#### ARCHAEOLOGY AND HISTORY:

NORTH EDWARDS, WESTERN MOJAVE DESERT

Bruce Love Archaeological Research Unit University of California Riverside, CA 92521-0418

#### ABSTRACT

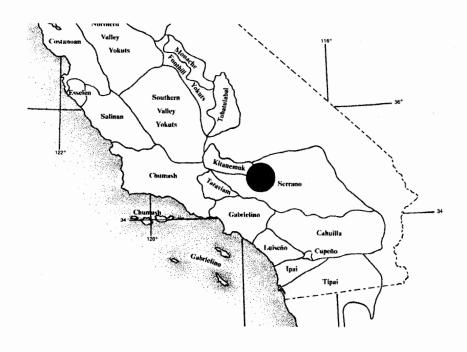
North of Edwards Air Force Base in the Western Mojave Desert is an unincorporated town known as North Edwards. A recent cultural resource overview of the area was conducted for the County of Kern. The study revealed extensive prehistoric remains in the small dunes and pans that form the northern extreme of Rogers Dry Lake. A basalt quarry was located that may have been the source for hearth or roasting stones found throughout the desert to the south. Background research, current knowledge, and future research potential for the area are discussed.

# INTRODUCTION

This report summarizes current knowledge on the cultural resources of the North Edwards Specific Plan area (Figure 1). In almost every way, North Edwards is understood best as an offshoot or side branch of Edwards Air Force Base to the south. Geologically, the pans and dunes scattered across North Edwards are little sisters to the great Rogers Dry Lake. Culturally, the town grew up as off-base housing for the service personnel and support people of the base. And prehistorically, the Indian use of the area can only be understood within the framework of the prehistoric occupation of the larger dry lakes to the south, the Antelope Valley as a whole, and the more all-encompassing Western Mojave Desert.

# PREHISTORY OF NORTH EDWARDS

In previous attempts to summarize the prehistoric cultures of the area, many chronological sequences have been proposed and these have been summarized in Greenwood and McIntyre (1980). A comparison of four of the many different schemes, presented by Coombs and Greenwood (1982), demonstrates the discrepancies between researchers (Figure 2), but more important than the discrepancies themselves is the underlying reason for them. The two thousand year disagreement in the first two columns of Figure 2 for the onset of the Lake Mojave period, the occupational



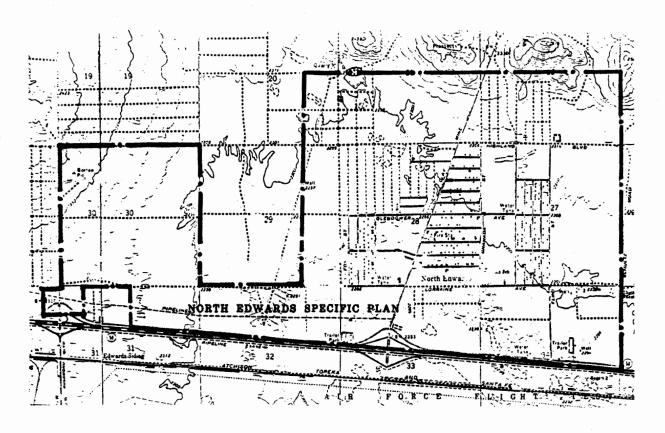


Figure 1. Area of North Edwards Specific Plan, reduced in scale from USGS North Edwards, Calif. 7.5' quadrangle.

hiatus proposed by Hester in the fourth column, and other departures from agreement, must be the result of a general lack of firm evidence on and in the ground itself. The question must be asked, when attempting to use these and other schemes, is the evidence really there on the ground?

Local archaeologists currently working on the Base and in the Antelope Valley (e.g., Sutton 1988; Norwood, personal communication) tend not to work with finely drawn chronologies, but tend more toward the basic early-middle-late type sequences, as follows:

Pleistocene (Ice Age): Earlier than 10-12,000 years ago. Evidence for human occupation during this period is speculative and not generally accepted in the academic community.

Early Prehistoric Period: 10,000 years ago to 3,000 years ago. A time of low population densities, apparently hunter-gatherer bands, perhaps intermittent occupation and abandonment of many areas. Large point types associated with large game exploitation.

Middle Prehistoric Period: 3,000 years ago to 1,000 years ago. Increased population, establishment of permanent camps or villages, continued and increased exploitation of local resources.

Shoshonean Period: 1000 years ago to displacement by Europeans. Occupation by the groups who were present at the time of European contact; marked by the incoming of Paiute/Shoshonean peoples from the east, the introduction of pottery and small triangular arrow points.

Historic Period: From European contact to present. Marked by Native American population decline, abandonment of traditional villages, disruption of cultural lifeways, and partial assimilation into European-American society. Increase in European-American populations.

The simplicity of the above scheme points out the need for more data. Chronological orderings of prehistoric occupations can only be fine tuned when much more data are collected. In fact, there are almost no sites from Edwards Air Force Base firmly dated to the oldest periods; most are from later times. [There are some intriguing signs of the possibility of human occupation during the last years of the Ice Age (the Pleistocene) in the form of a human tooth found in the context of Pleistocene fossil remains (Richard Norwood, personal communication).] Only through an ongoing program of data collection and analysis can the question of chronological sequences be answered.

One problem with the chronologies is that broad classifications, applied to the Great Basin or Mojave Desert as a

Warren &	Watran &	Battinger	Hester	
McCerty	Grabtree	& Taylor	1973	
1980	1972	1974		DATE
Shoshonsen		Merene	Late	
	Shoshonesn		Prohistoric	
Saratoga		Halwae		1000
Springe	Saratoga Spr.		Rese Spring/	
Gypsum	Gypsum	Newbarry	Eastgate	A.D.
				- 0
			Great	B.C.
				1000
			Besin	
Pinto	Pinto	Little Leke	56510	2000
			Archaic	L
				1000
				4000
			Occupational	
		Mojeve	Occupational	5000
Lake Mojave	Lake Mojave	-	Hietus	
				6000
			Western	
			Pluvial	7000
	Pre-		Lekes	8000
			Tradition	
	Projectile			9000
			Fluted Point	
Pielstocens	Point		Tradition	10000

Figure 2. Four proposed prehistoric chronologies (from McCarty 1982:30).

whole, are overlain on small environmentally distinct zones, such as the area of northern Edwards Air Force Base. It must be remembered that the prehistoric groups living in the time slots presented above were parts of ecological systems. To understand their lifeways, one must understand the resources they were exploiting, and how the resources changed over time. For the people of the North Edwards area, these included the stone material available for tool making, and the fauna and flora for hunting and collecting. But most of all, the central fact of living must have been the lakes and ponds.

During wetter times in the past, the lakes were full year round, and had different shorelines during different periods. But even as the lakes became dry, they became no less essential to Indian ways, because these shallow basins hold water for weeks and even months after rain storms. This standing water provided for the essentials of life, even though temporarily.

The high density of recorded prehistoric sites around the edges of Rogers Dry Lake attests to the lake's central role in Indian life. In North Edwards the same is true, only in miniature. The many mud pans of the North Edwards area are like mini-dry lakes, and just like Rogers to the south, these mud pans show evidence of prehistoric occupation and exploitation.

# HISTORY OF NORTH EDWARDS

Apparently, the first European activity in North Edwards was the building of a portion of the Southern Pacific railroad from Mojave to Barstow. Preliminary surveying began in 1872 followed by construction in 1882; however, the rail lines passed well to the south of North Edwards, bisecting Rogers Dry Lake (Settle 1967). Not until 1953 was the line moved north to its present position along Highway 58, the southern boundary of the North Edwards Specific Plan area (Hatheway 1980:122-127).

In the first decades of this century, homesteaders dotted the landscape around North Edwards. Mr. George Cooper homesteaded near the north end of Clay Mine Road between 1916 and The homesteads, according to Cooper, were 160 acres and many of them had tents on them prior to building two room houses as required for improvements. Clay Mine Road was two tire tracks heading north from the Mojave-Barstow road, itself only a dirt road at that time. At the junction of Clay Mine Road and the Mojave-Barstow road, at the site of present-day North Edwards, there was, according to Cooper, "absolutely nothing." An aerial photograph taken by the Engineering Division, Wright-Patterson AFB, dated November 20, 1947, shows no sign of a town at the location of present-day North Edwards, but there are what appear to be small structures near the intersection of Rosamond Avenue, the north gate exit road from the Base, and Highway 58. Hubbard family, residents of North Edwards since 1955, have

identified that intersection as the general location of the remains of the rather notorious restaurant/bar known as Ma Green's. Ma Green's was the enlisted man's equivalent to the famous Pancho Barnes' establishment which played such an important role at Edwards during the heady days of Chuck Yeager and friends.

But North Edwards, from the beginning was nothing more than a bedroom community for Edwards Air Force Base, and there appears to be no historical component to it, that is, old mines, railroad camps, or cattle ranches more than 50 years old, even though nearby areas like Muroc and Boron have rich historical narratives [detailed in Greenwood and McIntyre (1980) and elsewhere].

# HISTORICAL RESEARCH POTENTIAL IN NORTH EDWARDS

The historical research potential in North Edwards is very limited. Early homesteaders' cabins, if located, would be of interest but would not fit CEQA guidelines as unique, one-of-a-kind, last-of-a-kind, etc. Many such structures have been identified on Edwards Air Force Base, and adding one or two more from North Edwards would not significantly increase our knowledge of the homesteading era in this location.

The beginnings of the town of North Edwards itself is very recent, historically speaking, beginning around 1950. The generally accepted time frame of 50 years or older for historical sites precludes North Edwards as historically significant. Finding the exact location of Ma Green's restaurant/bar would be valuable and interesting to local inhabitants, all of whom know of Ma Green's as the poor man's Pancho Barnes, but who disagree wildly as to its original location.

# PREVIOUSLY RECORDED SITES SOUTH OF NORTH EDWARDS

Dozens of prehistoric and historic sites have been recorded within a mile of North Edwards. Most of the sites have been recorded as a result of the ongoing federally mandated inventory of sites within the boundaries of Edwards Air Force Base. Other sites, even closer to North Edwards, were located during a cultural resource survey done for the All American Pipeline project which passes along the southern boundary of the North Edwards Specific Plan area.

# Sites on Base

Within the Base, over 420 prehistoric sites have been recorded ranging from large complex village sites to sparse lithic scatters (Norwood 1987b). Within a mile of North Edwards, to the south, lie at least 17 sites ranging from very low density lithic scatters, to high concentrations of lithics with fireaffected rocks and grinding stones. At least 2 sites (EAFB 625)

and 626 aka KER-2084 and 2085) are buried, exposed only by road cuts. One site (EAFB 603, aka KER-2057) consists almost entirely of flakes of obsidian, a very unusual "special" kind of site; and another highly significant find (EAFB 872, aka KER-2164) appears to be the remains of a human cremation. Most sites are associated with ponds or mud pans.

As part of an archaeological evaluation performed by Jet Propulsion Laboratory (Norwood 1987a) of approximately 400 acres one-half mile south of North Edwards (Figure 3), the following sites were discovered:

# Prehistoric Sites

EAFB 871: A hearth of fire-affected rock accompanied by a piece of rhyolite chipping debris located on a dune with good potential for subsurface remains.

EAFB 872: Probable human cremation, 500 bone fragments, many of which appear to be human, associated with some chipping debris.

EAFB 873: A scattered hearth of 10 or more fire-affected rocks with some stone flakes in association.

Isolates: Isolated finds of chipping debris, fire-affected rock, one obsidian flaked tool, and one basalt mano.

# <u>Historic Sites</u>

EAFB 874: A 1930-40s trash dump from pre-military days.

More than a half dozen historical sites have been officially recorded within a mile of North Edwards. Most have to do with early military structures, but some trash dumps are pre-military. The north end of Rogers Dry Lake itself has been nominated to the National Register of Historic Places due to its central place in America's man-in-space program.

# All American Pipeline Survey

Ten prehistoric sites were recorded along Highway 58, the southern boundary of the North Edwards Specific Plan area, during archaeological investigations performed prior to the construction of the All American Pipeline (Bergin 1986). One site (AAPL 14-1) has been tentatively identified as an early period (older than 4000 years ago) site, which would make it a very significant and important cultural resource. However, firm dates have not been obtained as yet.

One very important discovery was a level of cultural remains found during a test excavation of a site (AAPL 13-1) which on the surface appeared to be a rather unimportant sparse lithic scatter. Fifty-five to 65 cms beneath the surface, stone tools, obsidian, hearths and other stone features, burned animal bone, grinding stones, and a bone awl were found. This points out the

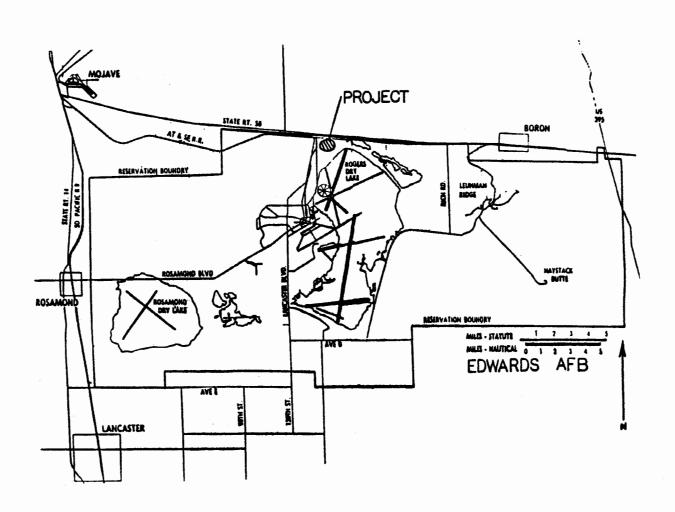


Figure 3. Area of JPL survey, south of the North Edwards study area (from Norwood 1987a).

difficulty in evaluating a site from the surface and emphasizes the need for subsurface testing before determining the significance of a site.

One historic trash dump was discovered during the pipeline survey.

# PREVIOUSLY RECORDED SITES WITHIN THE NORTH EDWARDS SPECIFIC PLAN

There are no recorded sites on record at the Archaeological Information Center at California State University, Bakersfield, or at the Edwards Air Force Base archaeology lab for the area inside the specific plan. This can only be because no systematic surveys have been performed there. Based on a recent cursory drive-by (see below), many sites will be recorded as soon as systematic archaeological surveys are performed.

# ARCHAEOLOGICAL RESEARCH POTENTIAL IN NORTH EDWARDS

In July, 1988, a brief drive-by survey was performed within the area of the North Edwards Specific Plan. Even with only a cursory look at the property, the high archaeological significance of the area was obvious. A dozen or more mud pans dot the area and virtually every mud pan is surrounded by chipping debris. Even areas between the pans show evidence of prehistoric occupation. One camp site with grinding stones, flakes, fire-affected rocks, and burned animal bone was located in a dune complex.

One especially intriguing research question for northern Edwards Air Force Base has been the function of clusters of broken basalt, found throughout the sites around the north end of Rogers Dry Lake and beyond. Typically, on site record forms, this broken rock has been called remains of hearths or just "thermally affected" rock. These features are ubiquitous but little understood. The primary reference source on stone artifact analysis from the Base (Clerico and Elston 1984) makes no mention of this phenomenon.

At North Edwards, in the hills immediately north of the specific plan boundaries, lies one of the sources, if not the source, for the basalt which is found on the Base to the south. In the pan nearest the source are the remains of prehistoric activities in which, apparently, large basalt chunks from the hillsides were brought to the flat playa to be broken up and reduced to a transportable size, later to be taken south. This is a new discovery and has some importance in attempts to understand prehistoric life in this area. Probably the stones were valued for their ability to retain heat, much as modern gas barbecues use "lava rock" to produce an even long-lasting heat.

Possible uses of the rocks were as heating stones for cooking, to keep warm on cold desert nights, or for steam baths for ceremonial sweating rituals. Studies at the basalt source, in the North Edwards Specific Plan area, will shed light on this question.

# CONCLUSIONS

In the areas directly south of North Edwards there are extensive remains of prehistoric and historic activities. archaeological evaluations that located these were performed as part of a legally mandated program of cultural resource management at the Base. The implications are that any large survey, placed randomly over the North Edwards area, would very likely yield prehistoric and historic finds. However, at this time, the meanings of the prehistoric sites are elusive. information on the sites on Base, mostly obtained from surface surveys, exists now as little more than collected data, the interpretation of which awaits further study. As stated by the Base archaeologist at Edwards Air Force Base: "Archaeological knowledge of the Base is essentially in its infancy and even basic problems of chronology, site function and adaptation remain unsolved" (Norwood 1987b:91). North Edwards has enough prehistoric materials in place to shed light on many of these basic questions, and to require asking some new questions.

#### NOTE

This is a slightly revised version of the paper originally presented in 1989 at the Society for California Archaeology Annual Meetings held in Los Angeles.

# REFERENCES CITED

Bergin, Kathleen Ann

1986 A Preliminary Report of Archaeological Investigations within the All American Pipeline Corridor Across Edwards Air Force Base. MS on file, AFFTC/DEV, Edwards Air Force Base, CA.

Bettinger, Robert, and R.E. Taylor
1974 Suggested Revisions in Archaeological Sequences of the
Great Basin in Interior California. Nevada Archaeological
Survey Research Paper 5:1-26.

Clerico, Robert, and Robert Elston
1984 An Analysis of Lithic Artifacts Recovered from
Archaeological Sites on East Range Edwards Air Force Base,
San Bernardino County, California. MS on file, AFFTC/DEV,
Edwards Air Force Base, CA.

- Coombs, Gary B., and Roberta S. Greenwood 1982 A Cultural Resources Overview and Inventory Plan for the Naval Weapons Center, China Lake. MS on file, Public Works Division, Naval Weapons Center, China Lake, CA.
- Greenwood, Roberta S., and Michael J. McIntyre 1980 Cultural Resources Overview for Edwards Air Force Base. MS on file, AFFTC/DEV, Edwards Air Force Base, CA.
- Hatheway, Roger G.

  1980 Cultural Resources Narrative--History. IN: Cultural
  Resource Overview for Edwards Air Force Base, 2 vols., by
  Roberta S. Greenwood and Michael J. McIntyre, with sections
  by Charles F. Forbes, Paul Sonnenfeld, Roger G. Hatheway, and
  Gary B. Coombs, pp.109-186. MS on file, AFFTC/DEV, Edwards
  Air Force Base, CA.
- Hester, Thomas R.

  1973 Chronological Ordering of Great Basin Prehistory.

  <u>University of California Archaeological Research Facility</u>

  <u>Contributions</u> 17. Berkeley.
- McCarty, Richard
  1982 Regional Prehistory. IN: A Cultural Resources Overview
  and Inventory Plan for the Naval Weapons Center, China Lake,
  Gary B. Coombs and Roberta S. Greenwood, editors, pp. 27-48.
  MS on file, Public Works Division, Naval Weapons Center,
  China Lake, CA.
- Norwood, Richard H.
  1987a A Cultural Resource Survey for JPL SAWE Launch Tests,
  Edwards AFB, CA. MS on file, AFFTC/DEV, Edwards Air Force
  Base, CA.
  - 1987b Prehistoric Archaeology at Edwards Air Force Base California. IN: Prehistory of the Antelope Valley, California: An Overview, Roger W. Robinson, editor, pp. 91-106. <u>Antelope Valley Archaeological Society Occasional Paper</u> 1. Lancaster, CA.
- Settle, Glen A.

  1967 <u>Along the Rails from Lancaster to Mojave</u>. Kern-Antelope
  Historical Society, Rosamond, CA.
- Sutton, Mark Q.
  1988 An Introduction to the Archaeology of the Western Mojave
  Desert, California. <u>Archives of California Prehistory</u> 14.
  Coyote Press, Salinas, CA.
- Warren, Claude N., and Robert Crabtree 1972 The Prehistory of the Southwestern Great Basin. MS on file, Department of Anthropology, University of Nevada, Las Vegas.