious damage from a burnt and fallen oak, as well as extensive bulldozer blading. In all, six of the sites were damaged by the fire and/or suppression activities, while 12 were not. At the request of Dan Foster, the Far Western graphics staff and I prepared a second web-site article to document the results of the Pines Fire archaeological survey and damage assessment.

Most recently, we have prepared a third article on the effects that small, prescribed burns can have on certain types of archaeological resources. After some preparation, Dan Foster and CDF Forester Jim Smith allowed a small, controlled burn to sweep across a prehistoric camp, to see what damage - if any - the slow-moving fire would have on the flaked stone tool debris lying on the surface. While we know that big, fast-moving wildfires can have some devastating effects on certain types of cultural resources (notably historic structures, which often are made of wood), the presumption has been that smaller, slower burns would cause little damage. The CDF experiment had some surprising results: artifacts in the area where the fire burned hot and swept through quickly showed much less damage that those where the fire smoldered and moved more

slowly.

As it turns out, in some cases duration is as much a factor as temperature. In a fast moving head fire, most of the heat dissipates upward, rather than heating up items lying on the surface. Conversely, a slower moving fire, such as a prescribed burn, if fire is applied to work upwind in a controlled manner, actually delivers more damaging heat to surface artifacts. This means that fire managers and archaeologists should consider both duration and intensity, and give careful thought to the fire environment -- soil moisture, fuel moisture, temperature, and the like - when writing a prescription for burning at an archaeological site.

In the past three years, I have worked closely with Dan Foster and his staff on several projects. Far Western's CDF "on-call" contract has given us the chance to expand our horizons, and it has been both interesting and fun. While CDF's archaeological staff is often stretched quite thin, Dan Foster and his colleagues have come up with some creative ideas for developing their program. I look forward to working with them in the future.

William J. Wallace, Ph.D.
Professor Emeritus, CSU Long Beach

William J. Wallace, Ph.D.

In mid-1987 (June 15 - July 15) I conducted a month-long archaeological investigation for CDF at Mountain Home State Forest, a state-owned woodland in the Sierra Nevada Mountains of southeastern Tulare County. Carried-out under a contract with CDF, the purpose of the inquiry was to amend and amplify what was then known of the region's prehistoric human past. Twenty-two already known archaeological sites were revisited, photographed and mapped. In addition, their surfaces were carefully searched for cultural remains. There is good reason to believe that the encampments saw only seasonal occupation for harsh winter conditions in this high (5100 – 7600 feet above sea level) country ruled out year-round habitation.

To learn more about their nature and content, excavations were undertaken at five of the prehistoric sites. The most extensive digging was done at Methuselah, a large, repeatedly occupied campsite. Methuselah was so-named from an old-growth Giant Sequoia, the storm-damaged top of which made it look very ancient.

Information gathered during the field study demonstrated that Mountain Home had experienced two distinct phases of visitation by native peoples. The first arrivals were small bands of hunters. Evidence of their presence was detected at one site, and less convincingly at a second. In addition, some of their characteristic projectile points were found scattered over the surface. Later-comers were plant-food gatherers, who exploited the regions' rich diversified edible plant products. They came into the mountains more often and stayed longer. Their living places yielded cultural materials like those found at late prehistoric sites elsewhere in the southern Sierra Nevada.

J. Charles Whatford
Associate State Archaeologist - CDF

J. Charles Whatford

I became involved in California archaeology in the 1980s first as an avocationalist, then as a student and graduate student and subsequently as a professional. I first became aware of the CDF Archaeology Program as an Anthropology/Archaeology undergraduate at Sonoma State University (SSU) (1987-90). Although I didn't meet Dan Foster until the early 1990s, prior to that time I had heard quite a bit about the CDF's Archaeology Program and most of what I heard were criticisms (when one's a student it's easy to criticize those who are already practitioners in the field you hope to join). Later, while earning my M.A. in Cultural Resources Management (CRM) at SSU, I began to appreciate the accomplishments of the CDF Archaeology Program as well as its limitations.

After graduating with my M.A. in late 1993, I continued the search I'd begun earlier for full time employment in CRM. But, given the economic downturn of the early 1990s, my search was not an easy one. Having selected State government as my preferred employer and the area within which I wanted to practice, I took every State agency Archaeologist exam that I could find, attempting to achieve a rank that would make me "reachable." I soon found that scoring high enough on the Department of Parks and Recreation Associate State Archaeologist Examination was not sufficient. I then had to wait for a position to be advertised. Given the tough economic times that the State and particularly DPR was going through in those years, I waited several years. During that time I picked up project work as a seasonal archaeologist for DPR as well as with Bay Area environmental consulting firms.

In 1995 I received a "crash course" in the Forest Practice Rules and the world of CDF after I learned that Dan had finally obtained the means to create and fill an Associate State Archaeologist position at the Northern Region Headquarters in Santa Rosa. In preparing for the exam I worked hard at familiarizing myself with the Forest Practice Rules and the CDF Archaeology Program. Because I was not familiar with anyone in CDF except Dan Foster (whom I had met several times in passing at the Annual Meeting of the Society for California Archaeology (SCA)), I figured my chances of being offered the position were slim but gave the exam my best shot. I scored a high enough ranking to be asked to come back to interview for the position, but in the end was not selected. Mark Gary, who had worked for the Department for several years as a consultant and knew CDF procedures and personnel well, was chosen as the first Area Archaeologist to be based at the Northern Region Headquarters in Santa Rosa.

Instructors Gerrit Fenenga, Brian Dillon, Linda Sandelin, Chuck Whatford, and Fritz Riddell at archaeology training near Ukiah in 2001.

Even though I knew Mark was more qualified than I for the job, I was still disappointed (since I was eagerly searching for a full time position in State service). A short while later, however, I

recall feeling relieved that I'd not been offered the position after I learned that Mark's duty area extended south from Santa Rosa to San Mateo, Santa Clara and Santa Cruz Counties, east to Yolo and Colusa Counties in the Central Valley and north to the California-Oregon border along the coast!

In June 1997 I accepted an offer from the Office of Historic Preservation in Sacramento (within the DPR) of a position as an Associate State Archaeologist performing project reviews of mostly Federal Agency projects in California. During the 4 years I worked on staff there on the 14th floor of the State Resources Building at Ninth and N Streets, I would occasionally run into Dan Foster, who worked on the 15th floor, where CDF Headquarters is located. Through those occasional chats with Dan as well as being one of the reviewers of some of the CDF Archaeology Program documents and agreements, I gradually came to better appreciate the strengths and breadth of the CDF Archaeology Program. The difference in my perception at this time being that my awareness of the program's achievements was now greater than my perception of its weaknesses.

In June 2001, still reeling from the shock of CDF Archaeologist Mark Gary's unexpected and untimely death over Memorial Day weekend, Dan Foster asked if I'd consider applying for the position of Associate State Archaeologist in Santa Rosa. Although I enjoyed my work as a reviewer at the Office of Historic Preservation (OHP), the 90 mile commute from home to Sacramento was wearing me down and, because opportunities for field work and field inspections at OHP were very few and far between, I readily accepted Dan's offer to lateral over to CDF.

Since coming on board at CDF Northern Region Headquarters in Santa Rosa July 2001, my appreciation for the CDF Archaeology Program has continued to grow. In particular, shortly after coming to CDF, I soon came to recognize the dedication and hard work not only Dan Foster, but Rich Jenkins, Linda Sandelin, Gerrit Fenenga and Steve Grantham bring to their jobs as CDF Archaeologists. Although the program still has its problems, continues to need improvement and strengthening, and its critics will no doubt continue to find reasons to grumble, given the political realities of state government and the regulatory environments of the California Forest Practice Rules, the Board of Forestry, and the California Environmental Quality Act (CEQA) that CDF must operate within and maneuver through, I'm impressed with the high degree of responsibility the CDF Archaeology Program has exercised toward the State's cultural resources to date and am grateful to be a member of the CDF Archaeology Program.

Doug Wickizer
CDF Staff Chief - Archaeology, Environmental Protection, and Regulations

Doug Wickizer

I believe that the first formal recognition I had of the CDF involvement in Cultural Resources Management was in 1979. I was then an Area Forester for the Shasta-Trinity Ranger Unit and the Sierra-Cascade Region Coordinator for the then new California Forest Improvement Program (CFIP). As with most CDF Foresters, our jobs are very diverse and offer a continual opportunity to learn in emerging resource areas. Archaeology was one of those areas for me at that time period of my career. One of the "other duties as required" I had at the time was the development and preparation of management plans for 11 parcels of land CDF had on loan from the State Lands Commission. This was an experiment in expanding the reach of the Department State Forest System. Regardless, during the development of those plans it became apparent that current planning standards included an inventory for cultural resources and a discussion of how such resources should be managed.

To accommodate that need the Department had an Archaeologist on retainer from the Department of Parks and Recreation. That individual was Jim Woodward. Jim and archaeology were new to the CDF scene and so it was with somewhat anxious anticipation that the Unit (Larry Blackman and I) invited him up to the Shasta-Trinity Ranger Unit to review our CFIP and State Lands parcel key projects at the time. Jim flew to Redding in his own plane and spent several days with Mr. Blackman and I driving around Shasta and Trinity counties to look at land parcels. Some parcels were easy to access and had some easily identifiable resources such as a parcel by Lake Britton where Jim had identified a series of shell midden sites along the Pit River. Other parcels were much more distant such as a piece located on Tuna Creek which is a tributary of the McCloud River. I am not certain if Jim ever returned to that property to complete a general survey. The days spent were productive for all three of us, if for no other reason than beginning the ability to communicate on the value of cultural resources and for Jim to begin to understand how to protect cultural resources within the CDF / Forestry cultures.

My next involvement with Archaeology occurred at Sacramento Headquarters. I accepted the job as California's statewide Forest Practice Law Enforcement Officer in 1981. This was a newly established position and was an opportunity for the Department to obtain some consistency in application of the Forest Practice Act and Rules as well as to develop some administrative and civil enforcement tools made available in the Act but net yet well explored. At the same time there was a new Archaeologist position established later in the year. As I remember the general initiation of the program, the first couple of years were spent in the field, mostly relating to CFIP projects, getting both the Foresters and the Archaeologist comfortable in the analysis of Forestry impacts on cultural resources. A second effort was how to design and establish protections of cultural resources from Forestry projects (timber harvesting, thinning, planting, stand maintenance, and vegetation management).

This was somewhat of a honeymoon period for the Archaeology Program within the Department. It was relatively simple to approach program implementation from an educational perspective. Because of the novelty there were many employees willing to express interest and commitment. However, from about 1984 to 1986 the Forest Practice Program became subject to special

interest attacks. It was during this period that Scotia Lumber Company sold to out-of-state investors and was renamed Pacific Lumber Company (PALCO). It was this time that the special interest public declared the Redwood and Old-Growth wars. The underlying objective of these groups was to stop logging in the state. A number of surrogates were used to attack the timber companies. Some of those have been endangered animal species, fish species, and cultural resources. As the flow of litigation in this legal war continued, a few landmark cases emerged that had a direct bearing on how the Forest Practice Act was intertwined with cultural resources. One of these was the infamous EPIC v. Johnson case in 1985. As litigation progressed the Native American interests decided to seize the opportunity presented to them by other special interests. Individual tribes and tribal groups began to participate intently with the required public review of Timber Harvesting Plans. It became apparent to them that this opportunity was profitable to their desire to receive public recognition. Thus, the Native American Heritage Commission (NAHC) became a persistent participant with the Board and Department on Resource Management and Fire Protection projects or programs.

Several steps in the NAHC influence on the Board and CDF began in the early 1990's. The Board, CDF, and the NAHC collaborated to develop the first archaeology forest practice rules. This took about two years from start to finish and resulted in a great deal of learning by all parties on how the specific resources were intertwined. Since the beginning of that effort at coexistence there has been an increasing involvement of the Native Americans in Board and Department programs. The influence now includes almost any program or project in which the Department becomes involved. Examples include Forest Practice, CFIP, Vegetation Management Program (VMP), State Forests, Capital Outlay projects, Fire Protection, Urban Forestry, and a raft of other public assistance programs.

Along with the growth of Native American influence there was a heightened awareness of historical interests. In the early 1990's statutes were passed that required state agencies to protect and manage historical resources. As part of that legislative effort each Department was required to establish a Historic Preservation Officer. In CDF the assignment fell to the Manager for the Archaeology Program. This initially garnered little attention from Department Management but project reviews under the California Environmental Quality Act (CEQA) created challenges to implementing projects (THPs, CFIP, VMP, and Capital Outlay). The reaction was for the Department to develop and certify a Historical Building Management Plan, covering all historic CDF buildings including fire lookouts, stations, and administrative facilities. The historical aspect of cultural resources is still viewed by management as a stumbling block rather than an opportunity to save a significant part of this Department history and contribution to California as a society. However, there is currently an opportunity for the Department to correct this shortcoming through the development of its own 100 year history. Hopefully that opportunity will be seized with enthusiasm.

The Archaeology Program in this Department began as a minimal effort to forestall litigious attacks on Forest Practice and other Resource Management Programs. As staffing has increased and recognition of value contributed, the role has expanded into one of the areas this Department has developed pride. An example of growth in this area occurred in the last two years of fire protection efforts. In 2000 and 2001 CDF took some major criticism by the press on damage done to cultural resources through fire suppression activities. In 2002 and 2003 this has been reversed, through efforts of management and the Archaeology Program, to praises by the public and special interests on the amount of resources discovered and protected. A big change that enhances the Departments overall reputation with the pubic they serve.

Jim Woodward
Former CDF and DPR Archaeologist

Jim Woodward

Position in CDF When I was 28 years old, soon after my appointment as a State Archaeologist I to DPR, I was assigned to work for CDF full-time from March to September 1981 through an interagency agreement between the two state agencies. This was a transitional period for CDF's commitment to archaeology. It was an exciting, interesting time when the need for archaeological input was growing, and when the organization first acquired staff time that it could schedule and dispatch to meet its program needs.

Ready, Set, Misfire at State Parks In February 1981 when I began working for the State, I felt well prepared to be doing archaeology and cultural resource management for CDF. I had worked for three years doing archaeological timber sale surveys on the Eldorado National Forest, writing reports, and managing the program as best I could in the absence of a full-time professional. Fritz Riddell hired me to fulfill the requirements of an interagency agreement between State Parks and Forestry.

Fritz immediately assigned me to work on several parks projects that were behind schedule. This included Wilder Ranch State Park in Santa Cruz, with help from Glenn Farris who had completed excellent survey work at JDSF during a previous interagency agreement. I was reviewing proposed construction projects in Sonoma and Mendocino counties. Being new and willing to take any potentially interesting assignment, I volunteered for work in Old Town San Diego, where streets were being torn up and recontoured without any archaeological mitigation. Fritz sent me down with Dan Foster, with 3 days to excavate and expose brick and adobe building foundations, and two days to begin a survey in the mountains at Cuyamaca Rancho SP. That was my first opportunity to work with Dan, and to immediately appreciate his enthusiasm, energy, preparation, professional skills, and rock-solid integrity for any job and circumstance the State might throw at us.

In that one week, we went from doing "triage" in a construction zone, to revealing 60+ feet of brick and cobble wall foundations, to doing public interpretation of our efforts for visitors and local colleagues. Then we shifted to exploring mountain meadows, relocating rock art sites and quarries, and orienting to a new landscape with geology and vegetation like the Sierra that felt familiar. Then when it snowed heavily, we shifted to museum work, and an inventory of *ollas* and other treasures, some with human remains that had been overlooked in a hasty reburial snafu the week before. In Cuyamaca, that 2-day reconnaissance led Dan to produce a two-volume inventory of the park's cultural resources, with some of the best site records, maps, and survey report yet produced by a state park archaeologist.

CDF Calls and Collects Six weeks after I began working for DPR, CDF was beginning to see invoice charges on their interagency agreement, but had not seen the face of their archaeologist (me). On March 23, 1981, while Fritz was away, CDF's Audley Davison called up DPR's Mike Doyle and told him that CDF required the archaeologist to be in *their* office, taking assignments from *them*, with DPR providing the professional supervision. Mike told me to report to CDF the next day in the Resources Building, which I did.

From the very first day, CDF was more cordial, courteous, organized, and business-like than anything I encountered in state parks, before or since (sigh). Audley Davison was my supervisor, a wonderfully direct, wizened and straight-talking if salty old hand. He wasn't sure about the value and importance of sending a young man like me traveling hundreds of miles around the state, just to look at and write up things like a scatter of stone flakes. These chips, he knew, might be the tool-making waste, discarded briefly and long ago, by people we'll never really see or know as human beings. Audley wasn't sure about the significance of documenting grinding holes, either. I agreed with him that all bedrock mortar (BRM) sites aren't always all that important, although it's useful and worthwhile to record them, and I was real good at that, having recorded hundreds of BRM sites on the Eldorado. I said something forgettable about the potential value of flake scatters. Audley still wasn't convinced, but he accepted my answers, and put trust in my judgment from then on. He also knew CDF had to do something more in the area of archaeology, which at that time was primarily limited to activities on state forests.

Resource Management Programs All my project assignments came from three staff with program responsibilities in CDF's Resource Management Division. Division Chief Ken Delfino was always courteous, supportive, and well organized, though the demands on his time gave us few opportunities to talk. Simply put, Ken made sure that I had what I needed to do the work CDF needed to get done. I shared a tiny office with Bill Morrison, an assistant urban forester under Jim Geiger's supervision. Even though it was a windowless converted closet on the 15th floor, it was great. We were young, enthused, optimistic, and we were often in the field. Tess Albin-Smith supervised two clericals (Nancy Rogers and Tosh Balaba), two wonderful women who helped by typing up (on typewriters, pre-computers) all the site records, survey reports, and project review forms by the dozen each week. They even typed up time sheets and travel claims. I would never again see this level of quality clerical support in my 20 subsequent years at state parks.

THPs Timber Harvest Plans to review came to me from Hal Slack, a genial and overworked Forester III at Headquarters. He was skeptical about any new resource concern that might impede or restrict a process that was already contentious and charged with suspicion among industry owners, state regulators, and environmental advocates. I got along fine with Hal, and earned some goodwill by doing a survey of a Girl Scout camp in Amador County after my regular state hours one day. (That job yielded a new site with over a hundred bedrock mortars and a midden, and a brief report that helped them redo a waterline that summer.)

Most of the THPs got the green light from me, without any field review. This was an unavoidable outcome dealing with about 1800 THPs per year, with half in the North Coast Ranges. It also fit my biases that came from the Eldorado, where we spent most of our non-driving field work time actually recording new sites. (Much less time was spent walking the woods between sites racking up negative data for the coverage map.) The paper review was based on my judgment, input from the Registered Professional Forester (RPF), and a records check (blessedly) by the regional information centers of the SHPO. Making sure the RPF contacted the Information Center for a records search was the single best insurance policy for protecting known sites, and identifying the most sensitive areas for other sites. This practice, which was already partially in place when I arrived, also provided a stable, dependable income stream for the chronically under-funded Information Centers. If I recall correctly, our wholesale, state-discounted review price for work by Sonoma State staff was under $7 per THP in 1981.

Up in southern Humboldt County near Honeydew, several locals were objecting to a series of harvest plans without much success. Claims of endangered wildlife sightings, rare plants, and sensitive riparian habitat had all been investigated and addressed or discounted. Then claims about new arch sites began to surface, and I was asked to check them out. The CDF forester drove me out from Garberville past some of the wettest, lushest, most productive pot-growing areas in California. We were joined by one of the concerned citizens, who gladly led us to discovered "sites" where log landings and road junctions were planned. At one "site" the supposed flakes turned out to be serpentine, apparently salted in recently, perhaps from road base elsewhere. Reports of house pits depressions were totally lacking in substance. One supposed village site was at the silted over confluence of two tiny ephemeral draws, surrounded by 100%+ slopes, with maybe 80 square feet of usable space (like my cubicle), and rarely exposed to sun. It was deep in the sale area, a tough hike, and a most unlikely a place for a midden. I was disappointed to have nothing to record. Word got out that CDF would insist of verifying any claimed arch sites in THPs. Thereafter, objectors to THPs looked for other barriers to raise.

This experience left me vulnerable to amazement the next time house pits were reported during THP review. I was asked to check out a property in Mendocino County, NW of Ukiah, where redwoods and oaks were in transition. The CDF forester and I walked in a half mile, expecting to meet up with the concerned citizen, an adjacent property owner. He walked up the creek from the opposite direction, full of gregarious enthusiasm and anxious to show me a village site. It was Mark Gary. He led us to a midden with a half dozen clearly defined house pits, clearly bermed, with an abundance of fractured stone and debitage all around. I was delighted and overwhelmed. I had been fooled before in the woods, and these were the first real housepits I had a chance to record. Mark had already begun to map the site, and measure the features. We did our best to fill out a site record with his help, and to "sanctify" the area as safe from any silvicultural harm. Already an enthusiast for archaeological discovery and protection, Mark Gary became a terrific ally of CDF in the THP process, and later joined CDF as a staff archaeologist.

<u>CFIP Projects</u> The most enjoyable forestry projects to support were state-funded by the new California Forest Improvement Program (CFIP). Tess Albin-Smith gave the project descriptions, with much more flexibility to schedule field work where it looked appropriate. The landowners were friendlier - from curious to collaborative - and the sites were often lower in elevation where water and rolling terrain made the land more habitable, then and now. A professional forester still had to work up a reforestation plan, but with lots more discretion of locations and silvicultural treatments.

On one CFIP project above Auburn, I was delighted to meet Richard Simpson, ethnographic filmmaker and photographer. Archaeologists and anthropologists know him best for his book *Ooti* (1977) which richly documents the southern Maidu techniques of processing acorns. Richard filmed the late Lizzie Enos on the land that his mother owned, using Kodachrome film that was tinted sepia for an antique image effect! The land where Lizzie had gathered and pounded acorns had been cleared generations earlier for pasture. The Simpsons were now looking to restore some forest stands, and to better manage the mosaic of habitats in their small landholding - a classic CFIP project.

Another memorable CFIP project took me east of Nevada City, where two women were homesteading on 25 acres at a handsome stream confluence. We were on the same counter-cultural wavelength for awhile, and they were wondering how I could leave the Sierra foothills

to work in the big city out of a downtown high-rise. Given my love of the outdoors, it did seem a bit incongruous. They invited me to stay for dinner which was sorely attractive, or to come back on the weekend to see and explore additional sites they knew. I sensed I would soon be in over my head. It was great to meet people who truly loved their land. But my commitments were to build up a program, create an image of probity, and land a full-time government job.

State Forest Work The third priority for program support was to survey and document timber management compartments and sale areas for the eight State Forests managed by CDF. For this I reported to Cliff Fago, a quiet and dedicated Forester III who was methodical, precise, and willing to support what the rules (or bosses) required. I made several trips to the flagship 51,000-acre Jackson Demonstration State Forest near Fort Bragg. Alas, I usually had very little to show for my efforts slogging through the second or third growth redwood forests there. Glenn Farris had done a great job on his previous surveys there, and the overview by Bingham and Levulett (1978) was particularly helpful. The best known ridegetop sites such as Three Chop Village had already been well surveyed (but not yet excavated). A similar experience befell me at 9,000-acre Latour State Forest northeast of Redding. There among the distant red fir stands, remote from any highway, I recall feeling lucky to have found a couple small historic camps with split cedar shakes.

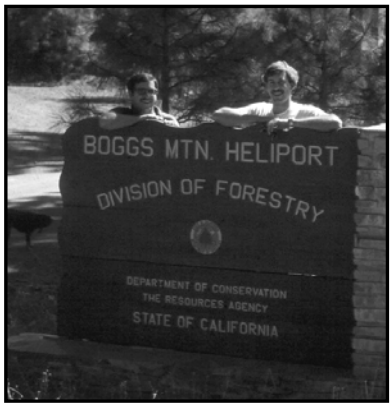
The survey work on State Forest lands was similar in many ways to my experience with the US Forest Service. Timber sale packages came with long lead times, completed records searches, with good maps and project descriptions prepared by knowledgeable foresters. Being the first archaeologist on many state-owned land parcels seemed fun at first. But I soon realized how much tougher it is to find archaeological sites in the Coast Ranges than the Sierra Nevada. It's much more difficult just to move about and see dirt in a second-growth coast redwood forest. Landform stability is more questionable, so hillsides are more erosional, and stream environments are more depositional. The apparent paucity of archaeological resources in many areas meant discovering something new and interesting would take work, persistence, and luck. The real downside of State Forest inventory and discovery tasks was the prospect of working alone for a week at a time away from home, not easy for an extravert.

Prior to arrival at CDF, Glenn Farris had completed two excellent survey reports for timber sales on the Jackson State Forest (the word Demonstration was added later), and another on Mountain Home. Glenn also produced two well-researched overviews of these forests, including prehistoric, ethnographic, and historic land use patterns, sites, and sensitivity modeling. That set a high standard for field work and reporting that subsequent work was expected to follow. Those reports also established credibility for professional archaeological research, leading to bureaucratic acceptance and some understanding within CDF. Fears and worries among foresters that we would obstruct projects, waste money, and consume inordinate amounts of support staff time were largely assuaged. They still had doubts sometimes that we would find anything important within their projects, and frankly so did I, but there was respect for our willingness and commitment to get out on the land and take a look.

For esthetic beauty, cultural interest, and for unique silvicultural stewardship, my favorite area was Mountain Home State Forest above Porterville in Tulare County. It felt familiar to be recording bedrock mortars and flake scatters during summertime in the yellow pine transition zone. Mountain Home also has several intriguing large basin features set in granite, deep bowls that anecdotally had been used in ethnographic times for water storage, fires, and food processing. They were similar in size and shape to the glacial moulins on the Mokelumne River

at Salt Springs (elevation 4500'), but they were clearly not glacial or cultural in origin. Not all showed signs of cultural use, or occurred near other findable remains of prehistoric activity. Like some rock art, these are features that retain a bit of mystery and uncertainty, which was stimulating to the mind while filling out the usual forms.

The other wonderful aspect of Mountain Home is the beauty and visibility of the Sierra redwood, my favorite woody species. This fast-growing redwood adds huge amounts of volume its entire life, which can be thousands of years. For the first 75 years, it's also more upwardly mobile than any other vascular plant on earth, with a pointed top. After 75 years, the crown takes on a more rounded form, and it is these trees that have protected status in the State Forest. The younger redwoods, and those of other species, were managed with sustainable, renewable production and conservation values in mind. The effect was a more open landscape, with tremendous scenic vistas of the big trees throughout this 9,000+ acre forest.



Jim Woodward and Dan Foster at Boggs Mountain in 1981.

There is no better place in the Sierra to photograph, view, and appreciate this fast-growth over-achieving conifer. State and national parks no longer seem to care for or consider optimal visitor esthetics, having ceased efforts to control brush and undergrowth and restore vista clearings. This was pointed out to me by my first mentor at state parks, the late Fred Meyer, who continued to advocate both prescribed burning and vista clearing at Calaveras Big Trees. Fred had studied under Frederick Law Olmsted, Jr., in the 1950s, and had worked also to acquire Mountain Home as a state park. State legislation then required matching funds for any park acquisition, which Mountain Home did not have. Even though this area has outstanding park-like qualities, it was acquired directly as a state forest, partly to repay the state for the capital acquisition costs, and partly to protect it in public ownership while making it accessible for use and enjoyment. In my view, CDF has done at admirable job in all respects, though the site is unknown or unappreciated by a vast majority of Californians.

One of my last field projects in September 1981 was a survey of Boggs Mountain State Forest in Lake County, north of Mt. St. Helena. By then I was committed to taking a promotion in time base and rank to become a State Archaeologist II with state parks. Dan Foster joined me on the Boggs Mountain survey, picking up on that project. More importantly, Dan quickly picked up on CDF's organizational nuance, style, and culture, and asked every searching, probing question imaginable about doing archaeology with CDF. I was totally confident that Dan would be a great match and a tremendous addition to CDF's resource management staff.

<u>Aviation Archaeology</u> My seven months with CDF were the most productive and satisfying seven months of my 25-year career in public service. A big part of this joy was flying, truly winging it around the state. In 1981, I was still single and living with my dad in El Dorado County, at Cameron Park airport. We had a Cessna 182 parked under the house. (I learned to fly when I was 14, soloed when I was 15, earned a pilot's license when I was 16, and an instrument rating by age 18.) In my second week with CDF, the Aviation hierarchy in fire fighting management helped me complete the paperwork and a tough check ride at Executive Airport that would let me fly my plane on state business. The state reimbursement was 28 cents a mile, equal to $33.60 an hour. This almost covered my operating costs, when gas cost $1.40 a gallon. I lost a

little bit on every flight, but I made up for it in volume - especially experience and adventure.

With help from my logbook, I recall flying 52 hours on CDF business, landing in Montague, Garberville, Willits, Fort Bragg in the NW; Fall River Mills, Susanville, Chester, Oroville, Sierraville, Nevada City, and Auburn in the NE; and San Andreas, Lodi, Turlock, Fresno, Porterville, Watsonville, Monterey to the south. CDF foresters in the regions made me feel especially welcome and appreciated, meeting me at rural airports, driving out to projects, coordinating with landowners and private RPFs, and helping with field inspections. For repeated help in this regard, I was especially indebted to Larry Blackman and Doug Wickizer (then in Redding), Bill Draper (Georgetown), Jim Purcell (Ukiah), and Bill Richards (Fresno). Traveling with these gentlemen, and also seeing these private lands from the air, opened up some remarkably beautiful, productive, and diverse forest areas that few are privileged to access.

I also owned a small 50cc motorcycle that I could take in the plane if I took out the back seat. So on a few opportunities, I could buzz in and motor out to a project without a ground crew. One flight to Foresthill was especially fun and efficient: It was only a 12 minute flight each way, with a 2 mile ride on that Divide. CDF also generously supported my participation in professional meetings in Bakersfield and San Diego, tied in with field work enroute.

Reflections and Regrets By the third quarter of 1981, CDF was ready to commit to a full time relationship, and so was I, and I was reachable on a promotional list to be a State Archaeologist II. And then State Parks, my nominal employer, offered me an identical position doing survey and inventory work in their development division, mainly to help with park general plans. I weighed the pros and cons of working for either Department. CDF's Frank Bechler warned me, based on his audit experience, of how DPR was prone to terrible mismanagement and decentralized disorganization.

I expected that parks would provide more opportunities for vertically integrated archaeology—from survey work to excavations to lab work to publications and public interpretation. (That proved to be true, but only rarely.) I also believed that the working environment in the parks department would be more collaborative and team oriented. (I'll always relish this initial misconception. It usually took hard work and luck to create real teamwork there.) With some humility, I did not see how I could keep up with the growing workload at CDF. Travel had its own imperatives, and I had it easier than most. But it was easy to fall behind on site records and survey reports. CDF was clearly well managed, appreciative, and very much in need of a pragmatic, adaptable, and energetic archaeologist (or several!).

By the time I committed to the promotion with parks, forestry was committed to filling a full-time position with an archaeologist. Audley Davidson was particularly concerned that CDF not be saddled with an academic dilettante, on obstructionist preservationist, or some narrowly competent specialist. What CDF needed was a generalist, a field archaeologist with strong surveying experience, good communication and social skills, and an ability to be self-managing and loyal to a far-flung resource limited enterprise. Audley wanted someone with a pragmatic mind-set, with emphasis on timeliness, professional integrity, discretion and reasonableness, and not perfection. I knew just the man, and he was reachable on the Archaeologist II list. That gentleman, Dan Foster, took this opportunity and turned it into a long-term success for CDF.

My one regret involves an opportunity that came my way in 1990, when I served as president of the Society for California Archaeology (SCA). One of the awards the president gets to hand out

is for conservation archaeology in public service. I believed Dan Foster and the CDF Archaeology Program was already meritorious and deserving in this regard. I knew that hundreds and hundreds and of important sites had been discovered, documented, managed, and "saved" through CDF programs, a tremendous contribution throughout the range of private and state-owned forested lands. I knew CDF had the best program ever in the west for training and certifying non-professional archaeologists who could identify, record, map, and protect sites while developing plans for timber management. I knew that CDF had strongly developed both statewide and regional capacities to manage cultural resources in staffing, procedures, outreach, and good will. And I knew that CDF had done outstanding leadership work in several areas, including thematic treatments of historic lookouts, integrated use of Information Centers, and numerous publications and professional presentations. Alas, in 1990, I thought Dan and his program were still young and on-track for continuous over-achievement, and that the deserving SCA award recognition would certainly come in good time. I fell victim to tradition in the awards, which tend to emphasize those who have achieved old age and acquired some life-threatening condition. I hope SCA will soon remedy my oversight.

In one major but pedestrian way, I realized then and now that I was a poor match for the demands of a CDF archaeologist. As much as I love hiking and outdoor study, I am terribly slow going uphill. This has always been my biggest aerobic deficiency. Even today, as I take boys from my son's Boy Scout troop over mountains and ridgetops, I am the slowest on foot on trail or off, always trying to see everything within view.

IX. CONCLUSION

The efforts to protect archaeological and historical resources through the CDF Archaeology Program have been highly successful. The program's history is evidence of a unique and creative approach to the Department's environmental compliance responsibilities. With the broad and ever broadening responsibility base placed upon the little program shoulders, its ability to sell, and when necessary, enforce preservation regulations and laws in California is unmatched. Hundreds of new sites are found, recorded and protected each year. A heightened awareness of cultural resources has steadily increased throughout the Department. It has been demonstrated to landowners, RPFs, timber operators and fire control personnel that protecting cultural resources does not necessarily interfere with timber harvest or fire suppression objectives. Where cultural resource protection efforts were formerly met with open hostility, active support has now developed in many areas. By 2004 this work, its accomplishments, as well its missteps, is carried out statewide by six permanent staff, and the dedicated efforts of contractors, volunteers, and just about anybody else willing to pitch in and lend a hand. Indeed, the program's history has been built on a shoe-string. Its eye has always been to the future, and it continues to strive towards improvement in the delivery of preservation efforts for California's irreplaceable heritage.

This chronicle represents an attempt to recount a few of the important events that led to the establishment and subsequent development of the CDF Archaeology Program. A fine example of the program's improvement in the delivery of its preservation effort was the development of the Humboldt-Del Norte Unit's archaeological program. With one staff Associate State Archeologist supplemented by another professional archaeologist working under a series of annual contracts, the Unit is well positioned to identify and protect archaeological and historical sites in the most active timber harvest region of California. To paraphrase a Humboldt-Del Norte Unit forester who quips that the Unit didn't even have archaeology sites until Steve Grantham and Bill Rich got here. Now they are everywhere!

The policies and procedures to protect archaeological and historical resources have been a shared responsibility. The programs and partnerships to accomplish these goals have been described. The major accomplishments of the program have been summarized and some of the people that have contributed to these accomplishments have been mentioned. There are, however, still a few gaps to be filled in the CDF Archaeology Program. With a long view to the future, the program is challenged by such gaps and considers them opportunities for improvement.

Several contributors to Voices have offered suggestions for improvements to the program. Tom King has challenged CDF to consider all cultural resource values during forest management. For many years, Richard Gienger has urged the Board of Forestry to take action leading to increased Native American participation during THP review. In 2003 the Board passed a set of revisions to the Forest Practice Rules which provides Native Americans with more complete information in the initial notice, longer timeframes, a second notice, better maps, and far greater opportunities to participate. We commend Richard for his effort and commitment to help shape this important policy. Historian Bob Colby points out that CDF has no system for archiving historical material and such a program should be established. CDF also has no program to preserve objects or artifacts relevant to the history of the Department such as antique building furnishings, fire

fighting equipment, or apparel. The management and preservation of historic buildings is viewed by some in CDF as an impediment to the modernization of facilities rather than an opportunity to demonstrate an appreciation for the vital role of CDF in California history. Many archaeological sites are damaged during fire suppression activities, but recent efforts to enhance cultural resource protection during wildland fires represent a major step forward. These efforts occasionally result in CDF archaeologists directing bulldozers to go around, rather than through, known archaeological sites, if such planning is possible without impeding or delaying emergency response operations.

The CDF Archaeology Program has made substantial contributions to the identification, documentation, and study of the heritage resources of California. The program has also made considerable strides towards enhancing and enforcing the cultural resource protection regulations of the state. But cultural resource management work is never done; it is an ongoing process. It is important to be open-minded to the reality that the program has been and will continue to be flexible in its efforts to meet the changes, challenges, and opportunities of the coming years. The program has come a long way. It was once a lone Associate State Archaeologist with statewide oversight. It has grown into what Jenkins and Grantham sometimes like to a call our little "archaeological strike team." The underlying tone of its members is always towards improvement. Rules change, perceptions change, as does the political and economic climate. With it we must change, grow, and if we have done our homework, improve. Because "it" was done a certain way before, does not mean it is done that way today or in the future. As more sites are lost through development, urbanization, and other factors, the sites located within California's wildlands become all that much more important. These sites constitute the tangible evidence of our past. They are precious, and once gone, they are gone forever. These little lithic scatters, bedrock mortars, apple orchards, lookout towers, steam donkeys, and other cultural materials jettisoned from the past offer the only opportunity we will ever have to know where we have come from, to know who we are, and to take a glimpse at who was here before us.

Readers interested in obtaining more information are encouraged to visit the CDF Archaeology Program website. From the main CDF home page at www.fire.ca.gov select "Resource Management," then "Archaeology" to be linked to the archaeology home page.

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Table of Abbreviations and Acronyms

AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
AFP	American Forest Products
AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effect
ARARA	American Rock Art Research Association
ARMR	Archaeological Resource Management Report
ARP	Archaeological Research Program at CSU Chico
ARPA	Archaeological Resources Protection Act
BCP	Budget Change Proposal
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BRM	Bedrock Mortar
CAA	Confidential Archaeological Addendum
Caltrans	California Department of Transportation
CAR	Center for Archaeological Research at CSU Bakersfield
CCC	Civil Conservation Corps
CCR	California Code of Regulations
CDC	California Department of Corrections
CDF	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CFIP	California Forest Improvement Program
CHRIS	California Historical Resources Information System
CLFA	California Licensed Foresters Association
CMP	Chaparral Management Program
COALARG	Coalinga Archaeological Research Group
CRHR	California Register of Historical Resources
CRM	Cultural Resource Management
CSU	California State University
DFG	Department of Fish and Game
DGS	Department of General Services
DPR	Department of Parks and Recreation
EIR	Environmental Impact Report
EPIC	Environmental Protection Information Center
FLEP	Forest Land Enhancement Program
FPA	Forest Practice Act
FRIF	Forest Resource Improvement Fund
FSP	Forest Stewardship Program
GP	Georgia-Pacific Corporation
HSC	Health and Safety Code
IC	Information Center
ICPAC	Information Center Procedural Advisory Committee
ICS	Incident Command System
JDSF	Jackson Demonstration State Forest

KCFD	Kern County Fire Department
LTO	Licensed Timber Operator
MHDSF	Mountain Home Demonstration State Forest
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NAAC	Native American Advisory Committee
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NDF	Nevada Division of Forestry
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRDC	Natural Resources Defense Council
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PA	Programmatic Agreement
PALCO	Pacific Lumber Company
PHI	Preharvest Inspection
PRC	Public Resources Code
RPF	Registered Professional Forester
SB	Senate Bill
SCA	Society for California Archaeology
SHP	State Historic Park
SHPO	State Historic Preservation Officer
SHRC	State Historic Resources Commission
SIP	Stewardship Incentive Program
SP	State Park
SRA	State Responsibility Area
SSU	Sonoma State University
THP	Timber Harvesting Plan
THPO	Tribal Historic Preservation Officer
UC	University of California
UCLA	University of California Los Angeles
USFS	United States Forest Service
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VMP	Vegetation Management Program
VOMNHA	Valley of the Moon Natural History Association
WPA	Works Progress Administration

Chronology Of Significant Events

1885: First State Board of Forestry created.

1887: Board of Forestry members and assistants given law enforcement powers.

1893: First State Board of Forestry abolished.

1905: Forest Protection Act passed. State Board of Forestry reconstituted. First state forester appointed.

1906: Federal Antiquities Act passed.

1918: Save-the-Redwoods League formed.

1919: The 1905 Forest Protection Act strengthened. Board of Forestry reorganizing. State forester empowered with contracting authority.

1927: State Department of Natural Resources, Division of Forestry created. State Park Commission created to oversee Division of Beaches and Parks.

1931: State Landmark Program established.

1935: Historic Sites Act passed.

1939: California Penal Code makes it a misdemeanor to willfully injure, disfigure, deface, or destroy objects of historic or archaeological significance.

1943: State Division of Forestry begins statewide wildland fire protection operations.

1945: Forest Practice Act passed. State forests authorized. Board of Forestry restructured.

1946: State forester begins registration of timber operators.

1947: New Forest Practice Rules approved by the Board of Forestry.

1948: The California Archaeological Survey established at the University of California, Berkeley.

1951: Revisions to the Forest Practice Act provide enforcement powers for the first time.

1953: History Section established within the Division of Beaches and Parks.

1956: Federal Aid Highway Act allows funds to be used for protecting or salvaging archaeological resources. California State Division of Highways agrees to participate in an archaeological salvage program.

1960: National Reservoir Salvage Act passed. Position of California state archaeologist established. Department of Water Resources begins to participate in state archaeology program.

1961: Department of Natural Resources abolished and the Division of Forestry transferred to the new Department of Conservation. Assembly Concurrent Resolution No. 25 calls for long-range plan to preserve, restore, and interpret historic resources.

1963: World's tallest tree discovered along Redwood Creek in Humboldt County.

1965: California Public Resources Code provides protection for archaeological, paleontological, and historical sites on public lands.

1966: National Historic Preservation Act passed.

1968: Redwood National Park created.

1969: National Environmental Policy Act passed.

1970: California Environmental Quality Act passed.

1971: Forest Practice Act declared unconstitutional. Federal Executive Order 11593 signed. SB 215 creates task force to study state efforts to preserve and salvage archaeological, paleontological, and historical resources.

1972: *Friends of Mammoth v. Mono County* decision expands CEQA coverage to include private projects regulated by state and local governments.

1973: Z'Berg-Nejedly Forest Practice Act passed.

1974: Federal Archaeological and Historic Preservation Act passed. State Historic Resources Commission created. First THP forms issued.

1975: *NRDC v. Arcata National* decision finds that the 1973 Forest Practice Act is subject to CEQA. Interagency review teams established by executive order. Amended Forest Practice Rules developed. THP Task Force established to evaluate the effectiveness of the Forest Practice Regulations. OHP created. California Archaeological Sites Survey established. CDF enters into an interagency agreement with DPR for archaeological services.

1976: Secretary for Resources Claire Dedrick certifies THP preparation and review is functional equivalent of EIR. Native American Heritage Commission created.

1977: Department of Forestry created. *Society for California Archaeology v. Butte County* declares that CEQA applies to archaeological resources. Headquarters Sale delayed by archaeological survey.

1978: California Forest Improvement Program established. American Indian Religious Freedom Act passed.

1979: Archaeological Resources Protection Act passed. Sierra Club attorney petitions Secretary for Resources to decertify the functional equivalency of the THP preparation and review process. Georgia-Pacific Corporation is cited for the destruction of archaeological site CA-MEN-1631. Archaeological training is provided to CDF foresters by DPR Archaeologist John Foster.

1980: Executive Order B-64-80 directs state agencies to inventory, preserve, and maintain cultural resources under their jurisdiction. SB 1652 requires state agencies to establish policies for the preservation and maintenance of state-owned cultural resources. State forest names changed to "Demonstration State Forests." OHP begins computerization of archaeological and historical site inventories.

1981: DPR Archaeologist Jim Woodward provides archaeological services to CDF. SB 720 is introduced to exempt Forest Practice Act from CEQA. Chaparral Management Program established. Kenneth Delfino promoted to Chief of Resource Management. Daniel G. Foster hired as first full-time CDF archaeologist.

1982: SB 856 removes authority of counties to regulate timber harvesting operations. Three archaeological training courses provided for CDF foresters and RPFs. OHP distributes standardized site record forms and handbook.

1983: Formal recognition provided for interagency review teams. CDF approves THP 1-83-464 M. EPIC files lawsuit against CDF and Georgia-Pacific Corporation (GP). Superior Court rules against plaintiffs, but EPIC appeals.

1984: Kenneth Delfino elevated to Deputy Director for Resource Management. Forest Practice Act challenged in court as a backlash from SB 856.

1985: OHP stops performing archaeological review of THPs. CDF archaeologist expands THP review program. Appeals Court rules in *EPIC v. Johnson* case finding that CDF made procedural errors, voiding the THP. CDF issues instructions for compliance with *EPIC v. Johnson* ruling.

1986: Richard Jenkins hired as second CDF archaeologist. EPIC sues to block new THP submitted for GP property. Trust for Public Lands purchases GP timberlands involved in the EPIC lawsuits.

1987: Department of Forestry becomes Department of Forestry and Fire Protection.

1988: CDF Archaeological Reports series initiated. Work begins on Forest Practice archaeological rules package.

1989: Tobias Meadows incident demonstrates problems with CDF archaeological review procedures. State Historical Resources Commission approves site recording handbook. COALARG formed.

1990: Golden Trowel Award established. Regional archaeologist position established in Redding. Native American Graves Protection and Repatriation Act passed.

1991: Board of Forestry adopts comprehensive archaeological rules package to be implemented under the Forest Practice Act. OHP begins revision of site recording system.

1992: State Executive Order W-26-92 issued by Governor Wilson. Dan Foster appointed CDF agency preservation officer.

1993: California Register of Historical Resources created.

1994: Carlys Gilbert hired to fill regional archaeologist position in Fresno. Native American Advisory Committee established.

1995: Mark Gary hired to fill regional archaeologist position in Santa Rosa. New site recording system approved.

1996: CDF enters into Programmatic Agreement between the USFS, SHPO, and ACHP to administer land management projects receiving federal funds located on nonfederal lands.

1997: Carlys Gilbert retires from state service. Linda Sandelin hired to fill regional archaeologist position in Fresno.

1998: Linda Sandelin assigned to supervise archaeological component of the Murphys Forest Fire Station project.

1999: Gerrit Fenenga hired to fill Associate State Archaeologist position in Sacramento. LTO video produced.

2001: Steve Grantham hired to fill regional archaeologist position in Fortuna. Comprehensive Management Plan for CDF properties completed. Mark Gary dies on Memorial Day. Charles Whatford hired to fill regional archaeologist position in Santa Rosa.

2002: Pines Fire spurs development of procedures for cultural resource protection during wildland fire suppression. Native American Advisory Council reestablished. JDSF Management Plan approved, but EIR is challenged. In response to the Pines Fire, all CDF Archaeologists complete Basic FireFighter I Academy and ICS training and are listed on ERDs as Technical Specialist (Archaeologist) resources.

2003: CDF establishes comprehensive policies and procedures for cultural resource review on all CDF projects, and develops a new Programmatic Agreement with the USFS, BLM, SHPO, and Council to address cultural resource policies in response to increased federal funding for CDF projects.

2004: New Programmatic Agreement is signed. Gerrit Fenenga reassigned to support federally funded CDF activities in Southern California. CDF Archaeology Program assigned to participate in development of EIR analysis of heritage resources for the draft JDSF Forest Management Plan.