MEMORANDUM

Date: May 30, 2000

To: The Honorable Chair and Members
    Pima County Board of Supervisors

From: C.H. Huckelberry
      County Administrator

Re: Overview of Traditional Cultural Places in Pima County

Background

The attached document entitled Overview of Traditional Cultural Places in Pima County, contains two reports that help to develop the Cultural Resources Element of the Sonoran Desert Conservation Plan. The first is by authors from Statistical Research Incorporated (SRI). It provides background information on the definition and application of the traditional cultural places designation under the National Historic Preservation Act. The second report is from the National Forest Service, and it expands on the first with examples of how traditional cultural places can be considered as part of land management planning.

Definitions

Culture is defined in the National Register to mean:

- "Traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the people of the nation as a whole."  (SRI report at page 2.)

Traditional Cultural Places (TCPs) were defined in the 1993 National Register Bulletin 38 as those places that are:

- "eligible for inclusion in the National Register because of their association with cultural practices or beliefs of a living community that (a) are rooted in the community’s history, and (b) are important in maintaining the continuing cultural identity of the community."  (SRI report at page 1.)

Examples of traditional cultural places can include places or properties that are valued by urban, rural, or Native peoples. The authors of the attached report cite these examples:

- "a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;"

- "a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;"
Overview of Traditional Cultural Places in Pima County
May 30, 2000
Page 2

- “an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;”

- “a location where Native American religious practitioners have historically gone, and are known to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and”

- “a location where a community has traditionally carried out economic, artistic, or other cultural practices important to maintaining its historical identity."

Evaluating traditional cultural places can be difficult since not all such places have a visible manifestation, yet eligibility to the National Register of Historic Places requires use of the property for at least 50 years, integrity of the property, and the area proposed for registration must meet one or more of the criteria below (from page 3 of the SRI report):

- “association with events that have made a significant contribution to the broad patterns of history [including oral history];’

- “association with the lives of significant persons in the past;”

- “embodiment of the distinctive characteristics of a type, period, or method of construction, or representative of the work of a master, or possession of high artistic values, or representative of a significant and distinguishable entity whose components may lack individual distinction;”

- “a history of yielding, or potential of yielding, information important in history or prehistory.”

Traditional Cultural Places in Pima County

Two traditional cultural places within Pima County are listed in the National Register of Historic places:

- the El Tirañito shrine in Tucson’s Barrio Historico; and

- I’itoi Mo’o, sometimes called Montezuma’s Head, in Organ Pipe Cactus National Monument.

The United States Forest Service, to prepare for revisions of the Coronado Forest Plan, is conducting studies together with members of the Native American community in order to address issues of traditional cultural properties. A briefing paper on this effort is attached. Citing Forest Service assessments, SRI identifies these general categories that might be designated as traditional cultural properties upon further review (SRI report at page 6):
Overview of Traditional Cultural Places in Pima County
May 30, 2000
Page 3

- Archaeological sites (Hohokam, Salado or Animas phase sites, and sites with associated burials)
- Traditional community sites (powwow or dance grounds)
- Ceremonial sites (Baboquivari Mountains)
- Historic event sites (battlegrounds)
- Traditional use areas (agave roasting pits)
- Agricultural fields (terraces, boundary markers)
- Shrines (rock rings, rock piles or cairns)
- Petroglyphs, pictographs, and geoglyph sites
- Caves and peaks (Sentinel Peak, Rincon Peak, Baboquivari Peak)
- Mineral sources (especially minerals used in paints)
- Waterways and healing waters (streams, springs)
- Plant communities (multiple-use plants for food, tools, medicine and rituals)
- Animal habitats
- Bird-nesting and roosting areas.

Trails are also identified as important to the earliest residents of Arizona and Sonora. A map of trails used from 1687 to 1711 by Native Americans is found on the next page. The Forest Service report expands the discussion of traditional cultural places by providing a summary of southeast Arizona history, and summaries of existing information on uses of Forest lands in the past by groups including the Chiricahua Apache, Western Apache, Tohono O’odham, Akimel O’odham, Hopi, Zuni, Yaqui, Mexicano, and Anglo-American residents.

Conclusion

The potential existence of traditional cultural properties in Pima County, and the small number listed in the National Register of Historic Places, suggests that a more extensive survey effort is called for by government land managers, including local governments. Partnerships with Native American resource experts, and a respect for what the authors describe as the privileged character of traditional knowledge, are necessary components of cultural property research. The next stages of developing the Cultural Resource Element will involve conducting a traditional cultural properties assessment for consideration as part of the Sonoran Desert Conservation Plan.
Indian Trails of Pimería Alta 1687-1711.
Regional Synthesis of Cultural and Historical Resources

Pima County Sonoran Desert Conservation Plan

Part I - Overview of Traditional Cultural Places in Pima County

Submitted by

Statistical Research, Inc.
P.O. Box 31865
Tucson, AZ 85751

Part II - Overview of Traditional Cultural Uses & Traditional Cultural Places
In Pima County and the Coronado National Forest

Submitted by

Coronado National Forest
300 West Congress St.
Tucson, AZ 85701

May 2000
Overview of Traditional Cultural Places in Pima County

Rebecca S. Toupal and Stephanie M. Whittlesey

Pima County and the desert lands surrounding it have a rich ethnic history dating back many thousands of years. The oldest inhabitants of the region are the Native Americans, such as the O’odham and Apache peoples, who were living here when Spanish explorers first set foot into this desert country. Other indigenous peoples, including the Yaqui, moved into what is today Arizona from original homelands elsewhere. The settlers of European, Asian, and African origin who came into the region much later brought with them religious, military, mining, and ranching aspirations that differed from the traditional uses of Native Americans homelands. The region, consequently, has many traditional use areas, some of which have been forgotten in the mists of time and others that are known primarily or solely to the ethnic groups associated with them.

This brief review provides information on the types of traditional use areas in Pima County that may be considered as Traditional Cultural Properties, or Traditional Cultural Places, (TCPs) and as such may be eligible for protection under the National Historic Preservation Act (36 CFR 60.4). After defining and discussing TCPs and criteria for evaluation, we present information on some known TCPs in Pima County and the kinds of potential TCPs that may be identified in future research.

It is important to recognize that the issues of identifying, documenting, and preserving TCPs are complex, and cultural resource managers have grappled with them since the publication of National Register Bulletin No. 38 in 1993. Cushman (1993:49) has described these issues well. Legal, social, and political considerations are involved, and there are many practical concerns as well. Perhaps most significant, in many cases conflicts between cultural resource managers and traditional groups arise because of differing cultural values, or in Cushman’s words, collisions between different and separate worlds. For these reasons, our overview of TCPs in Pima County does not tackle the many considerations that are involved or attempt to adjudicate among differing cultural values. We present a simple review of what is known about TCPs and how we might best predict the kinds of properties that represent TCPs, although underlying concerns are mentioned in our review.

What are Traditional Cultural Places?

Although we often tend to think of such areas as the sole purview of indigenous peoples, we should be sensitive to the wider definition of TCPs in terms of the cultural practices or beliefs of any living community. National Register Bulletin 38 defines potential TCPs as “eligible for inclusion in the National Register because of their association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1993:1).
The National Register programs define "culture" rather broadly as "the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the people of the nation as a whole" (Parker and King 1993:1).

Examples of TCPs include the following, taken from Parker and King (1993):

- a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historical identity.

As these examples demonstrate, not all TCPs will have a material manifestation (Sebastian 1993:23). Some readily visible landforms or landscape features, such as mountains or springs, may be associated with an event or person but not have human modifications or associated artifacts. Others are simply "empty" spaces. In these cases, as Sebastian (1993:22) points out, the historical importance of such properties can only be evaluated in terms of the oral history of the concerned community and its beliefs, customs, and lifeways. Intangibility is thus a unique characteristic of certain TCPs that distinguishes them from other types of eligible properties (Parker and King 1993).

Evaluating Traditional Cultural Places

- As Sebastian (1993:25) has noted, TCPs are treated much the same as other kinds of properties when determinations of eligibility are made. The use of the property must date back at least 50 years old, unless it is a unique or outstanding property. It must have integrity, and it must meet one or more of the criteria of eligibility. There are four criteria for evaluation of eligibility to the National Register of Historic Places (NRHP) (36 CFR 60.4) (Parker and King 1993:12-14).
Traditional Cultural Places in Pima County
May 2000
Page 3

- Criterion (a): Association with events that have made a significant contribution to the broad patterns of our history, "our" referring to the group to which the property may have traditional cultural significance, and "history" including oral history;

- Criterion (b): Association with the lives of significant persons in our past, with "our" interpreted with reference to the group of concern;

- Criterion (c): Embodiment of the distinctive characteristics of a type, period, or method of construction, or representative of the work of a master, or possession of high artistic values, or representative of a significant and distinguishable entity whose components may lack individual distinction;

- Criterion (d): A history of yielding, or potential of yielding, information important in history or prehistory.

As with other types of historic properties, including buildings and objects, a TCP must have integrity. Significance may be lost if the location, setting, design, or materials have been physically altered. With other types of properties, this evaluation is based on "integrity of location, design, setting, materials, workmanship, feeling, and association" (36 CFR 60). As Parker and King (1993:12) have noted, however, sometimes a TCP can be substantially altered and still retain integrity, as cultural values are dynamic and can often accommodate a great deal of change.

Working with Traditional Cultural Places

One of the greatest problems associated with TCPs is that in many cases it is whole areas rather than small, discrete sites that are involved. Boundaries may be difficult to establish beyond the immediate feature. The concept of cultural landscapes has been proposed to determine the extent of the associated areas of cultural significance (Stoffle et al. 1997). The National Park Service (NPS) also has operationalized the cultural landscape concept for planning purposes through its Park Cultural Landscapes Program and Cultural Landscape Inventory (Page 1998).

A cultural landscape is defined as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values" (Birnbaum 1994:1). There are several types of cultural landscapes, including historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes. These are not mutually exclusive. A cultural landscape designation may be more appropriate than a TCP designation for extensive areas that include multiple sites and features in Pima County.
Traditional Cultural Places in Pima County
May 2000
Page 4

Although guidance is available for the identification of TCPs, particularly in National Register Bulletin 38 (Parker and King 1993), use of this concept for preservation purposes remains problematic. A special issue of CRM magazine devoted to traditional cultural properties (NPS 1993) discusses some of the issues of concern. Concerns arise during identification, assessment, and documentation. Many properties of concern to traditional communities cannot be identified through the pedestrian surveys and archival research that archaeologists typically carry out, but must be identified through interview of knowledgeable individuals within the community. And as Sebastian (1993) has observed, simple questions of who to ask, and when to ask, are often not easily answered.

One of the most important issues is that of confidentiality. Cultural beliefs may specify who can have knowledge about certain practices or places, for example. "To many Native Americans," Cushman (1993:50) wrote, "knowledge about places of traditional cultural value is extremely sensitive, highly guarded, and not intended for dissemination to others. Release of information of this kind is a serious matter and could be dangerous or even fatal to those responsible." Federal land-management agencies may find it difficult to complete cultural resource inventories when tribal members cannot reveal sensitive information. Moreover, within tribal groups, cultural knowledge is held only by a few key tribal members and is unavailable to other members of the group. The problem of confidentiality occurs again during documentation, when confidential and nonconfidential files may be necessary (Arizona State Parks, State Historic Preservation Office 1996).

During a TCP Workshop in 1996 sponsored by Arizona State Parks, State Historic Preservation Office, a working group of Native Americans, federal and state agencies, environmentalists, academicians, and private consultants addressed these and other issues. These individuals identified a number of considerations when identifying TCPs (Arizona State Parks, State Historic Preservation Office 1996). In many cases, clashes may occur because of misunderstandings of the bureaucratic jargon used in historic preservation, and a simple substitution of words may be helpful. The workshop made the following recommendations and observations:

- "traditional cultural place" is a more accurate and appropriate term than traditional cultural property (use of the term "property" implies a commodity, whereas traditional communities commonly view these places as sacred or spiritual in significance [Cushman 1993:51]);

- traditional cultural places should be identified by their affiliated ethnic group(s) and decisions about those places should be made by the affiliated group(s);

- TCPs are places that have continuity of cultural identity and are important to a cultural group;
the use of the term "value" when discussing the meaning of a TCP to a cultural group is misleading; it implies relative degrees of importance and worth, and a sense of property—concepts foreign to many cultural groups (see Cushman 1993);

- economic, geographic, and spiritual importance exemplify the kinds of characteristics or qualities of places being evaluated as potential TCPS;

- an important aspect of TCPS is the affiliated group’s sense of stewardship for the TCP;

- the term “use” in the National Register is problematic, as it implies a physical use; cognitive use or spiritual continuity should also be considered;

- physical changes of a place do not necessarily remove or destroy a group’s spiritual connection to the place; this aspect of TCPS should be considered when evaluating the integrity of a TCP and when mitigating impacts to TCPS.

Traditional Cultural Places in Pima County

Arizona has several well-known TCPS, most of which are associated with tribal culture or are located on tribal lands, and consequently knowledge about them is restricted because they embody culturally sensitive information (Carol Griffith [Arizona State Parks, State Historic Preservation Office], personal communication 2000). Other TCPS are associated with Spanish, Mexican, and Euroamerican cultural groups. Two TCPS in Pima County are listed in the NRHP: l’Ittoi Mo’o, known popularly as Montezuma’s Head, located in Organ Pipe Cactus National Monument west of the Tohono O’odham Nation, and El Tiradito shrine, which is located in Tucson’s Barrio Histórico.

To identify other potential TCPS for purposes of the Sonoran Desert Conservation Plan, cultural resource surveys or traditional use assessments—the strategy used by some federal land management agencies—must be conducted with the affiliated ethnic groups. The USDA Forest Service has begun one such effort to identify potential TCPS on the various districts of the Coronado National Forest. This agency has established working relationships with several Native American groups whose traditional homelands overlap with the Coronado districts, including the San Carlos Apache Tribe, the White Mountain Apache Tribe, the Fort Sill Apache Tribe, the Mescalero Apache Tribe, the Hopi Tribe, the Pueblo of Zuni, and the Tohono O’odham Nation. Some sites and features of concern to these groups have been identified through initial assessments, and an overview of traditional cultural places in southern Arizona and on the Coronado National Forest follows this introductory section.
In general, categories of Native American sites and features that may be potentially designated as TCPS in Pima County include the following, derived from initial Forest Service assessments (USDA Forest Service 1999). Some examples of each type are provided.

- Trails
- Archaeological sites—Hohokam, Salado or Animas phase sites, *trincheras*, sites with associated burials
- Traditional community sites—powwow or dance grounds
- Ceremonial sites—Baboquivari Mountains
- Historic event sites—battlegrounds
- Traditional use areas—agave roasting pits
- Agricultural fields—terracies, boundary markers, shrines
- Shrines—may be recorded as rock rings, rock piles or cairns
- Petroglyphs, pictographs, and geoglyph sites (e.g., petroglyphs in the Rincon Mountain area)
- Caves, and peaks—Sentinel Peak or Chuk Shon (from which the place name “Tucson” is derived), Rincon Peak, Baboquivari Peak
- Mineral sources, especially minerals used in paints
- Waterways and healing waters—streams and springs
- Plant communities (multiple-use plants used for food, tools, medicine, and rituals)—acorn, agave, *Agave palmerii*, banana yucca, bear grass, cattails, cottonwood, creosote, deer’s ears, devil’s claw, fir, juniper berries, manzanita, “mescal beans” (coral beans), mesquite, mulberry bush, piñon, pine, prickly pear cactus, rushes, sedges, squawberry, sumac, sycamore, tobacco, walnuts, wild bananas, willow, yucca; willow and cattails especially mentioned as meriting protection and preservation
- Animal habitats—wild rats, whitetail deer (*siiki*), wild pigs, turkeys, quail, antelope (*kuuvid*)
- Bird-nesting and -roosting areas—tanagers, warblers, bluebirds, flickers, owls, roadrunners, eagles, and hawks
Although comprehensive assessments are needed, this list provides a starting point to predict kinds of potential TCPs and areas where such properties may be located. Baboquivari Peak, or *waw kiwulkan*, for example, shares many of the characteristics that qualified I’itoi Mo’o for designation as a TCP.

Trails are important to Native American and Mexican peoples in Arizona and Sonora. Trails not only link places but also link people to the past, to their histories (Copps 1995), and to their identities. Several Native American trails were identified on a late-seventeenth-century map as the primary Indian trails in the area (Indian Trails of Pimería Alta 1970). One trail began at the village of Tubutama, Sonora, and continued north through the Pajarito Mountains in southern Santa Cruz County. The trail passed the Atascosa Mountains on a route to Tumacácori, at which point it followed the Santa Cruz River into Pima County and northward to its confluence with the Gila River. Another trail ran from San Xavier del Bac eastward approximately along the Interstate 10 corridor to Benson, Arizona, and ended at the San Pedro River. Another trail also began at San Xavier del Bac and followed a westwardly direction toward and around the north end of the Coyote Mountains. It continued west beyond the Baboquivari Mountains before it turned north-northwest and proceeded toward the north end of the Quijotoa Mountains. Contemporary Native Americans no doubt would identify many other trails through Pima County.

Valleys serve also as connections between places of use and significance, often through important trails such as those described above. As a result, valleys may contain many TCPs associated with trails and connections that no longer exist physically or that have been disrupted by modern developments. Examples of potential TCPs fitting this description include symbols of and locales within the traditions of folk Catholicism and local folklore found throughout Pimería Alta. These include roadside crosses, shrines, and pilgrimage trails. The tradition of *descansos*, roadside crosses and shrines—symbols of folk Catholicism among Tohono O’odham, Yaqui, and Mexican peoples—dates back to 1783. Crosses are erected in memory of someone who has died, and shrines reflect thanks to a saint for a miraculous event. Hilltop monuments of one to three structured or painted crosses are another symbol of this tradition (Griffith 1996).

Some of the best-known pilgrimage trails are used for the fiesta day of San Francisco Xavier. Beginning at various points in Pima and Santa Cruz Counties, the trails end at Magdalena de Kino in Sonora. Thousands of people come to repay vows to the saint, whose statue resides in the local church. Many leave a small gift before joining the music and festivities in the plaza (Griffith 1996).

Many natural features are potential TCPs because of their association with rituals, ceremonies, or ancient stories. Ritual and ceremonial areas of significance, for example, may occur in narrow canyons and at water sources such as springs and *tinajas* (Erickson 1994:134).
Indian Trails of Pimería Alta 1687-1711.
Native American groups have stories of monsters or snakes that lived at water sources and inhaled nearby people and villages. One of these monsters, *nehbig*, was defeated by l’itoi, and its water source became a dry lake bed. Fossilized bones that have been found in collapsed sinkholes along the U.S.-Mexico border are believed to be the bones of *nehbig* (Griffith 1992).

Another natural feature, a smoke-blackened cave near Pozo Verde in Sonora and west of Sasabe, Arizona, has a rock above it with the footprint of l’itoi. The story associated with these features has to do with a witch who was stealing and eating children—not unlike the European story of Hansel and Gretel. About a mile north of Pozo Verde is a clearing surrounded by a rock wall. The story tells of how l’itoi tricked the witch into dancing at the clearing for four days after which he took her to the cave, entrapped her, and killed her with fire. His footprint on the rock above the cave shows where she tried to escape but was stopped (Griffith 1992).

These symbols and practices of the folklore traditions of diverse cultural groups have persisted through hundreds of years of warfare, political changes, and modern development. Such persistence reflects the kind of integrity necessary for TCP designation.

Conclusion

Although traditional cultural places present numerous challenges of identification, evaluation, designation, and protection, they provide, nonetheless, an additional strategy to respect and protect Pima County’s diverse cultural foundation. In addition to the current guidelines, past designations and the lessons learned by those who have gone through the identification, evaluation, nomination, and protection process provide the assistance required for respectful consideration of some of our more elusive cultural resources.
References Cited

Arizona State Parks, State Historic Preservation Office

Birnbaum, Charles A.

Copps, D. H.

Cushman, David W.

Erickson, Winston P.

Griffith, James S.


Indian Trails of Pimería Alta

National Park Service

Page, R. P.
Traditional Cultural Places in Pima County
May 2000
Page 10

Parker, Patricia L., and Thomas F. King
National Register Bulletin 38. Interagency Resource Division, National Park
Service, Washington, D.C.

Sebastian, Lynne
1993 Protecting Traditional Cultural Properties through the Section 106 Process. CRM

Stoffle, R. W., David B. Halmo, and Diane E. Austin
1997 Cultural Landscapes and Traditional Cultural Properties: A Southern Paiute View
of the Grand Canyon and Colorado River. American Indian Quarterly

USDA Forest Service
1999 Traditional Use Assessment Project Status Report. Coronado National Forest,
Tucson.
Baboquivari Peak, or "waw kiwulk" from Altar Valley, is considered the center of the Tohono O'odham universe and home to I'toi, Elder Brother, the creator of the Tohono O'odham.
Overview of Traditional Cultural Uses & Traditional Cultural Places
In Pima County and the Coronado National Forest

Jim McDonald, Coronado National Forest

Introduction:

The Coronado National Forest is one of several federal agencies in southern Arizona that are attempting to address the issue of traditional cultural property. Management of Forest resources is guided by the Forest Land Management Plan. This existing plan, completed in 1986, does not explicitly consider traditional cultural properties, and will be revised. In preparation for the development of a revised Forest Plan, the Coronado commissioned several studies of traditional cultural properties, to describe their existing and desired condition. The following report was the first of these studies. Other studies, prepared by American Indian tribes with interests in the Coronado Forest, are at varying stages of completion.

The following report is perhaps best viewed as a briefing paper for Forest staff, and a starting point for individual Tribal reports. It remains in draft form, as the individual Tribal reports will no doubt suggest the need for revisions and expansions. The focus on American Indian traditional cultural properties is a result of the unique governmental relationships between Federal agencies and Indian tribes. As planning progresses, other communities will also contribute their perspectives, leading to further revision and expansion.

National Historic Preservation Act guidelines (USDI-NPS n.d.: 1) define traditional cultural properties as buildings, structures, sites, landscapes and objects; associated with beliefs, practices, lifeways, arts, crafts or social institutions of a community that have been passed down through the generations. "Through the generations" means the property and the beliefs, etc. have been in existence for at least fifty years (USDI-NPS n.d.: 15-16). There is no regulatory definition of "community," therefore its vernacular definition as a group of people having common interests, or living in the same locality, is used here.

Traditional cultural uses are similar to TCPs, but lack the connection with a specific location or "property". Like TCPs, they are associated with beliefs, practices, lifeways, arts, crafts or social institutions of a community that have been passed down through the generations.

Throughout the following discussion, there will be references to "traditional cultural properties." TCPs are a category of National Register property (USDI-NPS n.d.), and are normally identified through formal processes of inventory and evaluation. It is evident that inventory has been far from formal; no evaluation is attempted in this report. Hence, references to TCPs carry the implicit qualifier "potential." More importantly, the two parameters used are intended to describe places of cultural significance to users of the Coronado National Forest, whether or not they fit specific regulatory guidelines.
Methods:

This summary was prepared from information in Coronado National Forest files and general references describing the prehistory, history and ethnography of southeast Arizona and southwest New Mexico.

District and Supervisor’s Office employees were consulted to identify the traditional uses of the Forest, and also specific buildings, structures, sites, landscapes and objects having cultural significance. Data from Forest files (such as Heritage Program site and survey records, and Special Use Permit files) were used to identify other properties and uses.

However, these data were not derived from systematic regional research, making it probable that the locations of a significant percentage of properties and uses are not known, much less the full range occurring on the Coronado. To assess the potential for TCPs, major secondary sources of ethnographic and historic information were also reviewed, such as the Handbook of North American Indians (Ortiz 1979; 1983), Wagoner (1975), Sheridan (1995) and Sheridan and Parezo (1996). Even these sources suffer problems of representation and detail, as they are not directly concerned with culturally significant places in land and resource management planning contexts.

Where locations of uses and properties could be identified with some certainty, properties were mapped on overlays to 1:62,500 topographic maps, and included in the Geographic Information System database. In many cases, however, locations are not known and identification of properties was limited to the overview-level assessment in the following narrative.

Historical Background:

Understanding of significant cultural places is facilitated by knowledge of the history of southeast Arizona, which has a heritage as rich as any area of the United States.

The close adaptation of early cultures to local environments, which include basin and range elements of the Sonoran and Chihuahuan Deserts (McNab and Avers 1994: 39-1 - 39-2, 40-1 - 40-3; Bailey 1994), influenced by long-term environmental processes, produced significant cultural diversity across time and space. Elements of Paleoindian, Archaic, Mogollon, Hohokam and Salado cultures are present, with numerous local variants (Whittlesey, Ciolek-Torrello and Sterner 1994; Fish and Fish 1996).

During the historic period, Spanish colonization and later conquest by the United States imposed European cultures on Apaches who had arrived shortly before the Europeans, and on O’odham descendants of the prehistoric occupants (Officer 1987; Spicer 1967; Wagoner 1975; Sheridan and Parezo 1996). Other contemporary tribes, including the Hopi and Zuni,
also trace their ancestry to the prehistoric inhabitants of southeast Arizona (Masayesva 1994; Pueblo of Zuni 1992). Today, population growth and internal and external immigration add additional components of cultural diversity.

The earliest evidence of occupation of southeast Arizona dates to the Paleoindian period (ca. 11,500-9000 B.P. [Before Present]; Whittlesey, Ciolek-Torrello and Sterner 1994: 45-52). Although commonly characterized as dependent on hunting of large Pleistocene species which have since become extinct, southeast Arizona’s Paleoindian population probably also used a broad range of other plant and animal species. In any case, they are known principally from sites where their artifacts are associated with the remains of extinct large game species (e.g. Waters 1986; Whittlesey, Ciolek-Torrello and Sterner 1994: 48).

Cultures of the succeeding period, the Archaic (ca. 9000-1800 B.P.) most likely developed in situ from Paleoindian populations responding to environmental change at the end of the Pleistocene, rather than by population replacement (Whittlesey, Ciolek-Torrello and Sterner 1994: 52). Archaic sites are widespread in Arizona, and there are broad similarities across regions. During the Archaic, there is evidence of increasing size and stability of populations, culminating in large agricultural villages along the major rivers at the end of the period (Mabry 1997a&b). This marks the beginning of the next period, the Formative (ca. 1800-800 B.P.; Whittlesey 1995; Deaver and Ciolek-Torrello 1995).

During the Formative, the archaeological record begins to show significant cultural divergence between sub-areas of southeast Arizona (Whittlesey, Ciolek-Torrello and Sterner 1994: 65-89). A distinction emerges between the Hohokam cultures of the Santa Cruz river valley and Mogollon cultures to the east. Through time, distinctions between north and south become evident as well, although they were not as pronounced as those between the Hohokam and Mogollon. Cultures such as the Trincheras of Sonora and the Casas Grandes of Chihuahua lent their distinct character to local manifestations of the Hohokam and Mogollon.

The final period in the prehistory of southeast Arizona is the Classic (ca. A.D. 1200-1450). Superficially, cultural diversity appears reduced because of the wide distribution of distinctive polychrome ceramics, called Roosevelt Redwares or Salado Polychromes, that have been argued to represent a widespread culture, religion or economic/political system (Crown 1994: 3-7). However, other aspects of culture, such as architecture, remain variable - often over relatively short distances (Fish and Fish 1996: 12-14). Consequently, there has been considerable debate regarding the cultural significance of what is known as the “Salado phenomenon” (Whittlesey, Ciolek-Torrello and Sterner 1994: 89-108).

A link between Classic populations and the O’odham encountered by the early Spanish explorers of the region is probable, but the details are not clear. Most probably, environmental political, or social upheaval late in the prehistoric period produced local O’odham cultures which loosely resembled their Hohokam ancestors, although some researchers have suggested
that wholesale population replacement of the Hohokam by the O'odham is also possible (Haury 1976: 357; Sheridan 1996b: 116-118). Elements of Classic populations may also have joined population centers on the Hopi mesas and at Zuni (James 1974: 22-25; Dockstader 1985: 10, 99-101).

Following the passage of Francisco Vasquez de Coronado through the region in 1540, the Athabaskan ancestors of the present-day Apache arrived, and reached northern Sonora no later than 1700 (Goodwin 1942: 66-67; Hinton 1983: 324; Hilpert 1996: 66-67). They are culturally distinct from the earlier Hohokam and Mogollon, and from their contemporaries among the O'odham, Hopi and Zuni (Ortiz 1983; Sheridan and Parezo 1996).

Although attempts were made by Fr. Kino to establish missions along the Santa Cruz River valley in southern Arizona as early as 1701, Spanish colonization did not begin in earnest until the discovery of silver at Arizonac (south of the present international boundary) in the 1730s. Sporadic mining, missionary efforts and ranching characterized the era from the 1730s to the 1850s, during which Spanish and later Mexican colonists attempted to wrest a living from the remote northern frontier of New Spain (Officer 1987; Sheridan 1995).

Initially, the Gadsden Purchase of 1854 did not change conditions in the region. Mining and ranching continued to dominate the economy despite Apache depredations. However, the eventual suppression of the Apache and completion of a transcontinental railroad through southern Arizona in 1880 led to an expansion of the population and of the scale of mining and agriculture.

By the early twentieth century, large-scale copper mining and cotton agriculture began to dominate the landscape of southern Arizona (Sheridan 1995), to be joined by tourism as mainstays of the post-World War II economy.

Existing Conditions - General:

Major cultural traditions derived from prehistoric and historic inhabitants include American Indian, Mexicano and Anglo/American. Other cultural traditions are represented by much smaller components of the population, as reflected by census data.

The bulk of the existing information pertaining to traditional cultural properties is oriented toward sites of significance to American Indians. This is in part a reflection of the fact that other National Register criteria guidelines do a reasonable job of protecting sites of interest to non-Indians.

It is also the case that more is known of American Indian traditional uses of the Forest than is known of use by Mexicano or other populations. There is a consensus among Forest staff that much traditional use can be characterized as collection of miscellaneous forest products,
which are used for purposes including ritual, medicine, subsistence and commerce, and some recreational activities.

American Indian: Cultures with historic connections to the Coronado include Apache (Chiricahua Apache, Western Apache), Piman (Tohono O'odham and Akimel O'odham) and puebloan (Zuni, Hopi). The Yaqui are twentieth-century arrivals who may be developing their own connections to the local landscape.

American Indian traditional cultural properties are best thought of as historical and religious landmarks. Cosmologies map the terrain with reference to events described in oral tradition. The latter is moral and religious in character (for example, Basso 1996: 13-17). These cosmologies give the land a supernatural meaning. In the case of resources, natural objects are invested with spiritual life which must be respected in the course of use; or, they may become ritual items that are used to attract positive supernatural power, remove dangerous power or represent the presence of the sacred. Ceremonial specialists use these objects to communicate with the supernatural and insure an abundance of natural and domestic plant and animal life, and assure that individual and community health and prosperity are maintained (Lamphere 1979: 763).

Apache - Chiricahua Apache: In the 19th century the Chiricahua Apache occupied northern Mexico, southwest New Mexico, and southeast Arizona as far west as the San Pedro River and as far north as the Gila Valley. The date of the Chiricahuas' arrival and expansion in the southwest is uncertain. Forbes (1994) makes a case for Apaches being present in the southwest by the 1400s, but other researchers favor a more recent date. Accounts from the Coronado expedition are equivocal. Coronado encountered no native groups in Arizona south of the Gila River, but Goodwin (1942: 66-67) suggested that Apaches may have avoided being noticed.

Apaches were clearly present in the seventeenth century (Opler 1983: 402). The first specific references to Apaches within the area of the present Coronado National Forest occur in the 1690s. In 1695, General Juan Fernandez de la Fuente mentioned Apaches among the people camped along the east front of the Chiricahua Mountains, though at this time they received far less recognition than other groups, especially the Janos, Jocome and Suma of northern Chihuahua. Affiliation of these early historic groups is uncertain, though at least one author (Forbes 1994) has argued that they were Apachean.

In 1886, after a series of conflicts with the American Army that began in 1862, the Chiricahua were deported to Florida. Later they were moved to Alabama, and then to Fort Sill, Oklahoma (Ball 1988). They were held as prisoners of war until 1913, when they were given a choice of lands in the vicinity of Fort Sill, or re-locating to the Mescalero Apache Reservation in New Mexico. About a third of the tribe elected to remain in Oklahoma, and are now known as the
Fort Sill Chiricahua-Warm Springs Apache Tribe (Opler 1983: 401-410). The descendants of those who moved to Mescalero have intermarried with other Apache residents of the Reservation, although they still maintain knowledge of their Chiricahua ancestry and family histories.

Because of the removal of the Chiricahua from their traditional homeland, and attempts at forced enculturation (Ball 1988: 142-141), direct knowledge of the homeland has been difficult to maintain. However, ethnographers and historians have managed to record some of this information (Baseheart 1959; Opler 1941, 1983). In addition, recorded personal recollections, especially Ball (1970; 1988) and Betzinez (1959) provide important firsthand accounts of Chiricahua life in the southwest.

Ties to the land were a key component of Apache identity, as evidenced by Chiricahua culture. The definition of the tribe is based on common territory as well as language and culture, as there was no unifying political structure. The Chiricahua Apaches of the 19th century were a group of three or four relatively autonomous bands. The mountains of the eastern part of the Coronado, especially the Chiricahua, Peloncillo and Dragoon Mountains, are the main homeland of the Chokonen band, though they used a larger area. The Nednai were located primarily in the mountains of northern Mexico, but also occupied ranges of southeast Arizona, particularly during the 1870s. The Chihiene lived in southwestern New Mexico, mainly outside the limits of the Coronado, though they did interact frequently with the Chokonen. Many authors also recognize a fourth group, the Bedonkohe, from the upper Gila River valley; again, outside the limits of the Coronado.

The Chokonen appear to have expanded their range westward through the 18th and 19th centuries. In the early 1700s they were closely identified with the Chiricahua Mountains. The O'odham Sobaipuri living along the San Pedro River maintained hostile relationships with the Chiricahua and kept them from moving westward. But with the forced removal of the Sobaipuri to the Tucson area in 1762 (Dobyns 1976) allowed the Chiricahua to move more freely to the west.

In aboriginal times the bands were the core of Chiricahua political and social organization. Boundaries were well known, members felt a strong attachment to the territory (seldom seeking mates outside the band), and carried on most ordinary tasks within the limits of band territory (Opler 1983: 411). Bands were divided into local groups of 10 to 30 extended families who inhabited and used a defined section of band territory. The group was named for its leader, or for a prominent landmark within its range (Opler 1983: 411). The extended family, based on matrilocal residence, was another important Chiricahua social unit with a territorial basis.

Leadership was focused on the chief of the local group, and the well-known Chiricahua leaders (for example, Mangas Coloradas and Cochise) were exceptionally influential local group leaders rather than band or tribal "chiefs." Leadership was earned, not hereditary, and it had to be
constantly validated by appropriate behavior (Opler 1983: 411). An important element of "appropriate behavior" was providing for the local group, by finding and sharing subsistence resources. The close ties between bands, local groups, and their territories was necessitated by the need to be intimately familiar with where and when resources were available.

Chiricahua subsistence was based on hunting and gathering, with agriculture playing a minor role, and then only among the Chihenne (eastern) band (Opler 1983: 413). Division of labor was strict, with women barred from any role in hunting. Deer and antelope were the favored game animals. Yucca, agave, mesquite beans, screw bean, juniper berries, sumac berries, sunflower seeds, acorns, pine nuts, prickly pear and strawberries, as well as many varieties of greens, were important subsistence resources.

Most Chiricahua ceremonials are oriented toward the acquisition and manipulation of supernatural power for purposes of curing. The mountain spirits, who lived in the highlands bounding Chiricahua territory, were instrumental in preventing disease and enemies from attacking their worshippers (Opler 1983: 416). More generally, the universe is believed to be pervaded by diffuse supernatural power that is eager to be of service to the believer. This power manifests itself through familiar beings and objects; thus animals, plants and celestial bodies take human form and become channels through which power appears to individuals in visions, conveying the details of useful rites (Lamphere 1983: 746; Opler 1983: 416). During this experience, the subject (a future shaman) is guided on a journey to a "holy home," often a cave in the mountains, where supernatural powers reside. Appropriate songs are taught to the shaman, and he is given ritual objects necessary to attract his supernatural helpers when needed for curing (Lamphere 1983: 746; Opler 1969: 24, 133).

The elderly receive great respect in Chiricahua society, as living to old age is considered a triumph over inimical forces (Opler 1983: 415). The ghosts of the dead could be very malignant, especially those who had died in the prime of life. At death, the body was buried promptly at a distance from the encampment. The dead person was lead by a deceased relative to the edge of a break in the earth, where a cone of loose sand crumbled beneath the spirit and carried the dead person below. The underworld was a paradise filled with encampments of dead people restored to health and vigor.

Chiricahua Apache known and potential properties: Removal of the Chiricahua Apache from their homeland and efforts to force enculturation have obscured information about traditional cultural properties. The strong ties of the Chiricahua to their territory, and the naming of local groups after prominent landmarks within their territories, suggests that these geographic features are potential TCPs - where it is still possible to match local groups to landmarks. A similar situation may exist with respect to the relationship between extended families and locations central to family or group history.

A number of sources (e.g. Baseheart 1959; Boyer and Gayton 1992) have noted that Chihenne country, especially the Mogollon Mountains, has been identified as the origin place and initial
core area of the Chiricahua. Early historical records seem to conform to oral traditions of a spread of Chiricahua people into southeastern Arizona from southwestern New Mexico (Baseheart 1959).

A small number of compilations of Chiricahua place names have been made. Baseheart (1959) documented 54 Chiricahua place names by interviewing elders living at Mescalero. These include former camp sites, sacred sites, and plant gathering locations. However, no field trips to the places identified, and many locations remain uncertain. Grenville Goodwin (1932) also recorded a larger number of Chiricahua place names in the course of his studies among the Western Apache. Although these may have come from Western Apache informants, some of the locations for which both Goodwin and Baseheart recorded place names were identified similarly. Another source of Chiricahua place names are contemporary U.S. Army scout reports where Merejildo Grijalva, who was raised by the Chokonen, served as a guide (Sweeney 1992). As noted by Hayes (1994) and Sweeney (1992), Grijalva supplied the Army officers with Spanish translations of the Chokonen place names. Two scout reports from the 1860s contain about 10 place names for geographic features in the Chiricahua mountains that appear to have been provided by Grijalva. Assimilating place names from these historic and ethnographic sources with information from Chiricahua living at Mescalero or Fort Sill had the potential to help in identifying traditional places.

Conversations with individual Chiricahua in recent years indicate that there is still substantial interest in collecting wild plants for subsistence purposes. Yucca, agave, prickly pear, juniper berries and acorns have been specifically mentioned. Difficulties in obtaining these resources include loss of knowledge of productive locations (a result of removal), non-Indian ownership of land (which creates access problems), and measures to protect native plants (which create uncertainty as to whether it is legal to collect agave).

In addition to their importance for subsistence uses, certain animals and plants (or specific locations containing these animals and plants) may be important to individuals because they are the source of ritual items used in curing, or are associated with the shaman's spiritual helpers. Caves or rockshelters may be identified as entries to the residences of mountain spirits. Rock art (whether Apache or Puebloan) is considered to be the work of mountain spirits, and hence sacred.

Burials are also considered to be sacred, because of the powerful forces associated with the dead. The location of the break in the earth through which the spirits of the dead reach the underworld is not specifically identified (Opler 1983: 415-416), and indeed may be different for different bands or local groups.

Finally, archaeological sites are not necessarily viewed as traditional cultural properties, but are certainly considered important to understanding tribal history, especially given the extent of loss of the traditional culture.
Attempts are being made to revive traditional culture and connections to historic territory in southeast Arizona. Four acres in the East Cochise Stronghold of the Dragoon Mountains were donated to the Fort Sill Chiricahua-Warm Springs Apache Tribe, and are being used to educate members of the tribe in the use of traditional resources including acorns, agave and yucca.

**Western Apache:** While the San Carlos and White Mountain Apache must be distinguished for purposes of government-to-government contact, both have been subsumed under the cultural designation Western Apache (Basso 1983: 462-463). Western Apache territory lay to the north and west of the Chiricahua, to whom they are related by their Athabaskan language and culture. Unlike the Chiricahua, they have retained portions of their historic territory (Basso 1983: Fig. 1). The date of their arrival in Arizona is unknown, but may be as early as the first quarter of the seventeenth century (Basso 1983: 465). Traditions hold that they have been in the southwest since time immemorial (Smith 1995).

As with the Chiricahua, ties to the land were important and territorial bands were a key feature of the social organization. Local groups were the basic unit of Western Apache social organization (Basso 1983: 470). They varied in size from 35 to as many as 200 persons, and had exclusive claim to certain farm sites and hunting territories. The most prominent leaders were the chiefs of the local groups, who governed by strength of character, ability to build consensus and exemplary behavior (Basso 1983: 475).

While these local groups had a high degree of social cohesion and a specific territory, clans cross-cut Western Apache society and territory, creating an extensive network of relationships that served to link local groups. The members of a clan were related through matrilineage, and were descendants of a group of women who established farms at the clan’s place of origin. These locations are the basis of clan names, and are considered sacred (Basso 1993: 472).

Traditional subsistence was based on a combination of farming, hunting, gathering and raiding (Basso 1983: 468-470; Perry 1991: 158-160). Only about 25% of the food was obtained through agriculture, principally plots of corn, beans and pumpkin. Agave, saguaro, prickly pear and cholla fruit, mesquite beans, yucca fruit, acorns, pinon nuts and juniper berries, supplemented by deer and rabbit meat, were most significant. Mescal sprouts on southern mountain slopes in early April; and groups traveled to these areas to harvest it. Acorns were gathered in midsummer and probably constituted the basic staple for the Western Apache; their collection is still important (Perry 1991: 159, 189-190; Seth Pilsk, personal communication, 1997; Wilson 1987: 207-219). Mesquite beans were harvested during August; and pinon nuts and juniper berries collected later, in the fall. Late fall and winter were the most important times for hunting (deer, elk and a variety of birds and small mammals). Raiding reached a peak in winter months, when supplies of stored food were at a minimum.

Use of these resources - indeed, all behavior - is governed by respect for *diyih* (supernatural power). In Western Apache thought, everything that exists has life, including the earth itself.
All life possesses diyih, which must be respected else the animal, plant, etc. cannot be put to beneficial use (Goodwin 1938: 27; Basso 1983: 477; Basso 1992). Significant sources of diyih include water, fire, lightning, thunder, wind, bats, eagles, snakes, lizards, elk, deer, mountain lion, bear and horse. It is not the animal, bird or natural object which is sacred, but the power it contains (Basso 1969; Lamphere 1983: 746).

Diyih may be called on by ritual specialists, with specific forms of diyih called on for different purposes. Some entities, such as mountains and mountain ranges, provide homes for other entities, and are thus associated with multiple forms of diyih. The array of supernatural powers manifested by a place determines its sacred significance, which may be as a location for ceremonies, as a place where plants and animals essential to ceremonies can be gathered, as a place intimately associated with important mythical events, as the home of supernatural beings, or as places which hold the remains of deceased Apache. Because the array of powers at any particular place are unique, places are not interchangeable (Basso 1992: 4), nor is it possible to invent or claim new sources of diyih (Goodwin 1938: 29).

There is an inexhaustible supply of diyih, some of which people can acquire and control. The remainder remains free and acts on its own, not necessarily with moral sanctity (Basso 1983: 477). Serious forms of physical and mental illness can result from a lack of respect toward diyih, and a considerable portion of Apache religious belief was directed to ritual curing of the effects of such breaches (Basso 1983: 479).

As with the Chiricahua, elders receive great respect. Ghosts of the dead could be malignant, and the dead were buried at a distance from the village.

Western Apache known and potential properties: Although traditional lifestyles have been disrupted by arbitrary and forced relocations of bands (Hilpert 1996: 69-73), much of Apache culture remains viable. What is known of Western Apache traditional cultural properties and uses on the Coronado derives from the Mt. Graham International Observatory project. Mt. Graham provides an example of a locality with a unique constellation of spiritual power. It is a named locality in Apache culture (Dzil nch'aa si an, or "Big Seated Mountain"), and has been described as one of two or four "chiefs of mountains" (Goodwin MS 17: 113, 177, 447, 450). It is associated with sacred powers for deer, horses, lightning and thunder. Because of its association with deer power, it was prayed to for success in hunting, and because of its association with horses, it was prayed to for success in raiding and warfare. Because of its association with the powers of lightning and thunder, it was prayed to for success in raising crops (Goodwin MS 17: 113, 116, 175-176, 402, 450; Basso 1992: 5-6).

Mt. Graham is also home to bear, owl and eagle and is associated with their sacred powers. It is the location of several springs whose water has curative properties, as well as the source of minerals, plants and animals used in traditional ceremonials. Mt. Graham is also the site of numerous Apache burials (Basso 1992: 6-7). Perhaps most important, Mt. Graham is a home for the mountain spirits (gaan), supernatural entities who appear in various ceremonials and
are critical agents in the process of healing. *Gaan* reside at a place inside Mt. Graham (Basso 1992: 6).

There are other holy mountains, which Goodwin (1938) did not name in print. Water People, Cloud People and Lightning People (the latter an especially powerful class of supernaturals) are associated with mountains, and provide water, essential to life.

Aspects of Western Apache cosmology with generalized implications for the nature of traditional cultural properties are described in the work of Goodwin (1929-1939, 1938) and Basso (1971, 1983, 1992). The earth is a female being (Goodwin 1938: 24). She was created by Black Wind, Black Metal, Black Thunder and Black Water, under the supervision of Life Giver. Because she was bare and suffered in the cold, Black Thunder gave her hair in the form of trees and grasses. Black Water gave her blood in the form of water. Black Metal gave her bones in the form of rocks and mountains, and Black Wind gave her breath (Basso 1983: 477). Other stories, historical, religious and moral in character, explain other aspects of the creation of the universe and the means by which it attained its present form (Basso 1983: 477; Goddard 1920; Goodwin 1939). At a more localized level, clan histories can be expected to identify origin points that, because of their historical importance to the clan, and their sacred character, could be considered traditional cultural properties.

At a yet more specific level, one can anticipate the existence of caches of ceremonial items that constitute traditional cultural properties. A term translated as "painted on" applies to anything bearing ceremonial designs, such as gaan dance paraphernalia. Eventually, these items must be disposed of in a cave or rock crevice, with prayers and under the instruction of the shaman who directed their making (Goodwin 1938: 33).

Although claims of cultural affiliation with, and lineal descent from, Mogollon, Hohokam and Salado peoples have been made (Smith 1995: 2), the primary archaeological concern of the Tribe is with Apache items. Ancient items and remains are considered the property of "people who came before," and not fully belonging to the Tribe. All ancient items should be protected and respected (Cassa 1995). Burials deserve an extra measure of respect.

Gathering of acorns and other subsistence and medicinal plants are known to occur on the Coronado (Seth Pilsk, personal communication 1997; Wilson 1987: 217-219). For example, traditional gathering of acorns is focused on oak woodlands within the Fort Huachuca Military reservation, a result of the historical presence of Indian Scout companies at Fort Huachuca. Some of this collection extends onto Forest lands on the east side of the Huachucas (Gillespie 1997). Other acorn collection areas are known and have been mapped, however, this map is not believed to be comprehensive. Wilson (1987: 218-219) also describes the collection of coral beans by San Carlos Apache, for use in necklaces.
Piman - Tohono and Akimel O'odham: Pimans include the Tohono and Akimel O'odham ("Desert People" and "River People," respectively), who occupy the Tohono O'odham, Akimel O'odham, Gila River and Salt River Pima-Maricopa Indian Reservations. A small population of Tohono O'odham also resides in Mexico (Fontana 1983: 125).

At Spanish contact, the territory of the Pimans roughly coincided with the Lower Colorado Valley and Arizona Upland divisions of the Sonoran Desert, extending to the Gila River on the north, the San Pedro and San Miguel Rivers on the east, the Rio Magdalena and Rio Concepcion on the south, and the Colorado River on the west (Fontana 1983: 126; Fig. 1). Piman territory subsequently contracted under pressure from the Spanish and Apache, but they continue to occupy portions of their historic territory. Historically, the Tohono O'odham have been known as the Papago, and the Akimel O'odham as the Pima.

Fontana (1983) classified pre-contact Pimans as no-villagers, two-villagers, and one-villagers, settlement patterns which reflected the increasing availability of water from west to east within Piman territory.

No-villagers inhabited the dry (0-5" annual rainfall) western portion of Piman territory. Farming was virtually impossible, and no-villagers were food collectors who had to forage for the water, plants and animals which sustained them. They led what was essentially a camping existence, with some bartering of seashells, salt and ceremonies for pottery and agricultural products of the Yuman Indians of the Lower Colorado River (Fontana 1983: 128). Shelters were generally rings of stone laid out as windbreaks (Fontana 1983: 131).

In the western portion of the territory occupied by the no-villagers, microenvironments supported mesquite, palo verde, cacti including saguaro, and agave, important dietary items (Fontana 1983: 128-129). Water was all-important in this area, including springs, seeps and rock tanks or tinajas. The no-villagers no longer exist as a distinct cultural entity, having died from epidemic disease and murder, or having been assimilated into the non-Indian communities of Arizona and Sonora (Fontana 1983: 131), although contemporary Tohono O'odham families do trace their ancestry to the no-villagers.

The descendants of two-villagers make up the bulk of the contemporary Tohono O'odham. More abundant water made for a more settled existence. Two-villagers had winter dwellings in mountain foothills near permanent water sources, and summer dwellings at the mouths of washes, which were farmed. Farming was by ak-chin agriculture, in which temporary brush dams spread the streamflow across the mouths of the washes. Up to 45 per cent of the food was supplied by agriculture (Fontana 1983: 131), although two-villagers used many of the same wild resources as one-villagers. The most notable addition to the material culture was the brush house (Fontana 1983: 133).

One-villagers are the contemporary Akimel O'odham. They also included the protohistoric Sobaipuri of the San Pedro and Santa Cruz Rivers. The latter were Pimans who disappeared
as a distinct cultural entity during the Spanish period, as a result of disease, warfare, relocation and intermarriage with the Tohono O'odham. Agriculture, including canal and ditch irrigation, made a settled existence in one location possible (Fontana 1983: 133). Wild plants provided important dietary supplements and medicines.

Local groups were present among the Pimans (Bahr 1983: 182-183) and were named after geographic features or historical events. Local groups names could be retained after the group had moved from the place referred to, although this appears to be rare. Each local group kept a basket containing artifacts from legendary times, which was hidden in the desert away from the village. These baskets were brought out for the major ceremonies.

Piman oral tradition tells of the creation of the earth by Earthmaker, a subsequent flood in which the supernaturals escape, and the rise of l'iitoi ("Elder Brother"), who creates the Pimans and teaches them their arts and ceremonies. Subsequently, l'iitoi is killed and revived many times. His home is linked to a cave in the Bacoquivari Mountains. Other historical personages are also associated with landscape features.

Piman villagers practiced communal agricultural rituals celebrating the life cycle of corn, and focused on fertility and rain making. Each village contained a Rain House, or ceremonial shelter, lived in by the most prominent village leader and his family. Major rituals included the rainmaking ceremony, ceremonies to promote the growth of corn, and the prayerstick festival. The rainmaking ceremony involved the fermenting and drinking of a liquor made from saguaro fruit. Following planting, villages would hold ceremonies to "sing up the corn," involving the replenishing of a shrine addition to songs describing the growing of corn and the coming of rain. The Prayer-stick festival was held every four years, to "keep the world in order." The central event was a day-long celebration including masked dancers, usually carrying an effigy of a cloud or mountain (Lamphere 1983: 760). Many of the ceremonies seem to have fallen into disuse, with only fragments of the traditional cycle remaining. Shamanism and curing have become the center of traditional religion (Lamphere 1983: 758-759).

Shamanistic power was acquired by men and by a few women. The most common method of power acquisition was the vision, which came while sleeping. In the nineteenth century, shamans performed magic feats related to warfare, hunting and rainmaking; in the twentieth, they have become diagnosticians and healers.

In some visions, the supernatural visitor, in animal form, takes the recipient on a journey to the mountains or the sea; more commonly, the spirit appears and simply instructs the dreamer (Lamphere 1983: 759). These dreams might come through contact with powerful supernatural forces as a result of slaying an enemy, killing an eagle or taking a salt pilgrimage. All three activities necessitated a purification ritual upon return home. After the ritual, the individual might be visited by an animal spirit who became his source of power (Lamphere 1983: 759).
The focus of shamans was on the diagnosis of illness; and specifically a category of illness known as "staying sickness" (Bahr 1993: 196). Various kinds of dangerous objects, as diverse as coyote, deer bear, rabbit, dog, eagle, hawk, lightning, lizard, and wind, can cause illness when a Piman transgresses on their "way." As a consequence, the "strength" of these objects enters the body and causes illness. The strength may be present for a considerable time before it manifests itself through illness, and then may be entwined with the strength of other dangerous objects. The shaman must identify and begin the process of removal of the strength(s) causing the illness; final removal may be accomplished by non-shamans, praying for the intervention of a spirit associated with the "way". The process is important to the O'odham as it forces the patient to reflect on his life and the consequences of past actions (Bahr 1983: 195-199; Lamphere 1983: 760).

Tohono and Akimel O'odham known and potential properties are typically places on the landscape. The O'odham, like the Apache, link their history to places. Certain geographic features, such as springs or peaks, have specific historical meaning (for example, I'toi's Cave) to O'odham society. Other locations may have historical importance to local groups, as reflected in group names (Bahr 1983: 182). Unfortunately, no O'odham atlas has been compiled. Caches representing the fetish bundles of individual villages (Bahr 1983: 183) would likely constitute traditional cultural properties, as well as items of cultural patrimony under the Native American Grave Protection and Repatriation Act.

Other sites of significance to the O'odham include large ruins, caves and the burials of notable shamans, which are regarded as sacred places where offerings are deposited (Ezell 1983: 152). In ethnographic Akimel O'odham villages, the village plaza, where rites of the ceremonial cycle were held, are considered sacred (Bahr 1983: 180); hence it is anticipated that identifiable plazas in prehistoric villages would likely be considered sacred. Shrines where visitors leave offerings are known among the Tohono O'odham (Fontana 1983: Fig. 6), and form an additional class of potential TCP.

On the subsistence level, each household had customary gathering grounds for wild plant resources (Bahr 1983: 190). Few are known on the Coronado, but users would not necessarily seek special use permits from the Forest, and detailed ethnographic research has not been undertaken. Saguaro may be of interest to the O'odham, since the saguaro harvest was an important element of traditional subsistence (Fontana 1983: Fig. 4), and the rainmaking ceremony involved consumption of saguaro wine. Likewise, yucca and other basketry materials are important to contemporary craftspeople (Bahr 1983: Fig. 5), and arrangements have been made for the collection of basketry materials from the Dragoon Mountains. Finally, traditional O'odham may be anticipated to have a generalized concern with the impacts of Forest decisions on certain animals believed to have exceptional strength, from the standpoint of a desire to avoid illness.
Pueblo - General: Pueblo culture, including religion, has a distinct agricultural focus, built around the life cycle of corn (Lamphere 1983: 754). Pueblos divide the universe into parallel human and supernatural worlds, with the supernatural divided into groups that mirror the divisions of human society. Death transforms humans into ancestors who become supernaturals themselves (Lamphere 1983: 754). Puebloan cosmology organizes the world according to the cardinal directions, which have extensive associations with colors, plants, etc. In addition to the cardinal directions, the Zuni also recognize the zenith, the nadir, and middle (Zuni pueblo) in the system of associations. In the case of the Hopi, Sipapu, the place of emergence, assumes the status of central place (Lamphere 1983: 754-755).

Supernatural power is personalized and is ambivalent, being capable of good or evil (Lamphere 1983: 754). Pueblo ceremony involves retreats and prayer sessions by ritual specialists, and appearances by the supernaturals at specified times, tied to the agricultural cycle. Central to ceremonialism is the offering of appropriate gifts (prayers, songs, and ritual objects) to attract supernaturals to the village. Prayer-sticks of wood with attached feathers are especially powerful offerings (Lamphere 1983: 756).

Curing is a less prominent aspect of ceremonials than among the Apache or Pimans, and is a communal activity, a responsibility of societies rather than individual shamans. Curing generally involves counteracting the effects of witchcraft (Lamphere 1983: 756-757).

Hopi Ethnography: The Hopi occupy territory at the southern end of Black Mesa, in northeast Arizona (Connelly 1979: Fig. 1). Prior to Spanish contact, Hopi territory was considerably more extensive. Conventional archaeological interpretations have Hopi culture developing through a combination of in-situ growth and in-migration from other Hisatsinom ("Anasazi") areas following the Great Drought of the late thirteenth century A.D. (for example, Brew 1979: 514). Hopi history derives contemporary Hopi populations from a broader region, including southeastern Arizona, through migration of clans from throughout Arizona and New Mexico (James 1974: 17-32).

There is little in the standard ethnographies of the Hopi which pertains directly to the Coronado, as they focus on the area occupied during the historic period. Hopi directional symbolism orders a wide range of natural and cultural phenomena (Heib 1979: 577-580), including landmarks such as the San Francisco Peaks and the Grand Canyon at the boundaries of Hopi territory (Clemmer 1979: 533). Other landmarks represent places or events mentioned in clan migration histories.

Although an agricultural people, planting corn, beans, squash, melons, fruit and cotton, the Hopi make extensive use of wild plants and animals (Kennard 1979: 557). For example, yucca is used for hair washing, which in turn is an essential part of every ceremony. In all, over 200 species of plants are collected for local use or trade (Kennard 1979: 557; Stanislawski 1979: 593). Although deer, antelope and rabbits were hunted, hunting has not been an important
part of the subsistence economy (Kennard 1979: 577). Other hunted animals include mice, rats, prairie dogs, coyotes, turtles, small birds, lizards and snakes. In the nineteenth century, badger, porcupine, mountain sheep, mountain lions, grizzlies and gray wolf were also hunted (Stanislawski 1979: 593). Eagles are collected for use in ceremonies.

In Hopi belief, everything is dependent on rainfall, which when combined with earth is the essence of all things (Hieb 1979: 577). Hopi life is based on ceremonies which assure personal and tribal equilibrium, and appeal to supernatural powers for rain, good harvests, good health and peace. Numerous kachinas (spirits), heroes and gods are invoked (Frigout 1979: 564; Dockstader 1985). Prayers and offerings are understood to require reciprocity between the Hopi and their spiritual benefactors. In making offerings to the kachinas, the Hopi "feed" them. The kachinas reciprocate by feeding the Hopi with rain, so that the crops will grow (Hieb 1979: 580).

Hopi known and potential properties: To date, discussions of traditional cultural property issues have focused on treatment of archaeological sites (Hamilton 1996) and the Mt. Graham International Observatory. The Hopi Tribe considers every ancestral archaeological site to be a traditional cultural property, because they are tangible monuments validating Hopi culture, history and the Hopi covenant with Ma'saw, guardian of the Fourth (present) World (Jenkins, Dongoske and Ferguson 1996: 38). Ancestral properties are considered to include Paleoindian, Archaic, Mogollon, Hohokam and Salado archaeological sites in southern Arizona (Masayesva 1994; Ferguson and others 1995: 14).

In the case of the Observatory, cultural features on certain peaks were considered to have the form of shrines, although they could not be conclusively identified as such. The cultural significance of springs, as manifestations of blessings bestowed by Hopi ancestral spirits, was affirmed. Finally, elements depicted in photographs of rock art from the vicinity of Mt. Graham were identified as Hopi clan symbols. Other shrines, springs, resource collection areas and landforms with Hopi place-names commemorating prehistoric or historic events are also considered to be traditional cultural properties (Ferguson and others 1995: 14).

Zuni Ethnography: The Zuni currently occupy a reservation in western New Mexico, adjacent to the Arizona state line (Ferguson and Hart 1985: Map 35). Recent additions in Arizona are not shown in published anthropological sources. As with other tribes considered in this report, the Zuni occupy a much-reduced portion of their historic territory (Ferguson and Hart 1995: 3; Map 1). Conventional archaeological interpretations have the Zuni developing from a combination of in situ growth and migrations from the Chaco Canyon and Upper Gila regions (Woodbury 1979: 467-469). Zuni oral tradition expands the area of ancestral populations (Ferguson and Hart 1995: 21-23, 25-27, Maps 8 & 9; Eriacho 1995). However, there are no specific references to the Coronado.
Petroglyphs from the Tucson area have been identified as traditional cultural places by the Tohono O'odham and Hopi peoples.
Dennis Tedlock (1979) has provided a comprehensive, yet concise, summary of Zuni religion and world view. Of most apparent concern to land management planning is the character of the world in Zuni thought. The world is encircled by oceans, which are connected by underground passages to all the springs, seeps, caves and ponds of the earth, forming a single water system. The world’s "sacred old places" are at the water outlets and on mountains (Tedlock 1979: 499).

The people who inhabit the world are the "raw people," who can change their forms, and the "daylight people," or humans. The earth itself is a raw person, Earth Mother, her arms and hands consisting of trees and bushes. Springs are inhabited by the "rain priests," who take the form of clouds, rainstorms, fog and dew. "Bow priests" of the six directions make lightning and thunder. To the east, in the vicinity of the Sandia Mountains, is the home of the "priests of the completed path," and kachinas, both of whom possess medicines. Most of the other kachinas live in the west, at Kachina Village, at the bottom of a lake two days walk from Zuni. Kachina village is also the home for the "hoofed game animals." Other "raw people" live much closer to Zuni, and the village itself contains numerous shrines and medicine bundles (Tedlock 1979: 500-501).

Sun Father is the ultimate giver of light and life (Tedlock 1979: 499). In the beginning, he had no one to give him offerings, so he arranged to bring the daylight people out of the fourth underworld. In return for prayers and offerings, he grants blessings. "The daylight people have a similar relationship with all the other raw people, be they rainstorms, bears, deer, kachinas, or corn plants; this is tewasu 'religion' (Tedlock 1979: 501)". The offerings include food and clothing (tobacco smoke, cornmeal plain or mixed with crushed shell, turquoise or coral), small portions of cooked food, and willow sticks with feathers and paint.

Prayer and offerings are made for the purpose of benefits (e.g. long life) in this world, and occasionally for benefit in the afterworld. Kachina dances may be for the purpose of encouraging rain, growth of crops and success in hunting, or for enjoyment. Other (non-kachina) societies include the Coyote Society, which with the Kachina Society conducts a quadrennial pilgrimage to Kachina Village; and whose patrons are the game animals of the six directions. The Societies of the Completed Path are dedicated to curing (Tedlock 1979: 501-502).

Every living person is believed to carry an invisible road which determines the proper time for his death. Deceased rain priests join the other rain priests in the waters of the world. Bow Priests become lightning makers. Members of the Societies of the Completed Path join their raw counterparts in the east. Kachina society members go to Kachina Village, and any person of Kachina Village may return among the living as a cloud. Girls and uninitiated boys become turtles or watersnakes. When a person has been separated from his former daylight existence by four deaths, he finds himself back at the hole at which the Zuni emerged from the earth, or else has descended to the lowest of the underworlds, at which point he may return among the living as an animal (Tedlock 1979: 508).
Ferguson and Hart (1985) provide extensive information on Zuni settlement, area of sovereignty, and areas of land use. These lie outside of the Coronado National Forest. However, because Zuni history affiliates the pueblo with archaeological sites in a much wider area (Eriacho 1995), the Zuni can be expected to be interested in resources outside of the region of mapped use. Examples other than archeological sites include clays, especially those useful in pottery manufacture, turquoise and copper ore, hematite and obsidian (Ferguson and Hart 1985: 49). Plants of interest include pine nuts, yucca, soapweed, cactus, milkweed, beeweed, and a plant named "tenatsali," used for special purposes such as divination (Ferguson and Hart 1995: 45-46).

Zuni known and potential properties: As with the Hopi, the Pueblo of Zuni considers ancestral archaeological sites to be traditional cultural properties. The Zuni consider ancestral archaeological sites to include Paleoindian, Archaic, Mogollon, Hohokam and Salado among the southern Arizona cultures (Eriacho 1995).

To date, discussions of traditional cultural property issues have focused on treatment of archaeological sites (Dishta 1996) and the Mt. Graham International Observatory (Simplicio 1985, 1986). Archaeological sites are also to be avoided whenever possible (Dishta 1996). Excavation and documentation may be appropriate where disturbance is unavoidable, particularly if it might clarify the relationship between the site and ancestral Zuni (Simplicio 1986). Shrines, similar to those located within the Mt. Graham International Observatory project area, may be found elsewhere on the Forest. The location of a shrine is central to its purpose, and disturbance or movement is inappropriate. Such locations have religious significance whether or not they are recently used (Simplicio 1985).

Finally, the treatment of human remains, whether discovered through accident or archaeological investigation, is of particular concern to the Pueblo of Zuni, as there are no traditional procedures for mitigating the effects of disturbance (Pueblo of Zuni 1992). Avoiding the disturbance of burials is always preferable. If disturbed, burials may be documented and non-destructive analyses performed, with the burials and associated funerary objects reburied as close to their original location as possible.

**Yoemem - Yaqui Ethnography:** Traditional Yaqui territory is located in southern Sonora and Sinaloa on the west coast of Mexico. Contemporary Yaqui culture includes a strong overlay of Spanish culture introduced by Jesuits in the seventeenth and eighteenth century. As a result of Mexican military occupation of Yaqui territory in the late 19th century, church-centered communities of Yaqui emigrants were established in Tucson and Phoenix by the 1930s (Spicer 1983: 250-263). Nothing is known of Yaqui use of the Coronado.

Yaqui known and potential properties: No Yaqui traditional cultural properties are known on the Coronado National Forest. While the Yaqui have strong territorial ties (Spicer 1983: 250),
traditional territory lies in Mexico, with the Yaqui of Arizona being twentieth-century immigrants escaping Mexican military occupation of their homeland (Sheridan 1996a: 40, 43-45). Consequently, traditional cultural properties are not expected on the Coronado Forest; however, dance plazas within Yaqui communities may be considered a kind of urban traditional cultural place.

MEXICANO:

Little attention has been paid to Mexicano traditional cultural properties, although they can be found throughout southeast Arizona (Griffith 1992). While some may be rooted in Indian belief (Griffith 1992: 3-13), others such as the tiraditos (wishing shrines) appear to be more uniquely Mexicano, and Griffith (1992: 105-112) describes how Tucson’s El Tiradito became a focus of community and ethnic identity. Of the places described by Griffith, corua springs (springs guarded by water serpents), traveler’s shrines and hilltop monuments may occur on the Coronado, but none are currently known. Cemeteries do occur, but since they are not normally eligible for the National Register of Historic Places, none have undergone detailed research and evaluation.

There are known Mexicano traditional uses of the Forest. Mexicano settlement has a long history in the adjacent valleys. Early economic activities included farming and herding in those valleys, and mining in a few locations in the mountains.

Ranching might now be conceived of as a traditional use, at least in some parts of the Forest. The San Rafael Valley provides an example. Herding probably began in the late 1600s, and the San Rafael de la Zanja land grant was established in the central portion of the valley in 1821. Ranching on and adjacent to the grant was done by a cooperative group of parcioneros from Santa Cruz, just south of the modern international boundary (Gillespie 1997). With transfer to the United States, however, control over ranching activities shifted to Anglo/American hands, and little connection with traditional Mexicano culture is evident.

Fuelwood harvesting, acorn harvesting, family gatherings and picnicking do appear to be traditional uses with ties to the Mexicano community. Historically, fuelwood was collected throughout the oak woodlands, from wherever it was most easily accessible. While currently regulated by the Forest Service and limited to designated areas, it does remain a significant use of Forest resources. Bellota (acorn) gathering is a popular activity in Walker and Tres Bellotas Canyons, along the Ruby Road (Imler 1997). While family outings and picnicking occur throughout the Forest, the west side of the Patagonia Mountains closest to Nogales and the Harshaw areas are especially popular with Mexicano families (Gillespie 1997).
"El Tiradito"—This is the only shrine in the United States dedicated to the soul of a sinner buried in unconsecrated ground. It is called "El Tiradito"—the castaway. The many legends about its origin all involve a tragic triangle love affair in the early 1870s. The mysterious powers of the "Wishing Shrine" are still an important part of Tucson lore and culture.
ANGLO/AMERICAN:

Anglo/Americans have made extensive use of the Forest for economic pursuits such as mining and timber harvesting. However, these tend to have little traditional linkage. Older mining communities such as Mowry, Harshaw, Duquesne and Washington Camp are now largely abandoned. The mining which does occur is being done mainly by large corporations.

Sawtimber harvest has effectively ceased. Farming is limited to valley bottoms outside the Forest, and virtually all the small-scale dry farming and fruit growing that was common in the early 20th century has stopped (Gillespie 1997).

In the San Rafael valley, where ranching may be considered a traditional use, the character has changed in comparison to the Mexicano pattern, but not in comparison to historic patterns. Mexicano parcioneros were displaced as owners as a pattern of large-scale ranching developed and peaked in the 1880s and early 1900s, when Colin Cameron and William Greene owned the San Rafael de la Zanja grant. Some small-scale ranching persisted in the valley, however, and a few of the smaller ranch families who herded cattle in the area in the late 1880s are still engaged in ranching today (Gillespie 1997).

Conclusion:

The preceding discussion has focused on culturally significant places, which broadly speaking, fall into two classes: properties, for which the attributes of a specific location are integral to the cultural significance, and resources, which generally consist of products of the natural environment, whose specific location is not integral to traditional beliefs and lifeways.

The bulk of the available information focuses on American Indian traditional cultural properties and uses, although there are significant Mexicano and Anglo/American places. Even in the case of American Indian tribes, however, there are few data pertaining directly to the Coronado.

Most of the needed information will have to be gathered from members of the traditional communities themselves. Culture is a system of knowledge, and knowledge of traditional culture is, for the most part, transmitted orally. This is particularly critical with respect to the desired condition of properties and resources, for which there is virtually no information useful to Coronado planners. A primary focus of the next phase of planning should be to obtain specific knowledge of the Coronado's properties and resources, through review of additional literature, and more important, through ethnographic research conducted in cooperation with members of traditional communities.

Given the visibility of American Indian traditional cultural property issues, and the tendency for Indian cosmologies to map the terrain with reference to events described in oral tradition,
the core product of this ethnographic research should be an atlas of significant cultural places, supplemented by narrative descriptions. A summary of the tribes’ historical traditions should be included to provide context for the individual narrative descriptions. (Such a summary would also be valuable for documenting claims of affiliation under NAGPRA and related legislation).

Where areas of resource use can be mapped, they should be included in the atlas, whether or not the areas meet the regulatory definition of traditional cultural property. Again, narratives describing the areas should be included, and context provided in the form of an ethno-botanical (or ethno-mineralogical, etc.) overview. A summary of properties and uses should identify their desired condition, by tribe.

In closing, it should be noted that the sacred and moral character of many traditional cultural properties will pose a significant dilemma for planning and decision-making by the Forest. There is a substantial risk of violating Constitutional restrictions on the establishment or prohibition of religion (one possibility is suggested by the example of conflicting Hopi/Bahai uses described in Jenkins, Dongoske and Ferguson 1996: 36). This is exacerbated by the geographic scope of some significant places. Mt. Graham provides the most relevant example, where the entire range is conceived as sacred by the Apache. Every management decision has potential impacts on religious practice - and religious practice has the potential to impact every management decision.

A second dilemma is posed by the privileged character of much traditional knowledge, at least among American Indian cultures. It is probable that specific information will be difficult to obtain, and if obtained, will be difficult to share with other elements of the public. This will complicate decision-making, where the data on which decisions are based must be public, and may make it impossible to manage places to achieve their desired condition. Because of the sacred and privileged qualities of their significance, traditional cultural properties and uses are likely to be the among the most difficult social and legal issues facing land management planning.
References Cited:

Bahr, Donald H.


Bailey, Robert G.

Ball, Eve


Basso, Keith


1992 Declaration of Keith Basso in support of preliminary injunction. Apache Survival Coalition et. al. v. USA. CIV. No. 91-1350 PHX WPC.

Betzine, Jason

Boyer, Ruth M. and Narcissus D. Gayton

Brew, J.O.
Cassa, Jeanette

Crown, Patricia L.

Clemmer, Richard O.

Deaver, William L. and Richard Ciolek-Torello

Dishta, Joseph

Dockstader, Frederick J.

Eriacho, Donald F.

Ezell, Paul H.

Ferguson, T.J. and E. Richard Hart

Ferguson, T.J., Kurt Dongoske, Mike Yeatts and Leigh Jenkins

Fish, Paul and Suzanne
Fontana, Bernard H.

Forbes, Jack D.

Frigout, Arlette

Gillespie, William B.
    1997 Forest Plan Revision - - Sierra Vista Ranger District. Electronic correspondence on file, Coronado National Forest, Tucson.

Goodwin, Grenville

    1932 Place names in the territory of the Chiricahua, Mogollon and Mimbres. Grenville Goodwin Collections; MS 17, Folder 31. Arizona State Museum, Tucson.


Griffith, James S.

Hamilton, Clay

Haury, Emil

Hayes, Alden C.
Hieb, Louis A.

Hilpert, Bruce E.

Hinton, Thomas B.

Imler, Barry L.

James, Harry C.

Jenkins, Leigh, Kurt E. Dongoske and T.J. Ferguson

Kennard, Edward A.

Lamphere, Louise

Mabry, Jonathan


Masayesva, Vernon
McNab, W. Henry and Peter E. Avers  
USDA-FS, Washington, D.C.

Officer, James E.  

Opler, Morris E.  
1941 An Apache Life-way: The Economic, Social and Religious Institutions of the  


Ortiz, Alfonso  
1979 Handbook of North American Indians, Vol. 9. Smithsonian Institution,  
Washington.

1983 Handbook of North American Indians, Vol. 10. Smithsonian Institution,  
Washington.

Perry, Richard J.  
1991 Western Apache Heritage: People of the Mountain Corridor. University of Texas  
Press, Austin.

Pueblo of Zuni  
1992 Pueblo of Zuni, New Mexico Policy Statement Regarding the Protection and  

Sheridan, Thomas E.  
of Arizona Press, Tucson.


1996a The Yoemem (Yaquis): An Enduring People. In Thomas E. Sheridan and Nancy  
J. Parezo, eds., Paths of Life: American Indians of the Southwest and Northern  

1996b The O’odham (Pimas and Papagos): The World Would Burn Without Rain. In  
Thomas E. Sheridan and Nancy J. Parezo, eds., Paths of Life: American Indians  
of the Southwest and Northern Mexico, pp. 115-140. University of Arizona  
Press, Tucson.
Sheridan, Thomas E. and Nancy J. Parezo

Simplicio, Chauncey

Simplicio, Chauncey

Smith, Chad

Spicer, Edward H.


Stanislawski, Michael B.

Sweeney, Edwin R.

Tedlock, Dennis

USDI-National Park Service

Wagoner, Jay

Waters, Michael R.
Whittlesey, Stephanie M.

Whittlesey, Stephanie M., Richard S. Ciolek-Torrello and Matthew A. Sterner

Wilson, John P.

Woodbury, Richard B.