

NAVAJO ARCHAEOLOGY AND ETHNOHISTORY OF THE BEAUTIFUL VALLEY, ARIZONA

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SWCA Environmental Consultants recently completed archaeological investigations along Navajo Route 27 in the Beautiful Valley between Chinle and Nazlini. These investigations included archaeological survey, ethnographic interviews, and archaeological excavations. The work was conducted under the administration of the Navajo Nation Historic Preservation Department for the Bureau of Indian Affairs, Navajo Region, Branch of Roads, Gallup, New Mexico. A total of 44 Navajo sites were recorded during survey, ethnographic interviews were conducted with residents of the valley, and excavations were conducted at one late-eighteenth century Navajo site. These investigations have documented early Navajo occupation and use of the Beautiful Valley, Navajo integration into and adaptation to Euro-American economy and society, and the continued importance of tradition among contemporary Navajo.

ARCHAEOLOGICAL SURVEY

Archaeological survey recorded a total of 45 components at 44 archaeological sites that dated to the Navajo period of occupation (Table 1). Most of the sites dated to the twentieth century including, 6 habitations, 11 locations where ceremonies had been held, the former locations of the Nazlini Day School and the Nazlini Trading Post. The habitation sites mostly date to between the 1930s and 1950s, and all had traditional forms of Navajo architecture.

Nine sites that were ceremonial locations used for *Anaa'ji* (Enemyway) ceremonies. Eight were used during the *Jin jeeh* (first night) activities, and the ninth during the *Nidáá'* (Second Night) activities. The two other sites that were ceremonial locations had been used for *Tl'éé'ji* (Nightway) ceremonies. Local residents said that many of these ceremonial sites were last used in the 1990s (Newton and Gilpin 1998), indicating the continued importance of Navajo traditional religious practice in the area.

Four sites recorded during the archaeological survey played important roles in the integration of the residents of the Beautiful Valley into Euro-American economy and society with the establishment of trading posts, schools, public works projects, and political institutions.

The identification of a vessel of Jeddito Plain raises two interesting possibilities regarding production and exchange. First, this overfired vessel of Jeddito Plain may have been acquired by early Navajo occupants from the Hopi through exchange. Second, and perhaps more interesting, that the vessel may have been manufactured by Navajo of Hopi descent. Several Navajo clans, especially segments of the *Táchii'nii* (Red Running into the Water People) Clan, claim descent from the survivors of the destruction of *Tááldáhooghan* (*Awatovi*) in A.D. 1700 (Begay and Roberts 1996:208; Brugge 1993:122, 1994:9; Kelley and Francis 1998a:697, 700; see discussion below). These people may have continued to manufacture pottery using Hopi methods, including vessel forms, clay sources, tempering material, and coal firing.

Pottery was a widely exchanged commodity during both the prehistoric and historic periods. Jeddito Yellow Ware, the painted pottery made at Hopi at the same time as Awatobi Yellow Ware, was one the most widely exchanged wares in the prehistoric and early historic Southwest (Adams et al. 1993). However, it is doubtful that early Navajo would exchange for decorated pottery considering the taboo against decorated pottery prescribed by the *Hózhóǵí* (Blessingway) Ceremony (Brugge 1981:15). Jeddito Plain, which lacked any decoration other than the rim fillet, would have been a more acceptable pottery for the Navajo to accept in exchange. During the early period of Navajo adoption of a pastoral economic adaptation, exchange relationships with neighboring agriculturalists would have been important, because, as the early Navajo shifted their economic focus towards pastoralism, the allocation of labor for livestock rearing would have taken labor away from agricultural pursuits. In addition to acquiring agricultural products from the Hopi through exchange, these early Navajo pastoralists may have also acquired pottery. The color differences between the type collection sherds of Jeddito Plain from sites on Antelope Mesa and the sherds recovered at Site AZ-P-4-9 may be because the Hopi potters selected the poorly fired vessels to offer in exchange, and retained better fired vessels for their own use.

The second possibility is that the vessel is actually a variant of Jeddito Plain that was made by Navajo descendants of Hopi who had been absorbed into emerging Navajo society during the period of social upheaval that accompanied the Spanish colonial conquest of the Southwest. Oral traditions indicate that the early Navajo occupation of southern Chinle Valley was associated with survivors of the destruction of *Tááldáhooghan* (*Awatovi*) in A.D. 1700 (Brugge 1993:122).

Awatovi means "place of the bows" in Hopi (Hill et al. 1998:41). It was a large Hopi village on Antelope Mesa that was first occupied in the late A.D. 1100s, but grew to its greatest size after A.D. 1300 (Smith 1971). In Navajo the site is known as *Tááldáhooghan*, for which two translations have been offered. Young and Morgan (1987:704) translate it as "flat-topped house," a combination of *táala* for flat-topped and *hooghan* for house. An alternative translation not based on a literal physical description has been presented by Brew (1949:22), who says that "It is usually translated as 'the house of the singing men.'" This translation is supported by Kelley and Francis (1998a:704) who were told by an informant that "Its name comes from *Hatáál Hoghann* (Home of Ceremonies)." This could be more literally translated as "home of the songs or chants." The second

translation of the name refers to the important role that the site played in the introduction of several ceremonial chantways (*Hataáljî*) to the Navajo as told in the origin stories of these *Hataáljî* (Kelley and Francis 1998a:695-697, 1998b).

The village was the location of a Spanish mission, San Bernardo de Aguatubi, that was established after the conversion of some residents of *Awatovi* by Spanish missionaries in A.D. 1629. This establishment served as the base of Spanish operations at Hopi, allowing further missionary activity in other Hopi villages. The Hopi participated in the Pueblo Revolt of 1680, killing all of the Spanish missionaries at Hopi. After the Spanish reconquest of New Mexico in A.D. 1692, the Hopi made an outward show of fealty to the Spaniards while still providing support for continued Pueblo resistance in the Rio Grande. In A.D. 1700, the mission at *Awatovi* was re-established by the Spaniards with the support of Christianized residents of the village (Brew 1949).

Hopi from the other villages, who were upset at the return of the Spaniards and the support provided them by the villagers, decided to mass their forces and destroy *Awatovi*. The behavior of the Spaniards, such as the liberties that they were taking with Hopi women, the repression of Hopi ritual, and the destruction of ritual paraphernalia, ensured the animosity of the Hopi. Hopi oral traditions suggest that some residents of *Awatovi* may have assisted the attackers. Those who assisted from inside the village included the *kikmongwi*, or village chief, who was distraught over his own people's neglect of native rituals. One night during the winter of A.D. 1700, men from the other Hopi villages attacked, trapping the men of *Awatovi* in their kivas and burning them alive. The women and children were captured by the attackers, who planned to divide them among themselves. However, an argument arose during the division of the spoils, and many of the captives were killed. Those women who were adopted into the other Hopi villages were said to have introduced some of the women's religious societies to those villages (Bandelier 1892:371-372; Bourke 1884:90-91; Courlander 1971:175-184, 1982:55-61; Fewkes 1893, 1896:603-606; H. James 1974:61-64; Lomatuway'ma et al. 1993:275-409; Voth 1905:246-255; Yava 1978:88-97).

Not all residents of *Awatovi* were killed or incorporated into the populations of the victorious villages. Even Hopi traditions say that some of the survivors of the destruction joined with their Navajo neighbors (Ishii 2001:149). Navajo traditions suggest that survivors from *Tááldáhooghan* joined with two specific clans and lived in southern Chinle Valley, around Canyon de Chelly, and in the upper Polacca Wash drainage on the eastern part of Black Mesa. Some of the *Tááldáhooghan* survivors settled at *Táchii* (Red Soil) Spring at the headwaters of Polacca Wash and became the *Táchii'nii* (Red Running into the Water People) Clan. The oral traditions of this clan say that they had come from the San Francisco Peaks area, settled at *Awatovi* forming a distinct population within the already thriving village, and survived the attack. This clan has several segments, including *Anaasázi Dine'é Táchii'nii* (Anasazi People), *Bíjñ Dine'é Táchii'nii* (Deer People), *Dólii Dine'é Táchii'nii* (Blue Bird People), *Gah Dine'é Táchii'nii* (Rabbit People), *Naaneesht'ézhi Dine'é Táchii'nii* (Charcoal Streaked People), *Naasht'ézhi Dine'é Táchii'nii* (Zuni People), *Nát'oh Dine'é Táchii'nii* (Tobacco People), *Nóóda'i Dine'é Táchii'nii* (Ute People), *Ostse' Dine'é Táchii'nii* (Tansy Mustard People), *Yé'ii Dine'é*

Táchii'nii (Giant or Masked God People), and *Kinlichii'nii* (Red House People) (Austin and Lynch 1983:5; Begay and Roberts 1996: 208; Brugge 1993:122, 1994:9; Kelley and Francis 1998a:697, 700; Young and Morgan 1987:351–352).

Some of these segments share names with Hopi clans (Table 2), which include *Aalngyam* (Deer Clan), *Asngyam* (Tansy Mustard Clan), *Katsinngyam* (*Katsina* Clan), *Pipngyam* (Tobacco Clan), *Tapngyam* (Rabbit Clan), and *Tsornygam* (Blue Bird Clan) (Eggar 1950; Hill et al. 1998). Brugge (1994:9) suggests that *Yé'ii Dine'é* could be translated as being analogous to *Katsina* People. It is possible that these six segments of *Táchii'nii* derive from survivors from *Táádláhooghan* who were members of the Hopi clans with analogous names that became absorbed into emerging Navajo society as part of the *Táchii'nii* Clan.

Table 2. Navajo and Hopi clans with shared totemic names.

Navajo Clan	Hopi Clan	Shared Totem
<i>Bí'ih Dine'é Táchii'nii</i>	<i>Aalngyam</i>	Deer
<i>Dó'lii Dine'é Táchii'nii</i>	<i>Tsomygam</i>	Bluebird
<i>Gah Dine'é Táchii'nii</i>	<i>Tapngyam</i>	Rabbit
<i>Nát'oh Dine'é Táchii'nii</i>	<i>Pipngyam</i>	Tobacco
<i>Ostse' Dine'é Táchii'nii</i>	<i>Asngyam</i>	Tansy Mustard
<i>Yé'ii Dine'é Táchii'nii</i>	<i>Katsinngyam</i>	Supernaturals

The names of the other segments of *Táchii'nii* indicate groups incorporated from sources other than the Hopi, including Ute (*Nóoda'i Dine'é Táchii'nii*), Zuni (*Naasht'ézhí Dine'é Táchii'nii* and *Naaneesht'ézhí Dine'é Táchii'nii*), and Zia (*Kinlichii'nii*). There is even a segment whose name indicates that it derived not from a historically recognized ethnic group, but rather from the prehistoric inhabitants of the area, the *Anaasázi*. This segment claims descent from *Anaasázi* in the Grand Canyon who survived the *naayéé'*, the wind of fire that destroyed most of the *Anaasázi* (Begay and Roberts 1996:208; see also Matthews 1897:145–146). This segment may be the oldest of the *Táchii'nii*, and may have been the nucleus around which the other segments organized themselves.

Survivors from *Táádláhooghan* are also associated with the *Mq'ii Deeshgiishnii* (Coyote Pass) Clan. Navajo oral traditions consider this clan to be associated with Jemez Pueblo by common ancestry from sites occupied during the Chacoan era, and, that after the Pueblo Revolt and Spanish Reconquest additional clan members were drawn from refugees that fled Jemez. These people were then joined by survivors from *Táádláhooghan* in the Canyon de Chelly area in the early 1700s (Kelley and Francis 1998a:700).

Hopi accounts suggest that members of *Asngyam* (Tansy Mustard Clan) lived among the Navajo in the Canyon de Chelly area for two or three generations during a period of drought beginning in the late-seventeenth century (Ferguson 1998:656; Fewkes 1894:164–165; Mindeleff 1891:30). These Hopi were said to have introduced peaches to the Navajo. While Hopi accounts say that most *Asngyam* eventually moved to First Mesa because of quarrels with the Navajo, some stayed among the Navajo and were incorporated into the *Kinyaa'áanii* (Towering House People) clan.

Táchii'nii (Giant or Masked God People), and *Kintlichii'nii* (Red House People) (Austin and Lynch 1983:5; Begay and Roberts 1996: 208; Brugge 1993:122, 1994:9; Kelley and Francis 1998a:697, 700; Young and Morgan 1987:351–352).

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<i>Gah Dine'é Táchii'nii</i>	<i>Tapngyam</i>	Rabbit
<i>Nát'oh Dine'é Táchii'nii</i>	<i>Pipngyam</i>	Tobacco
<i>Ostse' Dine'é Táchii'nii</i>	<i>Asngyam</i>	Tansy Mustard
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The incorporation of Hopi survivors from the destruction *Tááláhooghan* into Navajo clans suggests that some aspects of Hopi ceramic technology may have been transferred to the Navajo with these survivors. The aspects of Hopi pottery technology that may have continued to be used by the Navajo of Hopi descent include vessel forms, use of certain clays and tempers, and coal firing. However, some of the finer aspects of the technology may have been lost, such as specifics about maintaining the firing temperature and atmosphere in order to assure a brighter yellow hue. It may be that the darker hue and vitrification of the sherds recovered from Site AZ-P-4-9 were poorly fired because the vessel is a variant of Jeddito Plain that was manufactured by Navajo of Hopi descent who used coal in the firing but could not control the atmosphere or temperature well enough to achieve the bright yellow hues.

Also, Navajo of Hopi descent, in attempting to replicate Hopi pottery technology, may have exploited clay from different, yet geologically similar, sources. Clay from lenses within the Toreva and Wepo Formations of the Cretaceous Mesa Verde Group were used for pottery manufacture at Antelope Mesa and the Hopi Mesas. Exposures of the same formations are also found in the area of *Táchii* Spring and along the eastern flanks of Black and Balakai Mesas in southern Chinle Valley (Cooley et al. 1969). Coal for fuel could also be found in these same formations (Kirschbaum et al. 2000). The materials required for the manufacture of Hopi pottery were found in the areas inhabited by Navajo of Hopi descent.

Previous research on Jeddito Yellow Ware has used neutron activation analysis (NAA) of pottery to establish reference groups for clays of the Hopi area (Bishop et al. 1988). NAA of sherds from Site AZ-P-4-9 could determine whether they were manufactured at the Hopi mesas or in another area. If the sherds from Site AZ-P-4-9 matched one of the established reference groups, it would indicate that they were produced in the Hopi area and were exchanged to the Navajo. If they did not match, it would indicate that they were not manufactured in the Hopi area, and would support the possibility that they were made in another area by Navajo of Hopi descent.

While Site AZ-P-4-9 appears to be merely a small artifact scatter with no features, the site may be important in understanding the genesis of Navajo society because of the co-association of early Navajo pottery (Dinéah Gray, Transitional Variety) and Hopi pottery (Jeddito Plain). This limited assemblage may provide archaeological evidence of cultural mixing that confirms Navajo oral traditions regarding the integration of Hopi survivors of the destruction of *Tááláhooghan* (*Awatovi*) into the *Táchii'nii* and *Ma'ii Deeshgiishnii* clans. Additional research on the pottery using chemical sourcing methods could clarify whether the Jeddito Plain sherds were acquired through exchange with the Hopi or were made by Navajo of Hopi descent.

CONCLUSIONS

Archaeological and ethnohistorical research along Navajo Route 27 has documented Navajo use and occupation of the Beautiful Valley from the eighteenth through twentieth

centuries. The archaeological sites investigated provide information on early Navajo occupation of the region, the process of integration into and adaptation to Euro-American economy and society, and the continued importance of tradition among contemporary Navajo.

REFERENCES CITED

- Adams, E. Charles, Miriam T. Stark, and Deborah S. Dosh
1993 Ceramic Distribution and Exchange: Jeddito Yellow Ware and Implications for Social Complexity. *Journal of Field Archaeology* 20:3-21.
- Adams, Stephen E.
1982 Salvage Excavation: The Sand Dune Site. Ms on file, Southwest Regional Office, National Park Service, Santa Fe.
- Austin, Martha, and Regina Lynch
1983 *Saad Ahaqh Sinil: Dual Language, a Navajo-English Dictionary*. Rev. ed. Rough Rock Demonstration School, Rough Rock, Arizona.
- Bandelier, Adolf F.
1892 *Final Report of Investigations among the Indians of the Southwestern United States Carried on Mainly in the Years from 1880 to 1885*, Part 2. Papers of the Archaeological Institute of America, American Series No. 4. J. Wilson, Cambridge, Massachusetts.
- Begay, Richard M. and Alexandra Roberts
1996 Early Navajo Occupation of the Grand Canyon Region. In *The Archaeology of Navajo Origins*, edited by Ronald H. Towner, pp. 197-210. University of Utah Press, Salt Lake City.
- Bishop, Ronald L., Veletta Canouts, Suzanne P. De Atley, Alfred Qöyawayma, and C. W. Aikens
1988 The Formation of Ceramic Analytical Groups: Hopi Pottery Production and Exchange, A.D. 1300-1600. *Journal of Field Archaeology* 15:317-337.
- Bourke, John G.
1884 *The Snake-Dance of the Moquis*. Charles Scribner's Sons, New York.
- Brew, John Otis
1949 The History of Awatovi. In *Franciscan Awatovi: The Excavation and Conjectural Reconstruction of a 17th-Century Spanish Mission Establishment at a Hopi Indian Town in Northeastern Arizona*, by Ross Gordon Montgomery, Watson Smith, and John Otis Brew, pp. 3-43. Papers of the Peabody Museum of American Archaeology and Ethnology, Vol. 36. Harvard University, Cambridge, Massachusetts.
- Brugge, David M.
1972 *The Navajo Exodus*. Archaeological Society of New Mexico, Supplement 4. Albuquerque.
1981 *Navajo Pottery and Ethnohistory*. Navajo Nation Papers in Anthropology No. 4. Navajo Nation Cultural Resource Management Program, Window Rock, Arizona.
1982 Apache and Navajo Ceramics. In *Southwestern Ceramics: A Comparative Review*, edited by Albert H. Schroeder, pp. 279-298. Arizona Archaeologist No. 15. Arizona Archaeological Society, Phoenix.
1993 Traditional History of Wide Reeds. In *Wide Reed Ruin*, edited by James E. Mount, Stanley J. Olsen, John W. Olsen, George A. Teague, and B. Dean Treadwell, pp.121-124. Southwest Cultural Resources Center Professional Papers No. 51. USDI, National Park Service, Santa Fe.

- Brugge, David M. (cont.)
 1994 *The Navajo Hopi Land Dispute: An American Tragedy*. University of New Mexico Press, Albuquerque.
- Colton, Harold S.
 1956 *Pottery Types of the Southwest: Wares 5A, 5B, 6A, 6B, 7A, 7B, 7C; San Juan Red Ware, Tegei Orange Ware, Homolovi Orange Ware, Winslow Orange Ware, Awatovi Yellow Ware, Jeddito Yellow Ware, Sichomovi Red Ware*. Museum of Northern Arizona Ceramic Series No. 3C. Northern Arizona Society of Science and Art, Flagstaff.
- Cooley, M. E., J. W. Harshbarger, J. P. Akers, and W. F. Hardt
 1969 *The Regional Hydrogeology of the Navajo and Hopi Indian Reservations, Arizona, New Mexico, and Utah*. Geological Survey Professional Paper 521-A. Government Printing Office, Washington, D.C.
- Courlander, Harold
 1971 *The Fourth World of the Hopi*. Crown Publishers, New York.
 1982 *Hopi Voices: Recollections, Traditions, and Narratives of the Hopi Indians*. University of New Mexico Press, Albuquerque.
- Eggan, Fred
 1950 *Social Organization of the Western Pueblos*. University of Chicago Press. Chicago.
- Ferguson, T. J.
 1998 Hopi Footprints in the Jeddito Valley: Interpretation of Ethnohistory and Archaeology. In *Ethnohistorical Interpretation and Archaeological Data Recovery along Navajo Route 9107, Jeddito Road, Navajo County, Arizona*, prepared by David C. Eck, pp. 681-715. Zuni Cultural Resource Enterprise Report No. 562. Pueblo of Zuni, New Mexico.
- Fewkes, Jesse W.
 1893 A-WA'-TO-BI: An Archaeological Verification of a Tusayan Legend. *American Anthropologist* 6:363-375.
 1894 The Kinship of a Tanoan Speaking Community in Tusayan. *American Anthropologist* 7:162-167.
- Franciscan Fathers
 1912 *A Vocabulary of the Navaho Language, Vol. 1: English-Navajo*. The Franciscan Fathers, St. Michael's, Arizona.
- Gilpin, Dennis
 1996 Early Navajo Occupation West of the Chuska Mountains. In *The Archaeology of Navajo Origins*, edited by Ronald H. Towner, pp. 171-196. University of Utah Press, Salt Lake City.
 2001 The Talking Rocks of Carson's Wall: Navajo History and Settlement as Revealed at a Multicomponent Rock Art Site in the Chinle Valley, Arizona. In *American Indian Rock Art, Vol. 27*, edited by Steven M. Freers and Alanah Woody, pp. 59-66. American Rock Art Research Association, Whittier, California.
- Hagopian, Janet, and F. Michael O'Hara, III
 2004 Ceramic Analysis. In *Archaeological Investigations near Canyon de Chelly: Excavation of Four Sites along Navajo Route 27, Chinle-Nazlini, Apache County, Arizona*, pp. 13.1-13.111. SWCA Cultural Resources Report No. 04-001. SWCA Environmental Consultants, Flagstaff.
- Haile, Berard
 1938a *Origin Legend of the Navajo Enemyway: Text and Translation*. Yale University Publications in Anthropology No. 17. Yale University Press, New Haven, Connecticut.
 1938b Navaho Chantways and Ceremonials. *American Anthropologist* 40:639-652.

- Hargrave, Lyndon L.
 1932 *Guide to Forty Pottery Types from the Hopi Country and the San Francisco Mountains, Arizona*. Museum of Northern Arizona Bulletin No. 1. Northern Arizona Society of Science and Art, Flagstaff.
- Hill, Kenneth C., Emory Sekaquaptewa, Mary E. Black, Ekkehart Malotki, and Michael Lomatuway'ma
 1998 *Hopi Dictionary = Hopiikwa Lavaytutveni: A Hopi-English Dictionary of the Third Mesa Dialect with an English-Hopi Finder List and a Sketch of Hopi Grammar*. University of Arizona Press, Tucson.
- Hill, W. W.
 1937 *Navajo Pottery Manufacture*. University of New Mexico Bulletin, Anthropological Series, Vol. 2, No. 3. University of New Mexico Press, Albuquerque.
 1938 *The Agricultural and Hunting Methods of the Navaho Indians*. Yale University Publications in Anthropology No. 18. Yale University Press, New Haven, Connecticut.
- Ishii, Lomayumtewa
 2001 *Voices from Our Ancestor: Hopi Resistance to Scientific Historicide*. Ph.D. dissertation, Department of History, Northern Arizona University, Flagstaff.
- James, Harry C.
 1974 *Pages from Hopi History*. University of Arizona Press, Tucson.
- Jensen, Katherine
 1983 *Teachers and Progressives: The Navajo Day School Experiment, 1935-1945*. *Arizona and the West* 25:49-62.
- Jett, Stephen C.
 1994 *Cairn Trail Shrines of the Navajo, the Apache, and Puebloans, and of the the Far North*. In *Artifacts Shrines and Pueblos: Papers in Honor of Gordon Page*, edited by Meliha S. Duhan and David T. Kirkpatrick, pp. 129-145. Papers of the Archaeological Society of New Mexico No. 20. Archaeological Society of New Mexico, Albuquerque.
 2001 *Navajo Place Names and Trails of the Canyon de Chelly System, Arizona*. American Indian Studies Vol. 12. Peter Lang Publishing, New York.
- Jones, Karin L.
 1988 *Excavation of the Sand Dune Site (AZ K:6:11) at Hubbell Trading Post National Historic Site, Ganado, Arizona*. Southwest Archaeological Consultants, Inc., Santa Fe. Prepared for Southwest Regional Office, National Park Service, Santa Fe, Purchase Order No. PX-7029-7-0730.
- Kelley, Klara B., and Harris Francis
 1998a *Navajo (Diné) Ethnography*. In *Ethnohistorical Interpretation and Archaeological Data Recovery along Navajo Route 9101, Jeddito Road, Navajo County, Arizona*, prepared by David C. Eck, pp. 681-715. Zuni Cultural Resource Enterprise Report No. 562. Pueblo of Zuni, New Mexico.
 1998b *An Anthropological Interpretation of Diné Stories about Tááláhooghan in Archaeological Context*. In *Ethnohistorical Interpretation and Archaeological Data Recovery along Navajo Route 9101, Jeddito Road, Navajo County, Arizona*, prepared by David C. Eck, pp. 1093-1096. Zuni Cultural Resource Enterprise Report No. 562. Pueblo of Zuni, New Mexico.
- Kelley, Klara B., and Rolf Nabahe
 1987 *An Archaeological Survey of the Nazlini Trading Post Compound, Nazlini, Arizona*. Navajo Nation Cultural Resource Management Program Report 87-151. Window Rock, Arizona.

- Kirschbaum, M. A., L. N. R. Roberts, and L. H. R. Biewick
 2000 *Geologic Assessment of Coal in the Colorado Plateau: Arizona, Colorado, New Mexico, and Utah*. USGS Professional Paper 1625-B. United States Geological Survey, Denver, Colorado.
- Link, Martin A.
 1968 *Navajo: A Century of Progress, 1868-1968*. K. C. Publications, Flagstaff.
- Lomatuway'ma, Michael, Lorena Lomatuway'ma, and Sidney Namingha, Jr.
 1993 *Hopi Ruin Legends*, edited by Ekkehart Malotki. University of Nebraska Press, Lincoln.
- McKenna, Peter J.
 1987 An Evaluation of Ceramics at the Sand Dune Site, Hubbell Trading Post, NHS. Ms on file, Division of Anthropology, Southwest Cultural Resources Center, National Park Service, Santa Fe.
- Matthews, Washington
 1897 *Navaho Legends*. Memoirs of the American Folklore Society Vol. 5. New York.
- Mindeleff, Victor
 1891 A Study of Pueblo Architecture in Tusayan and Cibola. In *Eighth Annual Report of the Bureau of American Ethnology for the Years 1886-1887*, pp. 3-228. Washington, D.C.
- Mitchell, Frank
 1978 *Navajo Blessingway Singer: The Autobiography of Frank Mitchell, 1881-1967*. University of Arizona Press, Tucson.
- Newton, Virginia, and Dennis Gilpin
 1998 *Cultural Preservation Beautiful Valley: Ethnographic and Archaeological Investigations along Navajo Route 27, Apache County, Arizona*. SWCA Archaeological Report No. 96-149. SWCA Environmental Consultants, Tucson.
- O'Hara, F. Michael, III
 2004 Site AZ-P-4-9. In *Archaeological Investigations near Canyon de Chelly: Excavation of Four Sites along Navajo Route 27, Chinle-Nazlini, Apache County, Arizona*, pp. 8.1-8.14. SWCA Cultural Resources Report No. 04-001. SWCA Environmental Consultants, Flagstaff.
- Potter, James M., and Dennis Gilpin
 2000 *Archaeological Testing on Navajo Route 27, Chinle-Nazlini, Apache County, Arizona*. SWCA Archaeological Report No. 99-256. SWCA Environmental Consultants, Flagstaff.
- Roosevelt, Theodore
 1913 The Hopi Snake Dance. *The Outlook* 105:365-373.
- Smith, Watson
 1971 *Painted Ceramics of the Western Mound at Awatovi*. Papers of the Peabody Museum of American Archaeology and Ethnology, Vol. 38. Harvard University, Cambridge, Massachusetts.
- Tanner, Clara Lee
 1968 *Southwest Indian Craft Arts*. University of Arizona Press, Tucson.
- Thompson, Hildegard
 1975 *The Navajos' Long Walk for Education: A History of Navajo Education*. Navajo Community College Press, Tsaile Lake, Arizona.

- Valette, Rebecca M., and Jean-Paul Valette
 2000 The Life and Work of Clitso Dedman, Navajo Woodcarver (1879?-1953). *American Indian Art Magazine* 25(2):54-67.
- Van Valkenburgh, Richard F.
 1940 Sacred Places and Shrines of the Navajo Part II: Navajo Rock and Twig Piles, Called Tsenadjihih. *Plateau* 13:6-9.
 1941 *Diné Bikéyah*. USDI Office of Indian Affairs, Navajo Service, Window Rock, Arizona.
- Van Valkenburgh, Richard F., J. Lee Correll, David M. Brugge, and Martin A. Link
 1959 Report of Archaeological Survey of the Navajo-Hopi Contact Area. MS 246-82 David De Harport Collection, Katharine Bartlett Learning Center, Museum of Northern Arizona, Flagstaff.
- Voth, H. R.
 1905 *The Traditions of the Hopi*. Field Columbian Museum Anthropological Series Vol. 8. Chicago.
- Watson, Editha L.
 1964 *Navajo Sacred Places*. Navajoland Publications Series No. 5. Navajo Tribal Museum, Window Rock, Arizona.
- Wyatt, Charles D.
 1944 A New Navajo Art. *Arizona Highways* 20(4):34-35.
- Yava, Albert
 1978 *Big Falling Snow: A Tewa-Hopi Indian's Life and Times and the History and Traditions of His People*, edited and annotated by Harold Courlander. University of New Mexico Press, Albuquerque.
- Young, Robert W., and William Morgan, Sr.
 1987 *The Navajo Language: A Grammar and Colloquial Dictionary*. Rev. ed. University of New Mexico Press, Albuquerque.