

## INCORPORATION OF CULTURAL RESOURCE ELEMENTS IN MULTIPLE-SPECIES CONSERVATION PLANNING: VOLUNTEER PARTICIPATION AS A KEY FACTOR FOR SUCCESS

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*This paper describes how two critically important programs have been combined to mutual benefit. One program, habitat conservation, was mandated by government as a response to declining sensitive species. At the same time, public awareness of the natural resources of the county of San Diego prompted requests for information about prehistoric and historic cultural resources. Through education and outreach, volunteers have been incorporated into the county's habitat-conservation program.*

Archaeologists throughout the state are becoming increasingly aware of habitat-conservation planning, which will preserve and manage large tracts of land and key linkages for wildlife. These programs, referred to as Habitat Conservation Plans (HCPs), were designed to comply with federal and state laws to preserve endangered and threatened plant and animal species. Specifically, HCPs eliminate the need for individual permits to take species under the California and federal Endangered Species Acts (ESA). As a result, potentially large preserves are created and managed to improve and maintain high habitat values.

At the same time, these preserves do not necessarily protect cultural resources, although the agencies creating and managing the preserves have their own regulations regarding cultural resources. The California Department of Fish and Game must inventory their preserves for sites eligible for inclusion in the California Register. The U.S. Fish and Wildlife Service must comply with Section 106 and Section 110 of the National Historic Preservation Act, requiring inventory and identification of cultural resources. Local agencies and special districts may have no similar mandates. None of these agencies will see archaeological inventories and cultural resource planning as important to their primary goals of species conservation (although the author of this paper has achieved success in this area by reminding wildlife agencies that prehistoric humans were a significant part of the ecological system).

Archaeologists have an opportunity to become involved in preserve planning and management, and can make cultural resources a key element to wildlife agencies through the use of volunteers and outreach.

This article describes how San Diego County is incorporating cultural resource preservation into HCPs.

The San Diego County Department of Parks and Recreation is responsible for acquiring and managing the portion of the Multiple Species Conservation Program (MSCP) within the unincorporated part of the county. The Board of Supervisors approved the western portion of the plan in October, 1997, and committed to purchase and preserve over 9,400 acres in western San Diego County. The total amount of land in preserves, within the existing MSCP in the western third of the county, will include 172,000 acres. Over 10,000 acres have already been preserved by the cooperating agencies.

A critical part of the project is to prepare Framework Management Plans and Area Specific Management Directives to make sure that the preserves work in perpetuity to maintain species diversity and quantities. To date, the County of San Diego is the only agency that explicitly includes management of cultural resources in that agency's Framework Management Plan (FMP). Management measures include inventory, assessment of condition, condition control if necessary, and stewardship. It is the position of the County that management of cultural resources needs to be explicitly described in an agency's management plans to ensure their protection and integration within overall preserve goals.

The specific language added to the County of San Diego's FMP for all MSCP preserves in its jurisdiction is simple, yet requires action. The following text is from the County's FMP, which is the general guidance

to be followed for the entire Preserve system. Each individual preserve will have its own detailed management measures, including all the particulars on sites and site management at that specific preserve.

### GENERAL MANAGEMENT DIRECTIVES: CULTURAL RESOURCES

All Preserve lands will be inventoried for cultural resources. Cultural re-sources include historic structures, features, and landscaping as well as historic and prehistoric archaeological sites, features, and artifacts. Protection and preservation of cultural resources will comply with County of San Diego ordinances (Title 4; Public Property, Division 1: Parks and Beaches, Article 2, Section 41.113), as well as applicable state and Federal laws.

- A. Inventories shall include a records search at the South Coastal Information Center, and an on-foot field survey, as well as pertinent archival and historical re-search.
- B. Specific management plans and directives will be prepared for each Preserve to preserve and interpret cultural resources.
- C. All management activities within the Preserve, including but not limited to trail construction, placement of fencing and gates, and restoration of habitat will take into consideration potential impacts to cultural re-sources.
- D. No removal or modification of cultural resources shall occur without written approval from the Director of Parks and Recreation, County of San Diego.
- E. Removal or disturbance of cultural re-sources shall not occur prior to completion of an ap-proved mitigation program, such as data recovery or recorda-tion. Pres-ervation in place is the preferred mitigation measure.
- F. Condition and status of cultural resources shall be noted as part of routine monitoring activities, and remedial meas-ures shall be taken if damage is noted.
- G. Site location information will be confidential, and will be available only to qualified cultural resource staff and land

managers. Site locations will not be shown on maps or divulged to the public.

- H. Interpretive programs for Native American heritage, local and regional history, and prehistory will be developed for the Preserve. These may include lectures, walks, kiosks, signs, brochures, and displays, but will not include excavations, collecting of arti-facts, or disclosure of confidential site locations unless an interpretive plan is developed and approved by the Director of Parks and Recreation, County of San Diego. The plan will include direct supervision by a qualified archaeologist approved by the Director of Parks and Recreation, County of San Diego.
- I. Any cultural materials col-lected from the Preserve will be curated at a qualified curation facility.

Funds to acquire the County's share of the preserve lands come from County general funds, as well as state and federal grants. In fiscal year 1999-2000, over \$5 million in grant funds have been obtained, matched by \$3 million in County money. Hundreds of acres have been preserved to date, with thousands more under option or in negotiation.

The strategy that has been pursued has been to create large, linked conceptual preserve areas, incorporating cultural as well as natural resources. The Parks and Recreation Department considers cultural resources within a proposed preserve as an asset; the presence of diverse resources is used as a positive motivation for purchase. So far, the County is working on six proposed preserve areas throughout the MSCP area, containing many significant and diverse cultural resources.

Expanding the existing MSCP preserve, the County is working on the North County amendment area, which will add thousands more acres. Then the County will expand to the east, eventually encompassing the entire jurisdiction. This proposed preserve system will require more than 30 years to complete.

At the same time that the County must acquire preserve land, the state and federal agencies have similar commitments. The Department of Fish and Game has acquired 4,800 acres near Jamul as part of their preserve. Water districts and cities also have

commitments to reach and preserves to create. Eventually the preserves will link up, so it is critical that management practices are as similar as possible (given the different missions of the various agencies).

The County has taken a leadership role in making sure that cultural resources are part of the preserve management plan. Cultural resource inventories and conservation have been incorporated into the County's framework management plan, and specific preserves will have cultural resource components included. This was possible because of several important factors:

1. **Leadership commitment from a major player in habitat conservation.** The Parks and Recreation Department had to take leadership for the inclusion of cultural resources in the planning process, and had to include this element at every step: in meetings, in subcommittees, and during field trips.
2. **Trust building among team members.** Strident insistence on including cultural resources in HCPs will not work. There is no ESA for cultural resources. Understand that the biological species are driving the project and do not try to mislead or be sly about the role of cultural resources. Be collaborative, not confrontational. The County has invited Fish and Game and the Fish and Wildlife Service to joint cultural resources training for administrators and field staff; the first session was completed during the winter of 2000.
3. **Incorporation of an interpretive element.** Agencies need to see a benefit to including this element in the planning process. Everyone likes archaeology, but many people are suspicious about habitat-conservation planning, because some see it as a taking of private property rights. Archaeology can be used to bridge the gap. Displays, signs, walks, tours, and brochures are used to show the relationship of the cultural resources to the preserved landscape.
4. **Creation of a stewardship group of volunteers.** Cultural resource conservation within preserves will never be funded at the same level as biological resource conservation, at least not until all needed land is acquired. As long as there

is sensitive habitat to be purchased and preserved, no agency will pay for archaeology because it is not mandated by law (remember, there is no Endangered Species Act for archaeology). However, volunteer groups can be created to inventory preserves and act as stewards to monitor resource condition. These groups can be composed of local citizens and special-interest groups, which also create local ownership of the preserves and educate the public about archaeology.

The County of San Diego Parks and Recreation Department has created such a group of volunteers as a pilot study. An integral part of the creation of this group was a strong training program. Technical and ethical training, provided under the sponsorship of the County of San Diego, has been given by local professionals and is mandatory for participation in the project. With over 100 volunteers signed up and trained, the team is moving into the stewardship role at Volcan Mountain Preserve. In the coming year, the group will begin surveying other preserve lands, and will incorporate an outreach and interpretive element.

The Volcan Mountain Preserve Archaeological Survey (VMPAS) is a volunteer effort to record and monitor the prehistoric and historic archaeological sites within the Preserve and adjacent public ownerships. Volcan Mountain Preserve ranges in elevation from 2,000 to over 5,000 feet (610-1525 m), and contains some of the most rugged terrain in southern California. The home of sensitive plants and animals, the Preserve features mountain lions, rare oaks, cactus, and wind-twisted manzanita.

The project is sponsored by the San Diego County Parks and Recreation Department, and involves volunteers from the Society for Amateur Science, Volcan Mountain Preserve Foundation, San Diego State University, San Diego Natural History Museum, California Department of Fish and Game, and San Dieguito River Valley Park. The more than 100 volunteers have surveyed over 4,000 acres of rugged, open-space park land in remote eastern San Diego County, California.

The County of San Diego, as the majority property owner within the Preserve, took the lead in inventorying and recording the cultural resources. Land within the Preserve is also owned and managed by Fish and Game and the San Dieguito River Park Joint Powers Authority. Beginning in 1991, the VMPAS began to systematically identify and record archaeological sites and features within public

ownership on the mountain. The VMPAS provides a rare opportunity to study entire settlement systems, because the prehistoric archaeological sites are located within watersheds that are included in the Preserve. Therefore, VMPAS has identified major trade corridors from the Late Prehistoric Period, networks of defensive sites guarding trails, and special-activity sites for processing seasonal food sources.

The VMPAS provides extensive training to volunteers. The training typically is done in the fall and winter months, since Volcan Mountain is noted for severe winter weather; many a hardy survey team has been chased off the mountain by sudden rain, wind, and snowstorms. In September of 1998, expecting seasonally warm, calm weather, the survey team near the summit encountered heavy fog, strong winds, and bone-chilling mist.

Training includes technical as well as ethical guidance. Volunteers receive a short course in San Diego County prehistory, history, and archaeology. They are taught how to record, map, and describe a wide variety of site types and features. In addition, they are trained in the ethics of archaeology (look but don't touch; if you pick it up, put it back where you found it), not only for themselves but so that they can become advocates for the preservation of archaeological materials in their communities.

All of the prehistoric sites found represent the Late Prehistoric cultural period (A.D. 0-1750 [2000-250 B.P.]). This cultural group is identified as Desert Kumeyaay in the eastern part of San Diego County. The sites discovered to date are of two broad types: semi-permanent villages and special activity camps associated with the villages. Most of the village sites are in Arkansas Canyon, a broad, oak-lined valley extending from San Felipe Valley in the desert to the summit of Volcan Mountain. Crossing several ecological zones, Arkansas Canyon provided food sources ranging from desert mesquite, a staple legume, to the ubiquitous acorn, which provided the basis for California Native American population growth over thousands of years. Native grasses, seeds, herbs, and animals are also abundant in the canyon. Arkansas Canyon was used as a major trade corridor from points east to the southern California coast. The sites are scattered with obsidian flakes, traded into the area from the north and east.

At higher elevations, the summit of Volcan Mountain provided special resources, which could be exploited seasonally. Most of the sites in these areas are special-activity camps, established for a season or

longer to gather and process acorns, pine nuts, seeds, and other seasonal resources. The sites on the mountain also contain evidence for ceremonial and defensive activities. Cupules (ceremonial pits that were ground into bedrock outcrops), rock rooms, specialized grinding stones, and hunting blinds are located on the mountain ridges. A unique site contains rock rooms and rock walls created on an artificially leveled ridge. The discarded rock pile left over after construction of the platform is located below the crest of the ridge, and is heavily overgrown with mature trees. Another site features rock outcrops that are peppered with deeply engraved cupules.

The milling features found on Volcan Mountain are unique to this area. Instead of the typical bedrock mortars, basins, and slicks, used to pound acorns and seeds into fine meal, Volcan sites feature complex, compound systems of grooves, pits, large mortars, rings of ground stone, and sets of uniform-sized basins. Volunteers spend much of their time drawing and mapping these features, often using their hands and fingers to feel the connections between the grinding surfaces.

In fact, it would be tempting to state that every prehistoric site on Volcan Mountain has milling features associated with it. Volunteers soon learn to scout out the numerous boulders and bedrock outcrops, and are usually rewarded for their search by the discovery of mortars, basins, and slicks. As the team continues looking around the rocks, they will find flaked stone and pottery. If a narrow interpretation is made, it would seem that all the campsites had associated milling features. An archaeologist might be tempted to draw a circle around the bedrock outcrops or boulders and the scatter of flakes and pottery, and call this area a "site." However, the major advantage of surveying a landscape like the thousands of acres of Volcan Mountain Preserve is that seemingly separate scatters of artifacts, milling features, and other finds can be seen correctly as elements of a larger, spatially and temporally complex pattern of interrelated settlement and resource use. It is this pattern that the survey seeks to interpret and discover.

One important artifact found during the survey is a projectile point from near the confluence of Arkansas Canyon and San Felipe Valley. Discovered by SAS member Pam Scott, the isolated point lay on a rocky ridgeline far from any camp or village site. It has been identified as a type of Elko-eared projectile point, which dates in the Great Basin between 1200 B.C. and A.D. 600 (3200-1400 B.P.). Most of the other points

found during the surveys have been more typical triangular points. The Elko-eared point supports the use of the area as a trade corridor over a long period of time.

The historic archaeological sites found on the mountain are also of great interest. Besides the logging that occurred on Volcan Mountain in the middle part of the 20<sup>th</sup> century, there were earlier uses of the area, including construction of rock walls and stock ponds. The earliest historic-period site is the 1890s settlement of Arkansas Canyon by the Grand family. Remains of their homestead include a beehive oven, an adobe house, and a rock barn and storehouse. Called the Grand Winery, it is unlikely that wine was produced here. Historian Judy Swink is conducting research on the family and on the site. In 1928, a series of visual airway beacons were established on peaks throughout the U.S. to guide aircraft. Volcan Mountain was one of the peaks identified as an aircraft hazard (there are still unfortunate crashes into the mountain, due to unpredictable desert updrafts). Although the original beacon is gone, its tower and supporting features still exist on the summit of Volcan Mountain (5353 ft/1632 m).

An enigmatic cabin foundation and chimney were recorded near the summit, at the 5000-ft (1525-m) elevation. Local lore was that the cabin was inhabited by an astronomer evaluating Volcan Mountain as a potential location for a telescope. According to Bradford Behr of Caltech, Volcan Mountain was on the short list of locations that were tested between 1928 and 1932 for placement of the Hale telescope that ended up on Palomar Mountain. Behr related that the astronomers returned to the potential sites many nights through-out the year to evaluate conditions, and may have been in residence. Certainly, given the extreme weather on Volcan Mountain, shelter would have been necessary.

Having completed the inventory of land acquired so far, the VMPAS is moving into a stewardship phase, using a monitoring protocol developed by San Diego County Archaeological Society. The monitoring phase will identify potential impacts from off-trail use, and from natural forces. Volunteers, under the direction of a professional archaeologist, revisit previously recorded archaeological sites and note whether any damage has occurred to the resources. This information will be used by the County to monitor trail use and evaluate the potential for impacts to cultural resources. The County plans to expand the program beyond Volcan Mountain Preserve, providing an opportunity for volunteers to work on archaeology

projects throughout the MSCP preserve system. The successful incorporation of volunteers into the inventory phase of the VMPAS supports the expansion of this program into other preserves.

The successful collaboration with Fish and Game during the VMPAS pilot program provides an encouraging "early win" in developing positive relationships with agencies whose primary mission is habitat and wildlife management. The VMPAS program has also benefitted from Fish and Game's familiarity with the natural resources of the Preserve.

Over time, cultural resources can become an integral part of HCPs. However, commitment from a lead agency and lots of volunteer hours will be needed. The beginning signs of success in San Diego County should be heeded by other archaeologists in the state, particularly by avocational and institutional groups.