MUSEUM OF NEW MEXICO

OFFICE OF ARCHAEOLOGICAL STUDIES

OFFICE OF ARCHAEOLOGICAL STUDIES

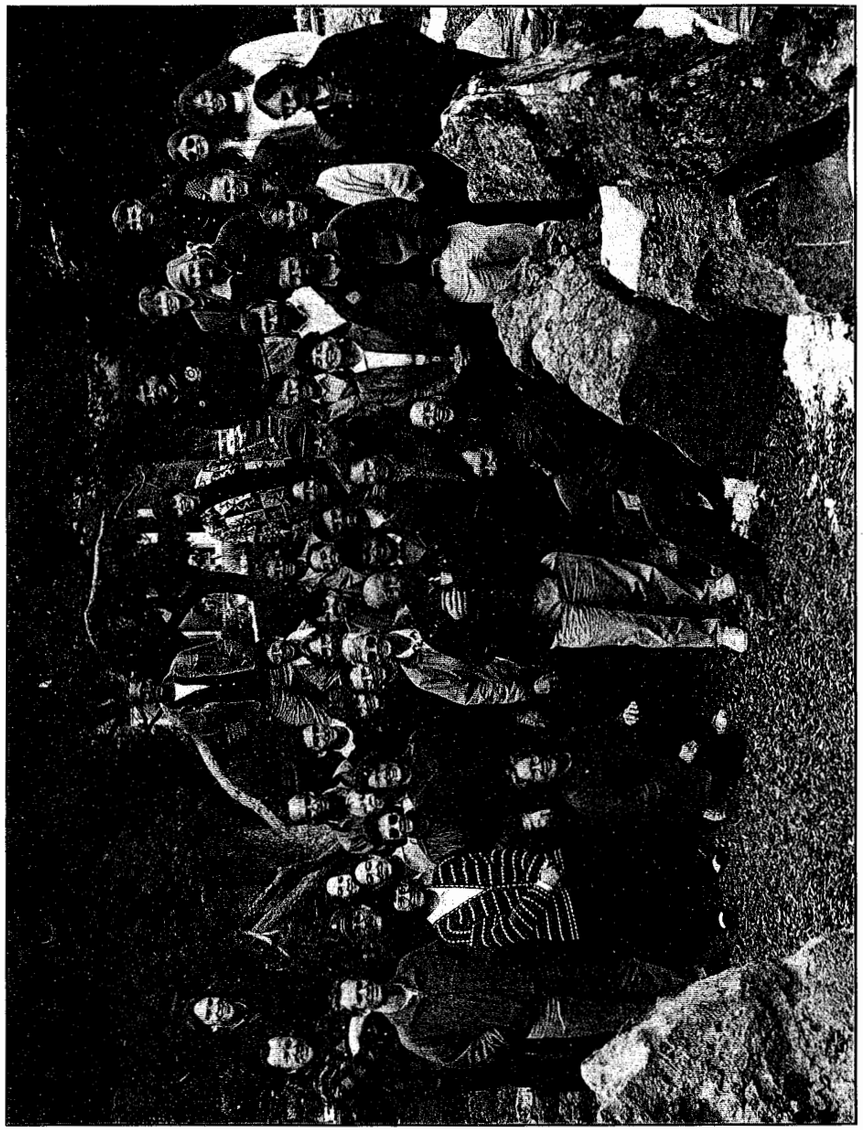
ANNUAL REPORT 1993

by

OAS STAFF

ARCHAEOLOGY NOTES 153

SANTA FE 1994 NEW MEXICO



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FOREWORD

The year of 1993 was a busy one at the Office of Archaeological Studies. In addition to 20 field projects, the OAS made significant progress in establishing its public outreach program, offered public tours of sites, inaugurated two cooperative research projects with Mexican archaeologists, and conducted special archaeological experiments for federal agencies. The OAS staff gave more public presentations than ever before and an exhibit based on the archaeology of the La Plata Valley was produced.

The Museum of New Mexico Foundation continued to offer valuable support in 1993. Funds were provided for the public outreach program, and the Friends of Archaeology, headed by Doc Weaver, enthusiastically promoted OAS programs. Many people made contributions of time and money in 1993 and we are grateful to each of them. We also thank our volunteers, Sam Sweesy in particular, for their many hours of labor and constant inspiration.

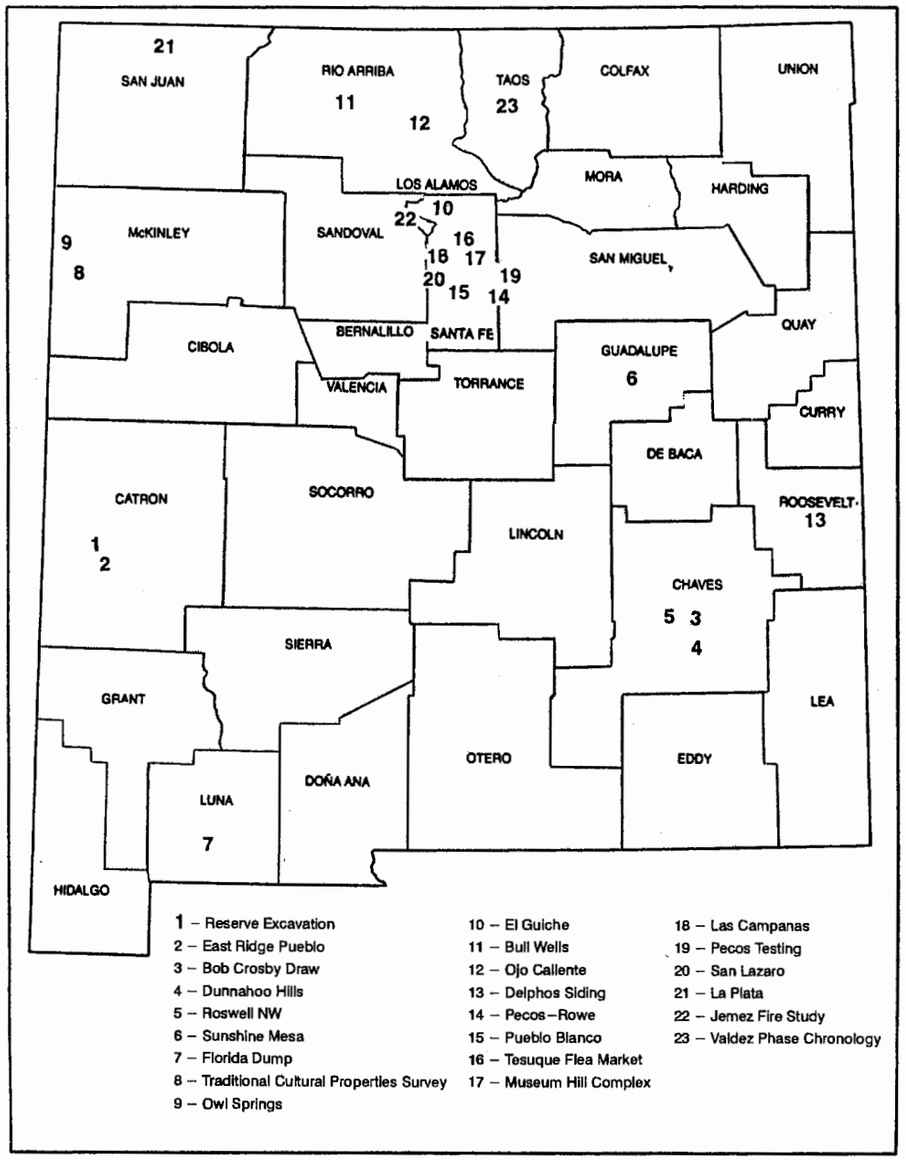
As in years past, the OAS conducted cooperative research with other state and federal agencies. In 1993, these agencies included the USDA Forest Service and the USDI Bureau of Land Management. A study of traditional land use areas for all Native American groups in New Mexico was completed for the State of New Mexico, Historic Preservation Division. In addition to these research projects, a cooperative study on rock art and prehistoric agriculture was instituted with the Instituto Nacional de Antropología e Historia in Chihuahua, Mexico. The research will begin in 1994 with OAS archaeologists working in Mexico.

For the future, the Museum of New Mexico requested funding from the state legislature for the construction of a new addition at the Laboratory of Anthropology that would include OAS laboratories and offices as well as room for the Archaeological Research Collections and new archival and site record facilities. Funds for planning and design were provided during the 1994 legislative session and the planning will begin in late 1994.

On the administrative side of government, we would like to recognize the special help of Thomas A. Livesay, director, Museum of New Mexico and Helmuth J. Naumer, cultural affairs officer of the State of New Mexico. Others that provided particular assistance include Jo Ann Flores, Perla Anaya, and Tisa Gabriel of the Administrative Services Division of the Office of Cultural Affairs. At the Museum of New Mexico Foundation, Melissa Engestrom, Chris Hall, and Sue Ann Snyder gave us many hours of extremely useful direction and service. Lastly, without the support of William L. Taylor and Steven A. Koczan at the New Mexico State Highway and Transportation Department, the OAS program would be greatly diminished.

Timothy D. Maxwell
Director

FIELD RESEARCH



RESERVE EXCAVATIONS
Catron County

Four prehistoric sites were excavated west of Reserve, New Mexico, in the Mogollon Highlands. LA 39968, the Spurgeon Draw site, consisted of a large pit structure (5 meters in diameter), 2.45 meters deep. The structure was mud-plastered half way up the walls and then cobble-lined. It had a long, narrow entry ramp, an in situ mealing bin with several pieces of associated ground stone, and one wooden post still in place. The hearth was rebuilt three times and produced an average archaeomagnetic date of A.D. 1200. Low rock walls rimmed the pit structure, indicating possible remains of masonry storage rooms. A reservoir and the outline of a jacal structure were also present on the site.

LA 39969, Haury's site, was a three-room masonry room block. Two of the rooms were small and paved with river cobbles. The larger room had an expediently prepared hearth and a small floor area in the southwest corner paved with flat rocks. This paving appears in another area just outside of the room block walls. Numerous pits were aligned along one side of these walls. This site also contained the remains of a jacal structure. The site probably dates to the Reserve phase, post A.D. 1000.

One site, LA 39972, was a probable Reserve phase room block. Only associated trash and a shallow pit were studied. On the north half of the site was a small lithic and ground stone artifact scatter probably dating to the Archaic period.

LA 43766, the Old Peralta site, was an Archaic campsite along the SU Canyon drainage. The site proved to be much more extensive than indicated by surface evidence. Two occupation surfaces were uncovered at a depth of 40 and 50 centimeters. On these levels were two hearths, a rock-filled roasting pit with faunal remains and a projectile point, and a small pit of unknown use. Over 100 San Pedro projectile points and numerous biface flakes were recovered. Radiocarbon samples were retrieved but dates are not yet available.

Project Directors: Yvonne Oakes and Dorothy Zamora

EAST RIDGE PUEBLO
Catron County

The OAS received a cost-share grant from the Gila/Apache National Forest to conduct a mapping and testing program at East Ridge Pueblo in Pueblo Park Campground near Reserve, New Mexico. The USDA Forest Service plans to open the site as part of an interpretive program at the campground.

The site, LA 21153, dates to the early Tularosa phase (radiocarbon dated to A.D. 1166) of the Mogollon Culture. Situated on a gently sloping ridge are two cobble-walled room blocks and a large kiva with additional surrounding rooms. The total number of rooms may exceed 20. An earlier pithouse component lies immediately to the north and east of the room blocks. Several nearby rock outlines of unknown association are also present.

Testing revealed that rooms are partitioned by masonry walls in excellent condition, standing at least 90 cm high. One room contained burned corn and cob fragments. The kiva is masonry-lined and plastered along its lower depths. It is approximately 10 meters (over 30 feet) wide and extends 1.65 meters (about 5 feet) below ground surface.

East Ridge Pueblo has the potential to yield important information on subsistence, settlement layout, and social adaptation during the Tularosa phase in this area of the Mogollon Highlands. The depth and preservation of the site suggest that the potential for data retrieval is high and that research questions can be addressed. Recommendations for further work at the site have been made.

Project Director: Yvonne R. Oakes
Archaeology Note 135

BOB CROSBY DRAW PROJECT
Chaves County

A data recovery plan was prepared for LA 75163 and LA 103931 located just east of the Pecos River northeast of Roswell, New Mexico. LA 75163 is situated among sand dunes, has lithic and pottery artifacts and abundant burned rock. Earlier work by Human Systems Research, Inc., recovered artifacts and burned rock from depths as great as 1.10 m (over 3 ft), though most items came from within 50 cm of the surface. Occupations dating to the late prehistoric (pottery) period, Archaic period, and perhaps the Paleoindian period may be represented. Because of its size, multi-occupational nature, potential for subsurface features (pits, hearths, structures), and location near a spring, the site is one of the larger, more significant sites in this part of New Mexico.

LA 103931 appears to an undisturbed, single-component sherd and lithic artifact scatter.

Research will focus on whether the pottery components belonged to hunter-gatherers or to farmers from nearby sites like Bloom Mound, the Henderson site, and the Rocky Arroyo site. The data recovery plan has been approved, and excavations will be conducted in 1994. In the future, a larger portion of the site will be excavated prior to highway construction.

Project Director: Regge Wiseman
Archaeology Note 124

DUNNAHOO HILLS TESTING PROJECT
Chaves County

In April, two sites in sand dunes were tested north of Roswell, New Mexico. Although both sites are ostensibly only artifact scatters, testing revealed the potential for subsurface features at both locations. LA 6825 dates to the late prehistoric (pottery) period and appears to have either pits or pit structures and hearths. LA 6826 lacks pottery but may have one or more hearths. The research will focus on whether these sites, especially LA 6825, belonged to full-time hunter-gatherers or to farmers from nearby sites like Bloom Mound, the Henderson site, and the Rocky Arroyo site. The data recovery plan has been approved, and excavations will be conducted in 1994 for the New Mexico State Highway and Transportation Department.

Project Director: Regge Wiseman
Archaeology Note 129

ROSWELL NW (RELIEF ROUTE) EXCAVATION PROJECT
Chaves County

During the fall, three prehistoric sites (excavated by R. N. Wiseman) and one historic site (excavated by Jeffrey Boyer) were excavated. Two of the prehistoric sites are lithic scatters with cobble hearths. The third prehistoric site, LA 68182 or Los Molinos, has about 90 bedrock features (basin metates and mortars) arranged in four groups. The main surprise at this site, situated on a windswept, rocky hill, is the natural crevice along the top of the hill, which is filled with medium to dark gray cultural soil and thousands of chipped lithics, sherds, artifacts (projectile points, manos, metate fragments, etc.), and animal bone fragments. The preponderance of projectile point and pottery evidence indicates a late prehistoric occupation starting at least as early as A.D. 900 or 950 and lasting as late as A.D. 1350. Although a few small Archaic-like points were recovered, most projectiles are corner-notched and side-notched arrow points. Analysis will focus on whether this site belonged to full-time hunter-gatherers or to farmers from nearby sites like Bloom Mound, the Henderson site, and the Rocky Arroyo site.

In addition to the prehistoric sites, the OAS conducted archaeological and ethnohistoric investigations at LA 54346, a homestead site dating to the first two decades of the twentieth century. Eleven site features were recorded.

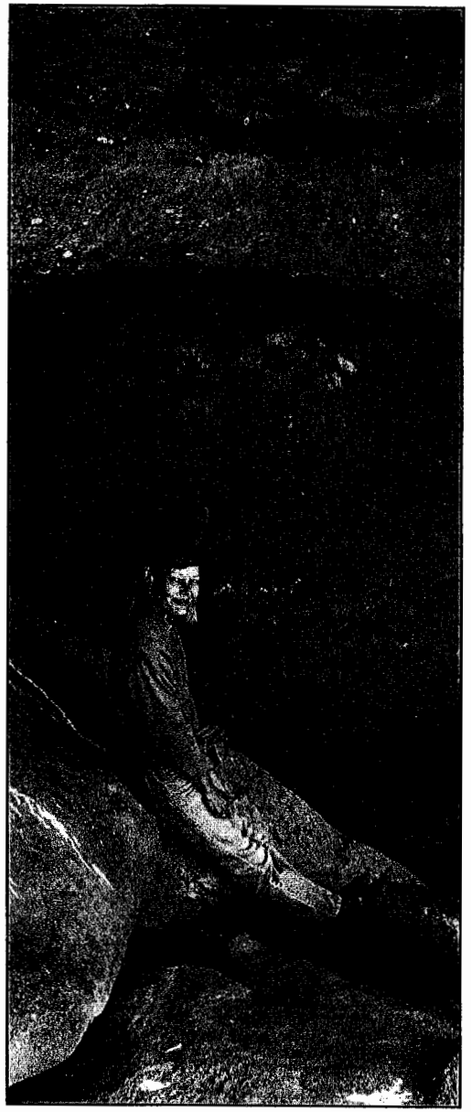
Bureau of Land Management and Chaves County records show that a homestead patent was issued to a Lewis S. Cass in 1911, for the 160 acres on which the site is located. Patent records state that, at the time the patent was issued, Cass had a one-and-a-half story house with a fenced yard, a deep well, and a stock barn on the property. Excavations centered on the house.

Analyses are focusing on both the archaeology and history of the site and on historic land claim and settlement patterns in the area immediately west of Roswell. Several Cass family members acquired homestead patents in the vicinity of LA 54346 and Lewis Cass, with two brothers, became involved in a land speculation business that concentrated its activities on the area surrounding his homestead. Although short-lived, the business seems to have been representative of land development and speculation activities common around Roswell in the early 1900s.

Project Directors: Regge Wiseman and Jeffrey Boyer
Ethnohistorian: Janet Spivey

US 84–SUNSHINE MESA
Guadalupe County

In May and June, the OAS tested 12 sites located along US 84 south of Santa Rosa. All of the sites consisted of lithic artifact scatters, although two sites



also contained evidence of possible historic components. Test trenches indicate little subsurface integrity remained on any of the sites within the project area.

In-field analysis was conducted of all surface artifacts found within the project area. Diagnostic artifacts indicate one site is late Paleoindian and another is Late Archaic. Lithic analysis suggests two sites are late Paleoindian/Early Archaic and the remaining eight sites are undifferentiated Archaic.

Project Director: Peter Y. Bullock
Archaeology Notes 130

FLORIDA DUMP
Luna County

An in-field analysis of surface artifacts was conducted at the site of the Florida dump, near Deming, New Mexico. Artifact analysis was supplemented with archival research and interviews in the Deming area. The dump has been heavily disturbed by bottle hunters in the recent past. The historic artifact assemblage clusters by date of manufacture at 1890-1920 and 1920-1940.

Florida was a railroad watering stop and section house. A station was built that briefly served Ft. Cook, and later the Cooke's Peak mining district and local ranches. Although never a town, Florida did exist as a small community of railroad employees and local ranchers.

World War II saw the paving of NM 26 between Florida and Deming, and the closure of both the post office and school. This period also saw the population of Florida shift from being overwhelmingly Anglo to primarily Mexican, recruited in Palomas, Chihuahua, through the Bracero Program, to make up the railroad manpower shortage caused by the war.

Railroad station houses were phased out in the 1950s with the transition to diesel locomotives. The section house at Florida closed in 1955. The historic railroad water tank is still standing, although little else today remains of Florida.

Project Director: Peter Y. Bullock
Archaeology Notes 136

TRADITIONAL CULTURAL PROPERTIES SURVEY WEST OF GALLUP
McKinley County

In anticipation of repairing erosion damage to a bridge west of Gallup on I-40, an inventory for traditional cultural properties (areas of significance for Native American groups) was conducted. This complemented an archaeological cultural resource survey conducted in 1992. No sites of historical significance were recorded. One concern voiced by local Navajo grazing permittees was to fence the project area during construction in order to protect their valuable Beefmaster cattle. Another concern was expressed by the Manuelito Chapter officers. The water that flows beneath the bridge in question originates at Tsadath Spring. The Chapter officers requested that the New Mexico State Highway and Transportation Department not utilize this water during the course of the project, however movement of equipment through the stream bed was permissible.

Project Directors: Janet Spivey and Linda Goodman
Archaeology Notes 116

OWL SPRINGS
McKinley County

This survey of two small parcels along NM 134 identified three sites and areas traditionally used by the Navajos for plant collecting or camping. The first area contained three sites--two undatable lithic scatters and one small circular alignment, probably historic. Also in the area are a traditional collecting area and a traditional Navajo camping area. The second area had no sites but is bordered by two traditional collecting areas and Owl Spring lies within the right-of-way.

Project Directors: Nancy Akins and Janet Spivey
Archaeology Notes 133

EL GUICHE SURVEY
Rio Arriba County

During the summer of 1993 an archaeological survey was conducted along NM 74 in anticipation of a new bridge over the Rio Grande at San Juan Pueblo. The proposed new bridge alignment occurs north of National Historic Landmark Boundaries of San Gabriel de Yunge Owinge, the first European settlement in New Mexico.

One multicomponent site (LA 100723), three historic properties (LA 76778, LA 100724, LA 100725), and seven isolated occurrences are located within the project boundaries. The three historic sites included the Chili Line (LA 76778, previously recorded), the Chamita Ditch, and El Guiche Ditch. LA 100723 was a scatter that included both prehistoric and historic Pueblo pottery and lithic artifacts. The two components appear to date between A.D. 1350 and 1550 and A.D. 1700 to present.

Project Director: Stephen C. Lent
Archaeology Note 127

BULL WELL TESTING
Rio Arriba County

In June 1993, OAS conducted archaeological test excavations at LA 81219 and LA 81220 in Bull Well Draw along State Road 537. Both sites are on land belonging to the Jicarilla Apache Tribe.

LA 81219 is a large site consisting of four concentrations of lithic and ceramic artifacts.

Excavation revealed the presence of a thin, artifact-bearing stratum just below the modern ground surface. Excavation showed that artifacts, burned rock, burned bone, and charcoal were all present within the thin stratum, negating the possibility that its top was a cultural surface. The stratum may have been alluvially redeposited, artifact-bearing soil. Sherds collected from the site suggest that it was occupied during the Rosa phase of the Anasazi occupation of the region. Charcoal was collected and submitted for radiocarbon dating but failed to yield a date for the site.

LA 81220 is a large site located immediately north of LA 81219. Two circular depressions were recorded at the site. Both depressions are 8 meters in diameter and about 20 centimeters deep. No cultural material was recovered and no evidence of architectural remains was encountered during testing. Auger tests from both depressions, however, suggest that the depressions are cultural features, possibly the remains of pithouses. Like LA 81219, sherds suggest that the site was occupied during the Rosa phase. This is confirmed by a radiocarbon date from charcoal collected from an auger hole in Depression 1. The charcoal sample yielded an adjusted date of A.D. 540 ± 110 (A.D. 430-650) and a calibrated date range of A.D. 552-690.

Project Director: Jeffrey L. Boyer

THE OJO CALIENTE PROJECT
Rio Arriba County

From July through September 1993, the OAS conducted excavations at five sites along U.S. 285, in southern Rio Arriba County: (1) LA 83110, a possible late Archaic lithic scatter with associated burned pit features; (2) LA 83151, a mixed Archaic-Pueblo IV sherd and lithic scatter; (3) LA 83118, a multicomponent artifact scatter; and (4) LA 83116 and LA 83117, two large PIV agricultural field complexes consisting of raised gravel-mulched fields and associated borrow areas and lithic reduction localities.

Data recovery at LA 83110 and LA 83151 revealed artifact-bearing deposits but no cultural features and no other significant cultural remains within the project limits. Excavations at LA 83118 revealed a buried hearth and the remains of a possible jacal or brush shelter within the project limits. The unprepared hearth consisted of a simple basin measuring 50 centimeters in diameter and filled with ash and charcoal-stained sand. The hearth was enclosed by a semi-circular row of small charcoal stains that may represent the remains of a perishable brush or pole superstructure. No diagnostic artifacts were found in association with the feature and an age estimate must await the analysis of radiocarbon samples taken from the hearth. The stratigraphic position of the feature suggests that it predates an early historic component at LA 83118, located immediately outside the project limits.

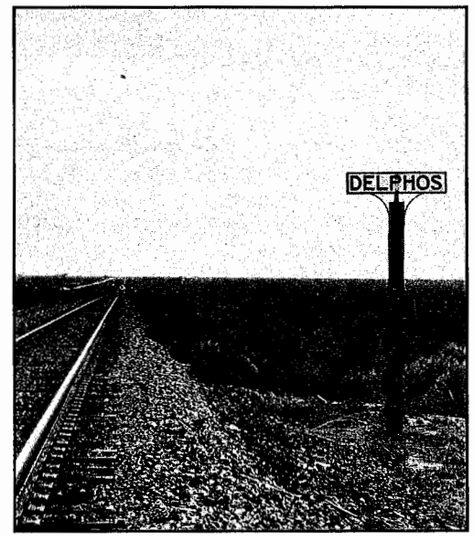
Test pits were excavated within agricultural fields at LA 83116 and LA 83117 where the predominant surface treatment consisted of parallel alignments of large river cobbles, spaced between 20 and 30 centimeters apart. The interior spaces between the alignments were filled with poorly sorted gravel and soil to a depth of 10-15 centimeters. Gravel mulch from the field surfaces was sorted, weighed, and then compared with samples of raw material recovered from test trenches adjacent to several prehistoric borrow pits. Differences between field and borrow pit materials was not significant, indicating that the borrow pits are the most likely source of the gravel mulch. Soil samples were collected by soil scientists from the USDA Forest Service and Soil Conservation Service. Pollen samples were also collected from field and borrow pit soils, and a biological team from the University of New Mexico collected detailed data on modern plant distributions, both on and off the agricultural fields. These data will be synthesized in a final report that should be completed by the end of 1994.

Project Directors: John A. Ware and Jeffrey Boyer
Biologist: Carleton White, University of New Mexico
Soil Scientists: Richard Aguilar, USDA, and Deborah Prevost, SCS

THE DELPHOS SIDING
Roosevelt County

The Delphos project consisted of transit mapping and researching the tiny hamlet of Delphos, 12 miles southwest of Portales, on the eastern plains. Delphos was a product of the railroad-caused emigration boom into New Mexico during the early part of this century. It reached its peak around 1920, and has been in a slow decline since. Due to much previous disturbance, little but concrete foundations remain of Delphos, especially in the project area.

Archival research revealed a picture of changing economic expectations. In 1910, fully a third of the



jobs in Delphos were railroad related, and only one woman listed an occupation. By 1920, no railroad workers remained, and five women were wage earners. Almost all of the settlers of Delphos were of Southern extraction, the majority from Texas. They subsisted on dryland grain farming, cream production, and the harvesting of bear grass or narrow leaf yucca, which was used as an ersatz jute until about 1930. Delphos has disappeared although it remains an active railroad siding.

Project Director: Natasha Williamson
Archaeology Note 143

PECOS-ROWE SUPPLEMENTAL SURVEY
San Miguel County

An archaeological survey along NM 63 between Pecos and Rowe identified two archaeological sites (LA

99939 and LA 99940) and two isolated occurrences. Portions of two previously recorded sites (the Santa Fe Trail and LA 85503) were relocated. Also, eight previously documented isolated occurrences were re-recorded.

LA 99939 was an early Rio Grande Classic (A.D. 1315-1425) sherd and lithic artifact scatter containing a possible deflated hearth. LA 99940 was an early to late Rio Grande Classic (A.D. 1315-1615) sherd and lithic artifact scatter, cobble concentration, and rock rings. Both contained historic material, and the latter site had old wagon ruts.

Project Director: Adisa J. Willmer
Archaeology Note 121

PUEBLO BLANCO
Santa Fe County

In April, the OAS was asked by the New Mexico State Land Office to excavate a burial eroding out of an arroyo below Room Block 15 at Pueblo Blanco (LA 40). Several Land Office volunteers assisted. The burial was analyzed by Nancy Akins. The burial was located within a bell-shaped cist below the floor of one of the rooms. It was incomplete, but most missing elements were later recovered. A small number of artifacts were recovered during excavation. No burial goods were present, nor were obvious pathologies or cause of death found. Ceramics present in the pit fill suggest a date for the burial of between A.D. 1425 and A.D. 1500.

Project Directors: Nancy J. Akins, Peter Y. Bullock
Archaeology Notes No. 128

TESUQUE FLEA MARKET
Santa Fe County

A one-day survey was conducted in July for the planned expansion of the Tesuque Flea Market. A 5-acre area was surveyed. No archaeological sites were found.

Project Director: Peter Y. Bullock
Archaeology Notes 131

MUSEUM HILL COMPLEX SURVEY
Santa Fe County

A crew comprised of staff from the Museum of Indian Arts and Culture and Laboratory of Anthropology and the OAS conducted an archaeological inventory of the 46-acre Museum of New Mexico complex along Camino Lejo in Santa Fe. The survey was completed in anticipation of future construction and open-space planning.

Four archaeological sites and 35 isolated occurrences were identified from the prehistoric and historic periods. LA 101160 was a prehistoric sherd and lithic artifact scatter that dated to the late Developmental period (A.D. 1050 to 1175) of the Rio Grande sequence. The site may have been a base camp for foraging and small mammal hunting. Residential sites from this period have been found closer to the Santa Fe River. Late Developmental period sites may represent the earliest year-round occupation of the upper reaches of the Santa Fe River.

LA 101161, 101162, and 101209 date to the historic period. LA 101161 is a C-shaped berm on a broad ridge top above the Arroyo Piedra Negra. Spatially associated artifacts date to after 1920, but they may not result from the feature construction or use. No function could be assigned to the feature or the site.

LA 101162 is an extensive and intact example of erosion control work in the Santa Fe area that may have been performed by the Civilian Conservation Corps in the 1930s. The site consists of a series of gabion wire and rock dams that were placed at points along the headwaters of the Arroyo Piedra Negra where heavy downcutting of the channel had occurred. These features were similar to other gabion dams observed in the major drainages on the southeast side of Santa Fe.

LA 101209 is four linear swales that are the remains of the Santa Fe Trail. These swales were identified by a previous inventory of the Santa Fe Trail ruts found on the southeast side of Santa Fe. These ruts also were visible on aerial photographs taken by the Soil Conservation Service in 1936. The trail ruts ranges from 17 to 245 meters long. The longest rut was crossed by rectangular gabion dams recorded as part of LA 101162. The trail ruts were vulnerable to erosion and many of the arroyos to the south of the museum complex may have started as wagon ruts.

Portions of all of LA 101162 and LA 101209 will be preserved in place. The Santa Fe Trail ruts may be incorporated into an interpretive trail. LA 101209 is outside the proposed construction area and the dams still serve to retard erosion along the Arroyo Piedra Negra.

Project Director: Stephen Post
Archaeology Note 134

THE LAS CAMPANAS ARCHAEOLOGICAL PROJECT
Santa Fe County

Throughout 1993, different phases of the Las Campanas Archaeological Project were completed. This project is part of an ongoing study of 255 prehistoric and historic period sites that are located on a 4,400-acre resort development complex, northwest of Santa Fe. This year, the OAS staff excavated 8 sites and tested 14. The excavation of 4 additional sites is planned for 1994.

The excavations at Las Campanas focused on sites that have the greatest potential to yield information about land use from 800 B.C. to A.D. 1945. During this more than 2,700-year period, the Las Campanas area was used as a seasonal hunting and gathering area by all inhabitants of the Santa Fe River Valley. Multiple occupations were common, but of brief duration. Only LA 84758 revealed evidence of a prehistoric or early historic occupation that might have lasted for more than one month. The first extended occupation occurred during the late 1800s and early 1900s when small holding claims were established for subsistence farming and ranching.

Analyses continue to focus on site structure and assemblage content and how they reflect changing land-use patterns in the Las Campanas area and settlement patterns in the Santa Fe River Valley. A final report in 1994 will describe and synthesize the OAS's contribution to the Las Campanas Archaeological Project.

Project Director: Stephen Post
Archaeology Note 126
Archaeology Note 140

PECOS TESTING PROJECT
Santa Fe County

Two sites were test excavated along NM 50 between Glorieta and Pecos. The sites, LA 99028 and LA 99029, were initially recorded as surface scatters of historic artifacts. A possible trash pit at LA 99028 was the only feature identified at either site during survey. The area in which this feature occurs contains a high density of surface artifacts and is heavily disturbed by rodent activity. Both sites were tested to determine whether subsurface cultural deposits or features were present within project limits.

LA 99028 contains one feature--the possible trash pit noted above, but it was not investigated. Examination of surface artifacts suggested the site was occupied between A.D. 1880 and 1920. Testing did not locate features or subsurface deposits of cultural materials.

Testing at LA 99029 located a buried midden, and auger tests were used to define its limits. This was the only cultural feature defined within project limits at LA 99029. Examination of surface and subsurface artifacts suggested that this site was occupied sometime after the opening of the Santa Fe Trail and before the arrival of the railroad in New Mexico, ca. A.D. 1821 to 1880.

Testing showed that LA 99029 had the potential to provide further information on local history. Thus, a plan for excavation was developed that included a research orientation examining indications of ethnicity in material culture remains and changes in strategy for implementing research goals through excavation and analysis. Since no subsurface deposits were found at LA 99028, no further work was recommended for that site.

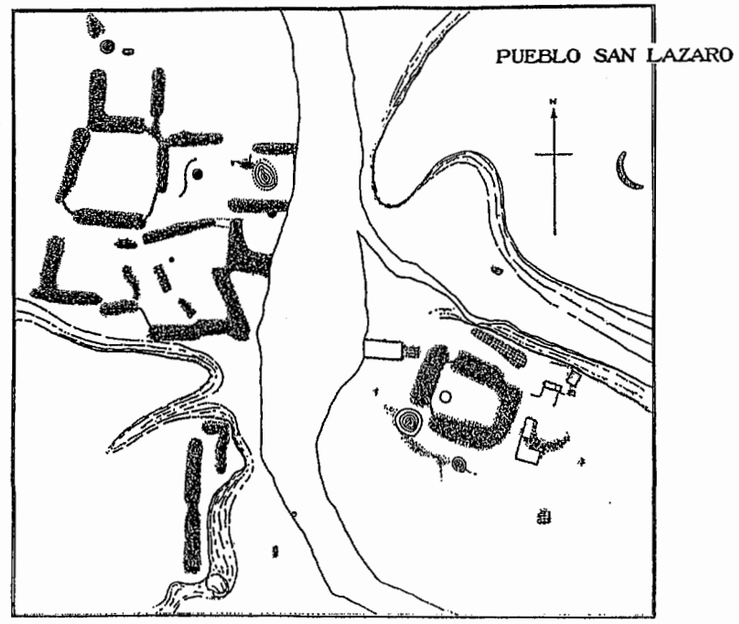
Project Directors: James L. Moore and Joan K. Gaunt
Archaeology Note 122

LABORATORY RESEARCH

SAN LAZARO DATA RECORDING PROJECT

Since the fall of 1992, John Ware, Eric Blinman, and Rob Turner of the OAS and Jan Orcutt, an archaeological associate of OAS and a specialist in Northern Rio Grande prehistory, have been working with a landowner south of Santa Fe to record data and document ongoing private excavations at San Lazaro Pueblo in the western Galisteo Basin. San Lazaro, one of the largest pueblo ruins in the Southwest with at least 2,000 ground floor rooms encompassing nearly a dozen plazas, was occupied more or less continuously from the thirteenth through seventeenth centuries. The landowner has been conducting excavations at the site for several years and has agreed to cooperate and provide partial support for the OAS to document current and past work at the site.

The discovery in the fall of 1992 of a storage room with a large assemblage of ceremonial artifacts initiated the cooperative effort between the landowner and the OAS. OAS archaeologists and Museum of New Mexico conservators excavated a portion of the assemblage with the understanding that an attempt would be made to repatriate the artifacts. The most probable descendants of the original inhabitants of San Lazaro are the Hopi-Tewa of northeastern Arizona. Meetings were conducted between museum representatives, the landowner, and Hopi-Tewa leaders in the spring of 1993. The ceremonial assemblage was viewed and tentatively identified as the property of a medicine society that became extinct among the Hopi-Tewas more than 50 years ago. Hopi-Tewa leaders requested that the materials remain in the possession of the Museum of New Mexico and that they be treat-



ed with respect.

Fundraising efforts to support the scientific study and publication of the assemblage are underway through the Museum of New Mexico Foundation. Archaeologists are continuing to work with the landowner, recording the stratigraphy of his excavations, recovering chronometric and other scientific samples, and documenting existing collections from the site.

Research Directors: John Ware, Eric Blinman

THE POTTERY LABORATORY

Upper San Juan Pottery

The Upper San Juan Pottery Conference, sponsored by the Bureau of Land Management and organized by Steve Lekson, was brought to a conclusion by the publication of *Upper San Juan Region Pottery Typology* (Archaeology Note 80). The 1991 conference was designed to bring together ceramicists working in this region of the Four Corners. A modern generation of archaeologists has been conducting extensive investigations in the region, the first since the Museum of New Mexico's Navajo Reservoir Project of the late 1950s and early 1960s. Al Dittert, Frank Eddy, and Dave Brugge, the archaeologists who created the definitions for the Anasazi and Navajo pottery types in the region, led the conference. Discussions centered around the variability of the clays, tempers, and styles, and how the pottery in this northeastern fringe of the Southwest relates to the better-known pottery to the west and south. Dean Wilson provided technical descriptions for the conference, and he and Eric Blinman assembled a descriptive typology of Upper San Juan ceramics, reflecting the discussions and conclusions of the conference participants and subsequent technological studies.

Utah SR-9 Ceramics

In 1993, Abajo Archaeology of Bluff, Utah, conducted excavations at 42WS325 for the Utah Department of Transportation. Pottery manufacture and exchange was a major focus of the research design for the site, and the OAS was asked to conduct the ceramic analysis.

Preliminary analysis of sherds was carried out and reported to the project directors. Field crews are currently sampling pottery from sites in the region for comparison with the 42WS325 collections, and the project staff is making decisions on which proveniences to subject to intensive analyses.

Mesa Verde Kilns

Archaeologists at Mesa Verde National Park excavated a series of Anasazi pottery kilns that were discovered during installation of a new waterline at the park. The OAS ceramics lab was commissioned to study the pottery from the kilns, and the analysis was carried out by Dean Wilson and Raul Troxler. The trench kilns are similar in design to previously excavated kilns in the region, but the pottery types indicate that they were used more than 100 years earlier than the other kilns that have been excavated in the region. The kilns contained the shattered remains of vessels that failed during firing and small pinch pots that appear to have been potter's tests of clays. Data and interpretations of the analysis will be incorporated into a project report being prepared by Mesa Verde National Park.

Armijo Canyon and Jones Canyon Community Surveys

At the request of the Bureau of Land Management, the University of New Mexico Office of Contract Archeology borrowed OAS ceramicist Dean Wilson to analyze pottery from the surfaces of sites in the Grants and Cuba areas. The ceramics were used to define the cultural affiliations of the sites and to date the occupations. The Armijo Canyon community was occupied in the late Pueblo II and Pueblo III periods, filling in an important gap in our knowledge of the prehistory of the Acoma region. Sites of the Jones Canyon community were occupied in the early Pueblo III period and showed greater affiliations with the Gallina region to the northeast than with the Chaco region to the west.

Ceramic Technology Studies: Anasazi Trench Kiln Experiments

Since 1991, the OAS has been co-sponsor of an annual kiln conference at Crow Canyon Archaeological Center, Cortez, Colorado. The conference has brought together archaeologists and potters for the purpose of experimental firings of Anasazi trench kiln replicas. Eric Blinman, Dean Wilson, Larry Sitney, and Wolky Toll have represented the OAS at the conference, and tremendous strides have been made in understanding how the kilns may have been used. Clint Swink, a Colorado artist, has led the experimentation, and the 1993 results were good in terms of coming close to approximating the temperatures and atmospheres achieved by the Anasazi potters. The OAS is continuing these studies, both in the form of firing experiments at the Museum of Indian Arts and Culture and as laboratory experiments. The latter are being conducted by Larry Sitney in collaboration with the Ceramic Materials Group of Los Alamos National Laboratory, developing a theoretical understanding of the complex processes that occur within the wood-fired trench kilns.

Laboratory Directors: C. Dean Wilson and Eric Blinman

TRADITIONAL USE AREAS IN NEW MEXICO

As a State Historic Preservation Division matching grant, this project was designed to aid the State Historic Preservation Officer in consultations concerning Native American aboriginal territories. The research generated a series a maps and information on areas traditionally used by various Native American tribes and potential traditional cultural properties for Native American groups who use or claim parts of New Mexico. Information was gathered from a wide variety of sources, however, the Indian Claims Commission cases provided much of the information. The report locates the use area, gives the source of the information, evaluates the area, lists properties identified as important to each group and properties that could be considered important but are not specifically identified as such, and provides a bibliography on each group.

Research Director: Nancy J. Akins
Archaeology Notes 141

LA PLATA PROJECT ANALYSIS

The process of gathering manuscripts, completing analyses, and refining data sets continued. Various members of the project participated in organizing and presenting a symposium at the Fifth Occasional Anasazi Symposium held in Farmington in October. The symposium used the results of a number of analyses to focus on the question of what advantages--if any--would result from settlement in a permanently watered valley. There are several indications that the population of the La Plata Valley lived under good conditions relative to Anasazi populations of the same period, although a sector of the population may have been at greater risk of physical injury. Materials from our excavations suggest that patterns of resource depletion seen elsewhere did not take place in the valley. The physical health of people living in the

valley also seems to have been good, and pottery and chipped stone indicate a high degree of self-sufficiency. The presence of a long-term, large, self-sufficient, and productive population in the river valleys around modern Farmington shows that most recent reconstructions that consider this area to be peripheral first to Chaco and later to the Mesa Verde region are simplistic and probably inaccurate. Eight display panels about the project were prepared for the office hallway.

Project Director: H. Wolcott Toll

LUNA ANALYSIS

Analysis of data recovered from phases I and II of the Luna Project, located between Pine Lawn Valley and Luna, continued through 1993. The materials from 21 prehistoric sites comprise the assemblage. All artifacts have been analyzed and special studies with ceramics and projectile points are now underway.

The data recorded from these sites are now being computerized. Palynological and macrobotanical analyses are expected to produce good results on subsistence adaptations of these highland occupants. Radiocarbon dates confirm that the temporal range of excavated sites is from Archaic to Mogollon to Apache. Finding several Apache sites (with roasting pits and hearths) dating to the 1500-1700s was a surprise, but not actually unexpected for this area, which was historically used by the Apaches. The abundance of recovered projectile points and biface tools will enable us to conduct extensive comparative analyses among the Archaic, Pithouse, Pueblo, and Apache assemblages. Ceramics from the sites are also yielding some provocative information suggesting that late Mogollon pottery production probably occurred outside of the Mogollon highlands. Preliminary settlement studies also indicate that there was definite movement over time into differing elevational and topographic zones within the region.

Project Director: Yvonne R. Oakes

JEMEZ FIRE EFFECTS STUDY

For the past two years, the OAS has received research grants from the USDA Forest Service and the USDI Bureau of Land Management to conduct studies on the effects of prescribed forest burning on archaeological sites and materials. The results will be used to develop a general government policy for the protection of cultural resources on federal lands.

The first phase of the project monitored fire effects on existing cultural resources during the 1991 Henry wildfire in the Jemez Mountains. Based on the findings from the first study, the OAS entered a stage of the project in which experimental sites and facsimile artifacts were created. These sites were then exposed to a variety of controlled burn situations. OAS archaeologists documented fire intensities, flame lengths, and other data. At the conclusion of the experiment, the USDA Forest Service extinguished any stray flames, and the archaeologists began to recover materials from the experimental sites. By the next morning, fanned by gusting winds, the fire spread rapidly to the northwest. Before the Porter Fire was contained, 285 acres of national forest had burned. Despite the regrettable consequences, preliminary findings suggest that the project was a success from an archaeological point of view. In the future, this study is expected to contribute greatly to the understanding of fire effects on archaeological materials.

Project Directors: Stephen Lent and Joan Gaunt

JEMEZ MOUNTAINS CHRONOLOGY STUDY
Los Alamos, Rio Arriba, and Sandoval Counties

OAS contracted with the Santa Fe National Forest to review and refine the knowledge of prehistoric time periods in the Jemez Mountains, clarify the dating of selected sites, and assess the reliability of current dating methods. Due to the location of major obsidian sources and the abundance of artifacts made from this material in the study area, particular attention is being paid to the potential of the obsidian hydration dating method and the possibility that different obsidian sources were used at different times. Arrangements have been made with various laboratories to analyze the obsidian source samples in the Jemez Mountains and artifacts from archaeological sites in these mountains and elsewhere in the Northern Rio Grande Valley.

Because of the importance of this work and the ongoing work of other archaeological projects in the Jemez Mountains, cooperative arrangements were made with other institutions. The OAS received a grant from the University of Missouri reactor, under which they performed Neutron Activation Analysis (NAA) on obsidian at a fee considerably below their normal rate. This fee is being shared by the OAS's Jemez Mountains Chronology Study; the National Park Service's Bandelier Archeological Project; Washington State University's Bandelier Archaeological Excavation Project; and the Ojo Line Extension Project of Mariah Associates, Inc. and the Public Service Company of New Mexico. Most of the NAA studies were finished by the end of 1992 and were completed during 1993. In addition, during 1993, X-ray fluorescence studies on the obsidian were undertaken by Professor Raymond Kunselman of the Physics Department at the University of Wyoming and obsidian hydration studies were undertaken under the direction of Dr. Christopher Stevenson, of Archaeological Services Consultants, Inc., Columbus, Ohio.

A draft report was delivered to the Santa Fe National Forest during November of 1993 and it is anticipated that the final draft of the final report will be completed during 1994.

Project Director: Daniel Wolfman

DATING THE VALDEZ PHASE: CHRONOMETRIC REEVALUATION OF THE INITIAL ANASAZI OCCUPATION OF NORTH-CENTRAL NEW MEXICO
Taos County

In 1992, the OAS received a research grant from the USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, to collect, analyze, and report chronometric dates for sites from the Valdez phase, the earliest Anasazi occupation of the Taos Valley in north-central New Mexico. During 1993, OAS located and received tree-ring samples from LA 9206, a Valdez phase site excavated by the University of New Mexico (UNM) field school in the 1960s. The samples were supplied by the Maxwell Museum at UNM and were submitted for dating to the Laboratory of Tree-Ring Research at the University of Arizona. Unfortunately, the samples from LA 9206 were small and failed to yield dates. Two samples were also received from Pot Creek Pueblo (LA 260), courtesy of Southern Methodist University. The samples were obtained from a pit structure underlying a room block at the large pueblo. They yielded a probable cutting date of A.D. 1255 and a non-cutting date of A.D. 1271. Comparison of these dates with others from Valdez phase sites suggests that the pit structure does not date to the Valdez phase but to the subsequent Pot Creek phase. Because the project's research design calls for comparing tree-ring and radiocarbon dates from the same samples, portions of the Pot Creek Pueblo samples will be submitted for radiocarbon dating. Although the LA 9206 samples did not yield tree-ring dates, they, too, will be submitted for radiocarbon dating.

During June 1993, the OAS relocated the UNM field school sites. The site locations, which were inaccurately recorded in both the state site files and the Carson National Forest's Cultural Resources Atlas, were correctly determined and recorded. OAS then re-excavated pithouses at LA 9204, LA 9206, LA 9207,

and LA 9208. Archaeomagnetic samples were collected from pithouse hearths at three of these sites; neither the pithouse floor nor hearth at LA 9028 could be relocated. One pithouse in the Pot Creek area was also re-excavated and an archaeomagnetic sample was collected from the hearth. Possible date ranges for the sample are A.D. 965-1055, 1215-1290, and 1330-1400. The first date range is earlier than archaeomagnetic and tree-ring dates from other Valdez phase sites, but does fall within one reported date range for the phase based on ceramic cross-dating. The second range overlaps both the Valdez and later Pot Creek phases. The third range overlaps the Talpa phase. The ceramic assemblage from the site is consistent with other Valdez phase site assemblages, suggesting that the archaeomagnetic date ranges that overlap with the subsequent Pot Creek and Talpa phases are inaccurate. Clearly, these results are not conclusive and must await additional independent evidence for interpretation. Unfortunately, the hearths from the UNM field school sites were in very bad condition when re-excavated and the archaeomagnetic samples failed to produce dates.

Ground temperature and humidity cells were placed at three UNM field school sites and at three sites in the Pot Creek area. They will be collected and analyzed in 1994 in order to define the extent of local variability in ground temperature and humidity and its effects on obsidian hydration dating.

In 1993, the OAS received a grant amendment and extension that will allow collection and analysis of additional archaeomagnetic samples from sites in the northern "community" of Valdez-phase sites. Those samples will be collected and analyzed in 1994.

Project Directors: Jeffrey L. Boyer and Daniel Wolfman

ETHNOBOTANY LABORATORY

The Ethnobotany Laboratory examines and identifies plant materials from many OAS testing and excavation projects, and for occasional outside contracts. Our most common method of recovery of botanical specimens is through flotation of soil samples. We process these samples at an outdoor site and then sort them microscopically in our lab for tiny seeds and other plant remains. Materials collected by excavators (mostly charred corn and wood) are also examined and identified. These data provide a wealth of information about human interaction with wild and domesticated crop plants, for food, fuel, construction and manufacturing. Analysis projects completed in 1993 include Loco Hills, Dunnahoo Hills, Bingham, Fox Place, Bull Wells, Pueblo Park, and San Ildefonso.

The process of running and maintaining an ethnobotany lab keeps us in constant and vital touch with archaeobotanists working throughout the Southwest. Continual exchange of modern specimens keeps our reference collection growing. We've provided guidance to several new labs (the Office of Contract Archeology at the University of New Mexico, Western Cultural Resource Management in Farmington, Southwest Archaeological Consultants in Santa Fe) in the organization of computerized data banks and development of accompanying forms and data codes. Such communication is a boon to standardization and data comparability. These goals have been the focus of two sessions (Phoenix; Cortez, Colorado) of the Southwest Paleoethnobotanical Workshop in 1993. The OAS will host the next session of this group in September 1994.

We at the OAS Ethnobotany Lab enjoy being a show-and-tell stop for visitors and tours to OAS, and taking prepared talks and demonstrations to schools and ethnobiological and archaeological professional meetings. We consider these efforts to communicate our work a vital part of the job, and the source of continual new perspectives.

Laboratory Director: Mollie S. Toll
Laboratory Assistants: Laurel Wallace, Deborah Johnson

ARCHAEOMAGNETIC DATING LABORATORY

The OAS has been developing an archaeomagnetic dating program for more than four and a half years. Through the end of 1992, the samples collected were processed by Jeffrey Cox under the direction of Dr. Daniel Wolfman in the Rock Magnetism Laboratory at the University of California at Santa Barbara (UCSB). By the end of 1992 most of the equipment for establishing the OAS's own archaeomagnetic dating laboratory had been received. Installation of equipment on the second floor of La Villa Rivera was completed during January of 1993.

Since April 1993, the OAS lab has been fully operational and routinely processing samples from inhouse projects and projects sponsored by other institutions. In addition to processing samples, other services provided by the laboratory include collecting samples, training individuals to collect samples, and selling collecting kits.

In January of 1993, Jeffrey Cox, who had worked for the archaeomagnetic dating program under a contract between the OAS and UCSB, joined the laboratory staff in Santa Fe as a full-time employee. Jeff is responsible for measuring samples, preliminary data analysis, and routine maintenance of laboratory equipment. He is also available, as needed, both by OAS projects and outside contractors to collect samples in the field. In September of 1993, Joan B. Moore joined the laboratory staff to undertake many of the lab's rapidly expanding clerical and administrative tasks.

Most of the activities of the program in 1993 revolved around projects in New Mexico. The largest project undertaken during 1993, which was finished during the early months of 1994, was the processing of 73 samples for the El Paso Natural Gas Project, under contract with Western Cultural Resource Management, Inc. Other projects in this country involved routine processing of samples collected from OAS's Valdez Phase Chronology, Luna, Carrizozo, and Pecos projects, from Arkansas under contract with the Arkansas Archaeological Survey, and from Casa Escondida under contract with Cibola Research Consultants. In addition, the laboratory began work under a contract with University of Texas at El Paso to review and redate archaeomagnetic samples collected in the El Paso area during the 1960s and 70s.

Contacts with archaeologists working in foreign countries continued. Samples from Senegal, Bolivia, and Guatemala were processed during 1993. In addition, the laboratory hosted a visit by Ibrahima Thiaw from Senegal, who is currently a graduate student in anthropology at Rice University. Mr. Thiaw learned archaeomagnetic sample collecting techniques during Dr. Wolfman's visit to his country in January 1991. In order to round out his knowledge of archaeomagnetic dating, Mr. Thiaw worked in the lab learning how to measure samples. During his visit, he also went into the field with the Valdez Phase Chronology Project, where he had an opportunity to see some Taos County archaeology and take part in collecting samples.

Laboratory Director: Daniel Wolfman
Laboratory Assistants: Jeffrey Cox, Joan B. Moore, Macy Mensel, Natasha Williamson, Vernon Lujan, and Laurel Wallace

THE SPEAKERS BUREAU

The OAS Speakers Bureau's challenge of educating the public about New Mexico's spectacular but fragile and nonrenewable archaeological heritage was productively achieved during 1993 by delivering 29 educational outreach activities to an audience of 1,890 students and interested adults. Several outreach events accented this year's activities. A Science and Archaeology Workshop directed towards elementary and junior high school teachers was acclaimed a grand

success by the coordinator of the Science/Math Learning Center in Santa Fe. The program was presented as a means of teaching science in the public schools through the discipline of archaeology, and generated several additional requests for activities by teachers involved.

In an effort to move activities away from Santa Fe, the OAS presented an all day program entitled "Examining New Mexico's Archaeological Heritage" in Santa Rosa. This event was in conjunction with Santa Rosa Days, a major event in Guadalupe County. Just under 300 Santa Rosa residents experienced "hands-on" interaction with archaeological materials representative of New Mexico's 12,000-year heritage.

The OAS Speakers Bureau interacted with a diverse range of interesting groups during 1993 including Vistas de Santa Fe Retirement Community, fifth and sixth graders from Oswego, Kansas, and visiting representatives from the Instituto Nacional de Antropología e Historia, Mexico. An archaeology booth at the State Fair with the New Mexico State Highway and Transportation Department entitled "Preservation of New Mexico's Archaeological Resources" generated successful outreach with visitors from around the state. Finally, the OAS outreach program was presented at a New Mexico Archaeological Council conference on archaeology and the public, attended by archaeological educators from Colorado, New Mexico, Arizona, and Utah.

Education Committee Chair: Charles A. Hannaford

FRIENDS OF ARCHAEOLOGY

The OAS is pleased to now have the encouragement of a group of public supporters--the Friends of Archaeology. As part of the Museum of New Mexico Foundation, a not-for-profit organization supporting the Museum of New Mexico, the Friends of Archaeology provides its members the opportunity to learn about Southwest archaeology from the professionals at the OAS. The Friends sponsor tours to important but seldom seen archaeological sites, public lectures, workshops, and extended tours. Friends also support OAS activities not funded by government such as educational outreach, symposia, and cooperative archaeological research with other national and international organizations. If you are interested in becoming a Friend of Archaeology, please call the OAS at 827-6343 or the Museum of New Mexico Foundation at 982-6366.

CONFERENCES ATTENDED

American Anthropological Association, 92nd annual meeting, Washington, D.C.
- Peter Bullock
- Linda Mick-O'Hara

American Institute for Conservation of Historic and Artistic Works, 21st annual meeting, Denver, Colorado
- Eric Blinman

Archaeological Society of New Mexico, Albuquerque, New Mexico
- J. L. Moore

Arizona Archaeological Conference, Flagstaff, Arizona
- Dean Wilson

Big MAC--Meeting of archaeological contractors working in the Four Corners, Cortez, Colorado
- Eric Blinman
- Tim Maxwell

Complex Societies Symposium, Tempe, Arizona
- Daniel Wolfman

Fruitland Conference, Bloomfield, New Mexico
- Dean Wilson

Jornada Mogollon Conference, 9th annual meeting, Tularosa, New Mexico
- Regge N. Wiseman
- Dorothy Zamora

Kiln Conference, Crow Canyon, Cortez, Colorado
- Eric Blinman
- Larry Sitney
- Dean Wilson

National Fire Symposium, Santa Fe
- Joan K. Gaunt
- Stephen C. Lent

Navajo Nation Workshop, Gallup, New Mexico
- Yvonne R. Oakes

New Mexico Archaeological Council Spring Workshop: "Archaeology and the Public," Socorro, New Mexico
- Joan K. Gaunt
- Chuck Hannaford
- H. Wolcott Toll

New Mexico Archaeological Council: Archaeological Theory, Albuquerque, New Mexico
- Chuck Hannaford
- David Hayden
- Tim Maxwell (organizer)
- Lloyd Moiola
- Yvonne R. Oakes
- H. Wolcott Toll
- Dean Wilson
- Regge Wiseman
- Dorothy Zamora

Fifth Occasional Anasazi Symposium, Farmington, New Mexico
- Nancy Akins
- Eric Blinman
- Peter Bullock
- Joan K. Gaunt
- Chuck Hannaford
- Linda Mick-O'Hara
- Yvonne R. Oakes
- H. Wolcott Toll (organizer)
- Mollie Toll
- Laurel Wallace
- Dean Wilson

Dorothy Zamora

Pecos Conference, Springerville, Arizona
Joan K. Gaunt
David Hayden
Lloyd Moiola
Yvonne R. Oakes
Patrick Severts
Sonya Urban
Dean Wilson
Regge N. Wiseman
Daniel Wolfman
Dorothy Zamora

Society for American Archaeology, St. Louis, Missouri
Nancy Akins
Peter Bullock
Daniel Wolfman

Society for Historic and Underwater Archaeology, Kansas City, Missouri
Guadalupe Martinez

Second Southwestern Paleoethnobotanical Workshop, Phoenix, Arizona
Mollie Toll

Third Southwestern Paleoethnobotanical Workshop, Crow Canyon, Cortez, Colorado
Mollie Toll
Laurel Wallace

Twentieth Annual South Gap Conference, Kin Klizhin, New Mexico
H. Wolcott Toll
Mollie Toll

Visitors Study Association Conference, Albuquerque, New Mexico
Chuck Hannaford

PROFESSIONAL PAPERS

Akins, Nancy J., with Debra L. Martin and Alan H. Goodman
Health Profile for the La Plata Highway Project. Paper presented at the Fifth Occasional Anasazi Conference, Farmington, New Mexico.

Blinman, Eric
Conservators and Archaeologists: Understanding Points of Tension. Paper presented as part of a panel discussion: "Strengthening Ties: A Dialogue Between New World Archaeologists and Conservators." 21st Annual Meeting of the American Institute for Conservation of Historic and Artistic Works, Denver, Colorado.

Introduction and Overview of Kiln Replication Studies. Paper presented at the Kiln Conference at Crow Canyon, Cortez, Colorado.

Introduction: Breadbasket, Backwater, or Burgeoning center? The Totah in Regional and Temporal Context. Paper presented at the Anasazi Symposium, Farmington, New Mexico.

Boyer, Jeffrey
Occupying the Anasazi Frontier. Paper presented to the Taos Archaeological Society, Taos.

Bullock, Peter
Anasazi Political Organization: A Radical Reinterpretation of Anasazi Culture. Paper presented at the 58th annual meeting of the Society for American Archaeology, St. Louis, Missouri.

Lords of the Southwest. Paper presented at the 5th Occasional Anasazi Symposium, Farmington, New Mexico.

Does the Reality of Anasazi Violence Prove the Myth of Anasazi Cannibalism? Paper presented in Biological Anthropology invitational symposium "Crime and Punishment," at the 92nd meeting of the American Anthropological Association, Washington, D.C.

Gaunt, Joan K. (with Stephen Lent)
Jemez Fire Study: Preliminary Results, Santa Fe. Paper presented at the National Fire Symposium, Santa Fe.

Hannaford, Charles
Prehistoric Communities in the La Plata Valley. Paper presented in symposium entitled "Breadbasket, Backwater, or Burgeoning Center? The Totah in Regional and Temporal Context." Fifth Occasional Anasazi Symposium, Farmington, New Mexico.

Education Outreach at the Office of Archaeological Studies. Paper presented in session entitled "Public Awareness and Participation." New Mexico Archaeological Council, Archaeology and the Public, Albuquerque.

Lent, Stephen C. (with Joan K. Gaunt)
Jemez Fire Study: Preliminary Results, Santa Fe. Paper presented at the National Fire Symposium, Santa Fe.

Mick-O'Hara, Linda S.
On Hoof or Wing: Changing Faunal Resource Use in the La Plata Valley. Paper presented in symposium entitled "Breadbasket, Backwater, or Burgeoning Center? The Totah in Regional and Temporal Context." Fifth Occasional Anasazi Symposium, Farmington, New Mexico.

(with Linda S. Cordell) Settlement Strategies after Abandonment on the Eastern Edge of the Pueblo World. Paper presented in a symposium entitled "Abandonment and Reorganization: The Social Consequences of Collapse in Puebloan Prehistory." 92nd Annual Meeting of the American Anthropological Association, Washington, D.C.

Moore, James L.

Prehistoric Pueblo Farming in the Taos District. Paper presented at the annual meeting of the Archaeological Society of New Mexico, Albuquerque.

Oakes, Yvonne R.

Apaches in the Mogollon Highlands. Paper presented at the Pecos Conference, Springerville, Arizona.

The Civil War in the West: The Battle of Glorieta Pass. Paper presented to the Colorado Historical Society, Denver, Colorado.

Toll, H. Wolcott

The Role of the Totah in Regions and Regional Definitions. Paper presented at the Fifth Occasional Anasazi Symposium, Farmington, New Mexico.

Through a Glass, Darkly: How Chance and Terminology Have Shaped Thinking about Four Corners Archaeology. Brown Bag Talk, Office of Archaeological Studies.

Toll, Mollie

Wood Charcoal Identification: Some Cautionary Notes. Paper presented at the 2nd Southwest Paleoethnobotany Workshop, Phoenix, Arizona.

Sampling Priorities. Paper presented at the 3rd Southwest Paleoethnobotany Workshop, Cortez, Colorado.

The Archeobotany of the La Plata Valley in Totah Perspective. Paper presented at the 5th Occasional Anasazi Symposium, Farmington, New Mexico.

Wilson, C. Dean

Patterns of Production, Exchange, and Interaction in the Totah. Paper presented at the Anasazi Symposium, Farmington, New Mexico.

The People Between: Ceramic Patterns along the Mogollon--Anasazi Contact Area. Paper presented at the Arizona Archaeological Conference, Flagstaff.

GRANTS

Jeffrey Boyer (with Daniel Wolfman)

USDA Forest Service Rocky Mountain Forest and Range Experiment Station, an amendment and extension for the project entitled "Dating the Valdez Phase: Chronometric Reevaluation of the Initial Anasazi Occupation of North-Central New Mexico."

Peter Bullock

Committee on Excellence:

To attend Society for American Archaeology meetings in St. Louis.

To attend AAM (American Anthropological Association) meetings in Washington, D.C.

Chuck Hannaford

Committee on Excellence:

To attend Creative Writing workshop instructed by local author M. Talbert

To attend the Fifth Occasional Anasazi Symposium

To attend Visitors Study Association Conference

Museum of New Mexico Foundation

Two grants to support the OAS Speakers Bureau

Yvonne R. Oakes

Committee for Research Development:

Study of site at Pueblo Park near Reserve

USDA Gila National Forest:

Testing Tularosa phase site, East Ridge Pueblo near Reserve

H. Wolcott Toll

Committee for Research Development:

To edit and assemble NMAC agriculture volume

Laurel Wallace

Committee on Excellence:

To attend Ethnobotanical Symposium, Crow Canyon, Cortez, Colorado

Regge N. Wiseman

Committee for Research Development:

Analysis of faunal and floral materials from Beth's Cave, Lincoln County

Petrographic analysis of pottery from sites on the Llano Estacado and South Plains of eastern New Mexico and west Texas.

Daniel Wolfman (with Jeffrey Boyer)

USDA Forest Service Rocky Mountain Forest and Range Experiment Station:

An amendment and extension for the project entitled "Dating the Valdez Phase: Chronometric Reevaluation of the Initial Anasazi Occupation of North-Central New Mexico."

Committee on Excellence:

To attend Complex Societies Symposium, Tempe, Arizona

Committee for Research Development:

To attend Society for American Archaeology annual meeting, St. Louis, Missouri

Dorothy Zamora

Committee on Excellence:

To attend Fifth Occasional Anasazi Symposium, Farmington

Committee for Research Development:

To attend Jornada Mogollon Conference, Tularosa

COMMITTEES, OFFICES, AND HONORS

Eric Blinman
Pottery Southwest, Editor

Jeffrey Boyer
Committee on Research and Development, OAS

Peter Bullock
Museum of New Mexico Committee on Excellence

Robin Gould
President, Communications Workers of America, Local 7037
1993 Collective Bargaining Negotiations, Statewide Labor Coalition

Chuck Hannaford
Santa Fe Archaeological Society, Consulting Archaeologist
Education Committee, Chair, OAS
Museum of New Mexico Education Committee, OAS Representative

Yvonne R. Oakes
Committee on Research and Development, OAS
Organizer, Brown Bag Lunches, OAS
Four-week survey, rainforest of Belize, volunteer for Program for Belize

H. Wolcott Toll
New Mexico Archaeological Council, Executive Committee (past president)
Crow Canyon Archaeological Center field seminar scholar

Mollie Toll
Journal of Ethnobiology, Editorial Board
OAS Space Committee

Natasha Williamson
Education Outreach Committee, OAS
Oversaw the final disposition of remains and organized the Lying in State at the History Library Annex for the Confederate Reburial

Daniel Wolfman
Ancient Mesoamerica, Editorial Board

PUBLIC PRESENTATIONS

Eric Blinman
Anasazi and Navajo Pottery in the Four Corners Area. Friends of the Wheelwright Museum, Santa Fe.

Ancient and Modern Egypt. Gonzales Elementary School, Santa Fe.

Overview of New Mexico Prehistory. Docent training lecture, History Museum, Santa Fe.

Southwestern Pottery and Ceramic Analysis. Colgate University class, Santa Fe.

Jeff Boyer
Taos Historical Museums. Tour with Taos Christian Home-School Association, Taos.

Chuck Hannaford
Office of Cultural Affairs representative, UNM Career Day, Albuquerque.

Archaeology Exhibit, New Mexico State Fair, Albuquerque.

"Pajarito Plateau Archaeology." Santa Fe Home Teachers, Santa Fe.

"Visiting the Office of Archaeological Studies." Turquoise Trail Elementary School (Santa Fe) and Placitas Home Teaching School (Placitas).

"Examining New Mexico's Archaeological Heritage." Hands-on archaeology exhibit presented at Santa Rosa Days, Santa Rosa.

"Spanish-Colonial Archaeology on the Cieneguilla Land Grant and the Cieneguilla Petroglyphs." Santa Fe Boy Scouts, Santa Fe.

Tour of Tsankawi Pueblo. José Luis Perea (Director) and Rafael Cruz (Archaeologist), Instituto National de Antropología e Historia (INAH), Chihuahua.

Tours of Tsirege Pueblo, Sandia Cave Kiva, and Pueblo Blanco. "Off the Beaten Track: Unique Prehistoric Villages of the Santa Fe Region." Friends of Archaeology activities.

Tour of Pueblo Blanco, Santa Fe Archaeological Society.

Archaeology workshop for teachers, Sierra Vista Math and Science Center, Santa Fe.

Lewis Kimmelman
Talk on Archaeology and Lithic Technology to Boy Scout Troop 49, Santa Fe.

Archaeology. Career Day at Atalaya Elementary School, Santa Fe.

Yvonne R. Oakes
Tour leader, Bat Cave and Tularosa Cave, Pecos Conference.

Patrick Severts
"Examining New Mexico's Archaeological Heritage." Hands-on archaeology exhibit presented during Santa Rosa Days, Santa Rosa.

"Ring of Fires." Public demonstration of prehistoric to modern firing methods, Museum of Indian Arts and Culture, Santa Fe.

H. Wolcott Toll

The La Plata Valley and Anasazi Regional Systems. Taos Archaeological Society.

Mollie Toll

Using Archeology to Teach Science: A Workshop for Teachers. Sierra Vista Math and Science Center, Santa Fe.

Plants Used by Prehistoric Residents of Tijeras Canyon and Central New Mexico. Tijeras Canyon Ranger Station, US Forest Service.

Archaeology Workshop. Sixth grade class at Gonzales Elementary School, Santa Fe.

Botanical Consequences of European Contact with the Americas. Fifth grade class at Gonzales Elementary School, Santa Fe.

Robert Turner

Designer and illustrator, La Plata Exhibit (office exhibit and traveling)

Laurel Wallace

Ethnobotanical Laboratory presentation during Friends of Archaeology Open House.

Natasha Williamson

Women in the Civil War. Martin Luther King Elementary School, Rio Rancho.

Women in the Civil War. Capshaw Jr. High School, Santa Fe.

Civil War in New Mexico. Roswell Enrichment Program Field Day, Roswell.

Las Campanas Tour. Rio Grande School first grade.

Tour of the OAS for Turquoise Trail Elementary School.

Life in Civil War Times. Gonzales Elementary School.

New Mexico's Historical Archaeology, Santa Rosa Days, Santa Rosa, New Mexico.

Artifacts from the Glorieta Burial, Sons of Confederate Veterans, Albuquerque.

Glorieta Battlefield Living History presentation for Rio Grande Elementary School.

Civil War in the West. Living History presentations for 84 5th and 6th graders from Oswego, Kansas, at Pecos National Monument.

The Glorieta Grave. Lecture in the Palace Courtyard for participants and visitors to the Confederate Reburial Project.

Regge N. Wiseman

Fox Place (LA 68188) and Its Potential Importance to the Late Prehistory of Southeastern New Mexico. Santa Fe chapter of the Archaeological Institute of America.

PROFESSIONAL PUBLICATIONS (OUTSIDE OF THE OAS)

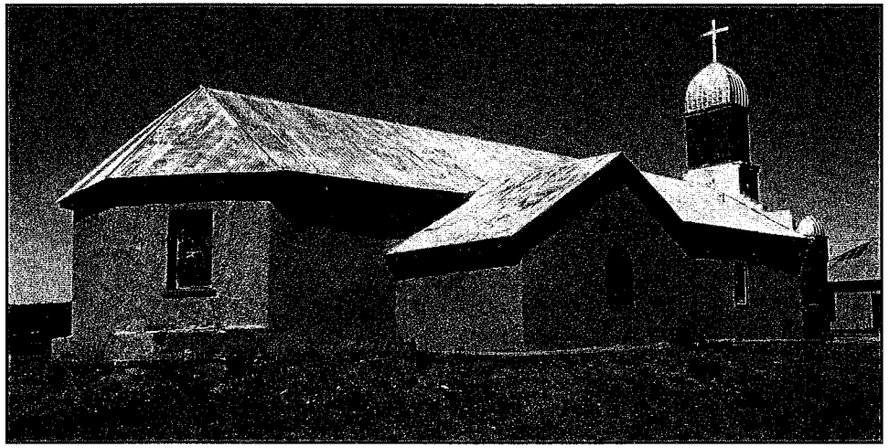
Blinman, Eric
1993 Anasazi Pottery--Evolution of a Technology. *Expedition Magazine* 35(1):14-22.

Blinman, Eric, and C. Dean Wilson
1993 Ceramic Perspectives on Northern Anasazi Exchange. In *The American Southwest and Mesoamerica: Systems of Prehistoric Exchange*, edited by Jonathon E. Ericson and Timothy G. Baugh, pp. 65-94. Plenum Publishing Corporation, New York.

Maxwell, Timothy D.
n.d. The Use of Comparative and Engineering Analyses in the Study of Prehistoric Agriculture. In *Building Methodology for an Evolutionary Archaeology*, edited by P. Teltser. University of Arizona Press, Tucson.

Wiseman, Regge N.
1993 Preliminary Impressions of Archaic and Ceramic Period Occupations along the Upper Rio Hondo, Lincoln County, New Mexico. *New Mexico History and Archaeology* No. 1, pp. 3-6. COAS Publishing and Research, Las Cruces. (Paper presented at the 6th Jornada Conference, Las Cruces, October 1989).

1993 Tentative Chronological Framework of Paleoindian and Archaic Projectile Points in Lincoln County, South-Central New Mexico. *The Artifact* 31(1), El Paso Archaeological Society.



BROWN BAG LUNCH LECTURE SERIES

This program was established as a forum where OAS staff and community scholars could share their current research activities with one another on an informal basis.

January 7
Tom Baker, photographer
The Use of Aerial Photography in Southwest Archaeology

January 21
Jeff Boyer, OAS
The Taos Valley: Living on the Anasazi Frontier

February 4
John Ware, OAS
The Galisteo Basin: Life on Yet Another Anasazi Frontier

February 18
Jim Moore, OAS
The Kinds of Things Farmers Build: Agricultural Fields in the Southwest

March 18
Nancy Akins, OAS
Bone Breakage in the Archaeological Record

April 1
Tim Koehler, Santa Fe Institute
Bandelier Excavation Project: Overview

April 29
Pearl Sunrise, MIAC
The Athabaskan Peoples: Prehistory and History

May 13
Pearl Sunrise, MIAC and Ellyn Lathan, Mescalero Apache Tribe
Part 2: The Athabaskan Peoples

May 27
Mike Diehl, Santa Fe Institute
Research on Mogollon Pithouse Period Subsistence and Social Organization

June 10
Wolky Toll, OAS
Through a Glass, Darkly: How Chance and Terminology Have Shaped Thinking about Four Corners Archaeology

June 24
Eric Blinman, OAS
Conservation and Archaeology

July 8
Linda Mick-O'Hara, OAS
Faunal Remains and the Human Factor (Perceptions, Production, and Process)

July 15
John Ware and Eric Blinman, OAS
Repatriation of a Ceremonial Assemblage

July 22
Sara Schlanger, MIAC
Occupation and Abandonment of the San Juan Area

September 16

Mollie Toll, OAS
The Archeobotanical Record in Southeastern New Mexico: How Does the Emerging Data Fit with Existing Subsistence Fables?

September 30

Stewart Peckham, Curator Emeritus, MIAC
The Chuska Valley: What Else Is There?

October 7

Regge Wiseman, OAS
Recent Research in the Roswell Area

November 4

Stewart Peckham, Curator Emeritus, MIAC
The Chuska Valley: What Else Is There? Part II

OAS PUBLICATIONS, 1993

LABORATORY OF ANTHROPOLOGY NOTES

Farwell, Robin E., Yvonne R. Oakes, and Regge N. Wiseman
Investigations into the Prehistory and History of the Upper Rio Bonito, Lincoln County, Southeastern New Mexico. Laboratory of Anthropology Notes No. 297, Santa Fe.

ARCHAEOLOGY NOTES

Akins, Nancy J.
Archaeological Survey and Summary of the Cultural Resources along State Road 134, San Juan and McKinley Counties, New Mexico. Archaeology Notes 101.

Akins, Nancy J., and Peter Bullock
Emergency Removal of a Burial from Pueblo Blanco, LA 40. Archaeology Notes 128.

Boyer, Jeffrey L., James L. Moore, Daisy F. Levine, Linda Mick O'Hara, and Mollie S. Toll
Studying the Taos Frontier: The Pot Creek Data Recovery Project. Archaeology Notes 68.

Bullock, Peter Y.
An Archaeological Survey along Highway US 62/180, Eddy County, New Mexico. Archaeology Notes 113.

Bullock, Peter, Linda J. Goodman, and Janet E. Spivey
An Archaeological and Traditional Cultural Properties Survey along I-40 in the Vicinity of Iyanbito, McKinley County, New Mexico. Archaeology Notes 107.

Archaeological Survey of the Planned Expansion of the Tesuque Flea Market. Archaeology Notes 131.

Gaunt, Joan K.
Archaeological Survey of a Road Realignment near Rio en Medio, Nambe Reservation Land, Santa Fe County, New Mexico. Archaeology Notes 82.

An Archaeological Survey of Mine Hill, Victorio Mining District, Luna County, New Mexico. Archaeology Notes 111.

Knight, Terry L.
An Archaeological Survey of Five Abandoned Mine Locations near La Ventana, New Mexico. Archaeology Notes 83.

Lent, Stephen C.
Excavations at LA 58973, near Corrales, New Mexico. Archaeology Notes 77.

A Cultural Resource Inventory of a Proposed New Alignment North of the Bridge over the Rio Grande at San Juan Pueblo, and 1.4 Miles along NM 68, Rio Arriba County, New Mexico. Archaeology Notes 127.

Lent, Stephen C., Joan Gaunt, and Adisa Willmer
The Henry Fire: A Study of Fire Effects on Archaeological Resources on Holiday Mesa, Jemez Mountains, New Mexico. Archaeology Notes 93.

Levine, Daisy
Survey of a Borrow Pit near Grants, New Mexico. Archaeology Notes 110.

Main, Rhonda
Limited Testing at Maljamar, Lea County, New

Mexico. Archaeology Notes 78.

Mick-O'Hara, Linda, and Susan Moga
Archaeological Testing Results from LA 77522 near Rowe, New Mexico. Archaeology Notes 46.

Moore, James L.
Archaeological Testing at Nine Sites along NM 502 near San Ildefonso, Santa Fe County, New Mexico. Archaeology Notes 35.

Archaeological Test Excavations and Data Recovery Plan for LA 86744 and LA 86780 at the Santa Teresa Port of Entry, Doña Ana County, New Mexico. Archaeology Notes 92.

Archaeological Testing at Two Sites along NM 50 between Glorieta and Pecos, and Data Recovery Plan for LA 99029, Santa Fe County, New Mexico. Archaeology Notes 122.

Oakes, Yvonne R.
Clearance Report and Damage Assessment for Two Sites along the Old Luna Road, Gila National Forest, Catron County, New Mexico. Archaeology Notes 105.

Test Excavations at East Ridge Pueblo (AR-03-06-03-373) on the Gila/Apache National Forest. Archaeology Notes 135.

Oakes, Yvonne R., and Regge N. Wiseman
The State Road 12 Archaeological Project: Results of Testing at Ten Sites and Data Recovery Plan for Four Sites Near Reserve, New Mexico. Archaeology Note 118.

Post, Stephen S.
Archaeological Survey and Testing at Las Campanas, Santa Fe County, New Mexico. Archaeology Notes 108.

Treatment Plan for Eight Sites at Las Campanas de Santa Fe, Santa Fe County, New Mexico. Archaeology Notes 109.

Archaeological Testing Results and Data Recovery Plan for Estates IV, Las Campanas de Santa Fe, Santa Fe County, New Mexico. Archaeology Notes 126.

An Archaeological Inventory of the Museum of New Mexico Hill Complex along Camino Lejo in Santa Fe, New Mexico. Archaeology Notes 134.

Post, Stephen, and Frederick York
Investigations at the Wildcat Springs Trading Post, LA 55647, along State Road 264, McKinley County, New Mexico. Archaeology Notes 84.

Schlanger, Sarah H., and Linda J. Goodman
Archaeological Tests and Ethnohistoric Research at LA 74220, an Early Twentieth-Century Sheep Camp near Ocate, Mora County, New Mexico. Archaeology Notes 95.

Spivey, Janet E., and Linda J. Goodman
A Traditional Cultural Property Inventory at Milepost 1.9, North of Bridge 10014 on I-40, McKinley County, New Mexico. Archaeology Notes 116.

Vierra, Bradley
The Excavations of a Multicomponent Anasazi Site (LA 50337) in the La Plata River Valley, Northwestern New Mexico. Archaeology Notes 49.

Ware, John, and Macy Mensel
The Ojo Caliente Project: Archaeological Test Excavations and a Data Recovery Plan for Cultural Resources along US 285, Rio Arriba County, New Mexico. Archaeology Notes 99.

Williamson, Natasha
An Archaeological Survey of Eight Abandoned Mine Locations near White Signal, New Mexico. Archaeology Note 86.

Bayard West: An Archaeological Survey of the Manhattan and St. Louis Mines near Central, New Mexico. Archaeology Note 87.

Willmer, Adisa
Archaeological Survey along State Road 117, Cibola County, New Mexico. Archaeology Notes 64.

A Supplemental Cultural Resource Inventory of CMEs, TCPs, WPAs, and New Right-of-Way Alignments along NM 63, San Miguel County, New Mexico. Archaeology Notes 121.

Archaeological Survey of Mica Mines in the Apache-Cribbenville District, Petaca Mining Region, Rio Arriba County. Archaeology Notes 114.

Wilson, Dean, and Eric Blinman
Upper San Juan Pottery Typology. Archaeology Notes 80.

Wiseman, Regge N.
The Roswell Relief Route Project: Phase 2. Assessment and Data Recovery Plan for Six Prehistoric and Historic Sites at Roswell, New Mexico. Archaeology Notes 94.

The US 70 Project: Archaeological Testing and Data Recovery Plan for Two Prehistoric Sites in the Dunnahoo Hills, Chaves County, New Mexico. Archaeology Notes 129.

Data Recovery Plan for the Bob Crosby Draw Site (LA 75163) Along U.S. 70, Chaves County, New Mexico. Archaeology Notes 124.

Observations on Ceramics. In *Archaeological Excavation at the Cristo Rey Site, Sunland Park, Dona Ana County, New Mexico* by Dorothy A. Zamora. Archaeology Notes 63.

Zamora, Dorothy
Archaeological Excavation at the Cristo Rey Site, Sunland Park, Doña Ana County, New Mexico. Archaeology Notes 63.

Zamora, Dorothy, and Christine Sterling
Archaeological Survey and Testing Proposal for Sites along US 180, Luna to the Arizona State Line, Catron County, New Mexico. Archaeology Notes 104.