

# SURVEY METHODS IN HISTORICAL ARCHAEOLOGY: THE NEED TO READ BEFORE YOU WALK

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## ABSTRACT

Recent archaeological projects at Edwards Air Force Base have increasingly demonstrated the need to conduct archival research before commencing archaeological survey of historic era properties. Conducting historic research prior to archaeological work helps alleviate interpretive problems which directly affect management concerns; more intensive preparation further allows for a more meaningful interpretation of the extant material remains. While primarily a methodological issue, problems with methods of recordation of historic era properties reflect conflicting priorities between cultural resource management and archaeological research which must be addressed. Through the examination of the methods, goals and implications of conducting historic era archaeological research we propose solutions to this important methodological and epistemological problem.

## Introduction

Within the boundaries of Edwards Air Force Base (AFB), located within California's western Mojave Desert, a series of historic period archaeological sites of varied nature have been recorded. Over the last fifteen years since a cultural resource management program was undertaken at Edwards AFB, a typology has been developed and implemented to categorize these sites in ways to further refine their research potential and to provide a framework for resource management planning. The contemporary site typology includes the following site categories and definitions:

**Townsites/Settlements:** Created in response to the presence of the remains of the town of Muroc, the definition of this category is self-evident.

**Homesites:** Includes the remains of any permanent or semi-permanent occupation structure of Euro-American design, including foundations, standing walls, outbuildings, fencelines, etc.

**Historic period refuse deposits:** Includes any combination of historic period debris, isolated from any other type of site, which meets minimum State Historic Preservation

Office (SHPO) guidelines to be considered a site.

**Agricultural features:** Consists of isolated wellheads, pump stands, cisterns, reservoirs, etc. which are not obviously related to a specific homesite.

**Ranching features:** Contains cattle guards, corrals, cattle chutes, line shacks, water troughs, and other such features not directly related to a specific homesite.

**Mining sites:** Includes mining features such as claim markers, shafts, addits, prospect pits, pit mines, and drilling rig locations as well as associated occupational structural remains or refuse deposits.

**Railroad or railroad camp, stop, or feature:** Includes all structures and features related to the Atchison, Topeka and Santa Fe Railroad found within the modern base boundary.

**Roads and trails:** Includes all historic period, non-military, roads and trails such as remnants of the Twenty Mule Team Road.

**Stills:** Sites not part of any other site which include materials or occupation sites related to illegal moonshine production during Prohibition.

**Military sites:** Includes a wide variety of site types such as structures, aircraft and aerospace vehicle crash sites, and historically

important localities such as Rogers Dry Lake bed (Norwood 1995).

This site typology represents an approach to recording archaeological sites from the cultural material upward. It is a logical result of the general survey procedures used in California and other areas where archaeological sites are usually visible on the surface. While useful in certain situations, this typological framework creates artificial divisions and unions of site materials; it focuses upon spatial proximity and apparent function of artifacts and features which may or may not reflect true cultural relationships. Meaning becomes obscured by creating false divisions and distinctions not reflected in the historical record. Cultural process and societal relationships between people and the sites they create are obscured by using a methodology based on surface remains. A cultural landscape approach is denied when sites are mis-surveyed, which hinders a potential avenue for future consideration of the archaeological resources.

Cultural resource surveys are usually performed after an initial archaeological records search to ascertain previously recorded sites and the extent of surveyed areas. Historic research is usually neglected during the project preparation stage, often because it is viewed as time-consuming, cumbersome, or unnecessary at the Phase I survey level. The general purpose of this paper is to illustrate the potential pitfalls of this methodology, and to suggest potentially available historic data sources which can be incorporated into pre-survey preparation.

However, a theoretical issue is at stake. The survey methodology commonly used is a response to directions from within the greater forum of cultural resource management. Ultimately, archaeologists need to ask themselves "What are we trying to record on a survey?" Should site boundaries include only extant cultural remains, or should they include the entirety of a particular property or landscape whether it has been visibly modified or not?

The practical needs of recording and categorizing what exists on the ground can be at odds with, or even detrimental to, further historical and archaeological studies. We think a

small amount of preparatory research can ease problems created by fragmented or misdirected site recording which potentially denies or clouds culturally meaningful relationships evident in the archaeological record.

### **The Problem**

We have discerned five distinct categories of problems which arise from surveying historic properties without preliminary archival research. These include: recordation of historically related sites as unrelated entities, combination of historically separate properties as single sites, misidentification of site function, the potential exclusion of pertinent site details during site recording, and the possible omission of landscape features related to material remains. The following three case studies are examples which we have encountered in the course of our work at Edwards AFB.

### **Case Studies**

#### Arvidson Place: CA-KER-2239H

During a survey of the Precision Impact Range Area, site CA-KER-2239H, the Alvin B. Arvidson Place, was updated in the usual manner: first, recording the material remains as encountered in the field, then completing the archival research. The final description which was listed on the site form is as follows: The Alvin B. Arvidson Place is a historic period homesite comprised of two artifact concentrations and standing structural remains. The larger northern concentration consists of a burned residence, nine loci of trash, and a trash scatter. The smaller southern concentration consists of a ruined shed house, the stone foundation of an outdoor oven, and a refuse deposit. The site size was recorded as 44,987 square meters (approximately 11 1/4 acres). However, as noted in the civil suit when the Army Air Corps appropriated the property, the Arvidson parcel was actually 320 acres in size (Official Records of Kern County 1939).

A 1939 article in the *Bakersfield Californian* is of interest to the plight of the Arvidson homestead in that it details military conduct which was intended to drive the settlers from their property. Alvin Arvidson was named in the

article as president of the Muroc Citizens Association, a group of homeowners who had formally protested the low appraisal of their properties by the military. The article refers to "reckless bombing" and stated:

We do not know whether the fliers merely intended to indulge in 'horseplay' or wanted to show their contempt for 'groundlings' or wanted to terrorize these people so they would leave. Nevertheless, they were very badly frightened as these bombs exploded and dug considerable sized holes (Chappell 1939).

If the survey team had been aware of the tensions surrounding the final disposition of the Arvidson property, certain details of the site's condition may have been interpreted differently.

#### D'Arcey and McKinney Properties: EAFB-814

The site record for this property describes the site as a homesite consisting of two loci and a light scatter of historic artifacts which may date between the late 1920s and the late 1950s. No structural remains were found; however, buildings are displayed on the 1947 USGS Kramer SW quadrangle map.

When initially encountered in the field, site EAFB-814 appeared to be nothing more than a sparse scatter of historic period refuse and a few materials which represented structural debris. Comparison of the site location with the real estate appraisal revealed that the site as recorded actually encompassed two separate, adjacent 320-acre homesteads (Karpe 1938). The homesteads belonged to different individuals, Alfred J. and Suzanne D'Arcey and Herbert Egbert and Della McKinney, who built their residences 230 feet apart across a section line. What remains of these homesteads is an apparently continuous refuse scatter which masks the property division.

During litigation regarding the value of his property, Herbert McKinney testified that he had cleared 25 acres, built an 18-foot by 20-foot house, and planted an experimental garden (U.S. District Court n.d.). Absolutely nothing on

the surface of site EAFB-814 suggests this level of development. Without the benefit of archival research this information would never have been known.

#### Oasis Duck Club

The Oasis Duck Club is a recreational hunting area established on the outskirts of Clarke Ranch (CA-KER-2249H) in the vicinity of contemporary Branch Memorial Park on Edwards AFB. The Clarke Ranch was one of the more successful homesteading ventures in the region, and the extant cultural remains are comparatively complex. Various ranch features have been recorded as separate sites in the past. The Clarke Ranch has been split into two sites CA-KER-2249H and CA-KER-2309H; the Oasis Duck Club has been included in either or both of the sites since its earliest recording. While this recording confusion is itself another example of the difficulties which can arise from incomplete preparatory research, the main issue here is the recording of the Duck Club itself. Simply put, if the researcher was not aware of its function, it is all but impossible to believe that the hunting club would have been recorded as anything but another homesite based upon its material remains. This interpretation would greatly limit the research potential of this site, since the Clarke Ranch and the Oasis Duck Club represent one of the few combined homestead and commercial recreation operations in the region.

### **Theoretical Concerns**

The initial recording of all archaeological properties is the first step in understanding the past and in comprehending the cultural processes which shaped the creation of those sites. How a site is described and categorized will affect its consideration in future research efforts. How boundaries are plotted will affect compliance activities in response to project impacts. How non-artifactual contributing factors such as viewsheds and traditional cultural properties are considered in relation to material remains will affect the way these sites are studied and whether they are ultimately deemed significant enough for future consideration.

For practical reasons, sites must be given boundaries in cultural resource contexts.

Archaeologists in this sector must work to balance the needs of the archaeological community with the public at large. They must also do justice to the resources in their care. Site boundaries are often at the crux of the matter, the point at which cultural resource management starts and stops.

In assigning site boundaries we need to consider the ultimate goal of what we, as archaeologists, are trying to accomplish. Does a homestead stop at the edge of the house, the edge of the refuse deposit, the edge of the field boundary, the windmill 400 feet away from anything else, or the boundary of the 320-acre parcel upon which the one-room cabin sat in isolation? Each decision we make, even at the Phase I level, affects the future of the past. Preparing ourselves with readily available historic data is a requirement of responsible survey at any stage.

#### **Potential Historical Resources for Phase I Survey**

Different types of historical material, particularly historic maps and photographs, can be quickly utilized to help alleviate survey problems before they crop up. Local historical societies often have reprints of historic maps that can be purchased for a nominal price. Older USGS quadrangle maps are especially useful for quickly locating historic sites and can be reviewed at most local and university libraries. Sanborn Insurance maps are an important source of information in urbanized areas. Several years ago, working on a site in Westchester County, New York, a former city reservoir, the only extant source of historic information on the reservoir and its pumping capacity was located on a Sanborn map. USGS maps such as David Thompson's excellent 1927 water supply maps of the Mojave Desert are also available to be used for identifying potential historic sites.

Historic photographs can be used to identify historic structures and sites. Local and university libraries often have photo collections that can be examined for information on specific historic places. For example, Beale Library in Bakersfield, California has a selection of Carlton E. Watkins photos, which date to the late

nineteenth century. Watkins' photos display scenes of Kern County, particularly Bakersfield and San Joaquin Valley, farms and ranches. Many historical societies have collected older family and real estate photos, which often can be utilized as a source of historical information. Historic post cards and stereoscopes also contain important visual information no longer available on the cultural landscape.

As well as historic maps, many different types of printed materials are readily available. County atlases, such as the 1902 Kern County atlas, are an excellent source of historical information. Although atlases have a boosterish tone, they can be utilized as a basic guide to cultural resources. County atlases are filled with photographs and maps as well as written descriptions of many locally important farmsteads and industrial sites, which can help identify resources and sites in the field. City and county directories, such as the 1899 *Bakersfield and Kern City Directory* can also be purchased at local bookstores or historical societies at modest cost. City directories yield wonderful social data as well as site-specific information pertaining to individual properties.

Appraisal reports, such as the 1938 Karpe Real Estate Appraisal for the Muroc Bombing Report, are excellent sources of historic information. The report was conducted when the Army Air Corps was interested in purchasing private property on the east side of Muroc Dry Lake to consolidate its holdings and create a bombing range. Karpe reports in detail, and provides period photographs of homesteaders' properties in and around Muroc Dry Lake as they existed in 1938. I was aware of the Karpe report through poor multi-generational photocopies; however, these copies were often unusable. On a whim the Karpe Real Estate Center was visited; soon thereafter we had an original copy of the report that could be reproduced and photographs that could be copied. This excellent source of historic information has been used to identify different structures on individual homesteads, to link the material remains of a homestead to individual homesteaders, to demonstrate historically accurate property boundaries, and to identify archival material, such as serial patents, which can extend our

historical knowledge further into the past.

Oral history interviews can also be used to help cultural resource surveys. Although oral history interviews are complicated, time-consuming, difficult to schedule, and it can be hard to identify potential interviewees, the potential rewards are immense. In the course of conducting interviews for a large-scale project on a townsite on Edwards AFB, several individuals were identified who could assist with a future project. When this project was funded, contact had already been made with these individuals and the interviews were conducted quickly to assist the archaeologists in the survey process. While oral history will probably not be a typical Phase I strategy to assist survey efforts, it should be pursued when the opportunity presents itself. Field contacts with local residents have often been helpful in assisting surveyors. Local residents often have knowledge important to understanding the local area. Encountering people who are willing to discuss the area should be utilized whenever possible. Similar to a formal interview these conversations should be evaluated carefully to find corroborating information whenever possible.

### Conclusions

We hope to have demonstrated in this brief discussion reasonable alternatives to the "survey first, document later" approach to Phase I cultural inventories of historic properties. A minimal level of preparation will result in better quality archaeological recording from the outset, and will streamline the field recording process. More thorough Phase I recording will provide a better framework for structuring research designs, and will enhance the project's overall research potential. Conducting preparatory archival research prior to survey endeavors will help avoid the pitfalls of misidentification and misinterpretation of cultural remains, pitfalls which can have lasting detrimental effects on our understanding of the past.

At every step of the archaeological process, whether it be a cultural resource management context or a purely academic one, archaeologists need to consider fully the lasting consequences of the routine decisions they make. A little bit of

preparation will go a long way in promoting the quality and value of our work.

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