

# Archeological Overviews: The Southwest Division Overview and the Central and Northern Plains Overview and Their Use in Historic Preservation

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ARCHEOLOGICAL SITES ARE NON-RENEWABLE RESOURCES, important to contemporary peoples for many reasons. Archeological sites contain information about past events and the development of our current society that cannot be obtained from any other source. They also contain important scientific information about changes in climate and ecological relationships over thousands of years. The management of these sites, sometimes called "cultural resource management" or "heritage resource management," is now an accepted part of the overall management of public lands in the United States and in most other countries of the world.

In the United States, federal agencies are required by the National Historic Preservation Act of 1966 and the Archeological Resource Protection Act of 1979 to actively manage archeological and historic sites on lands under their care, just as they manage any other resource. The management of these sites requires the same information needed to manage any other resource. One needs to know how many sites there are, where they are, which ones are significant, what effects are occurring to them, and what effects can be expected in the future. Using this information, detailed planning documents for the preservation of archeological and historic sites can be developed for any tract of land.

Since the passage of the National Historic Preservation Act in 1966, a tremendous amount of archeological and historical research has occurred in the United States. Much of this research is in archeological survey and excavation reports produced by government archeologists or by archeologists working for uni-

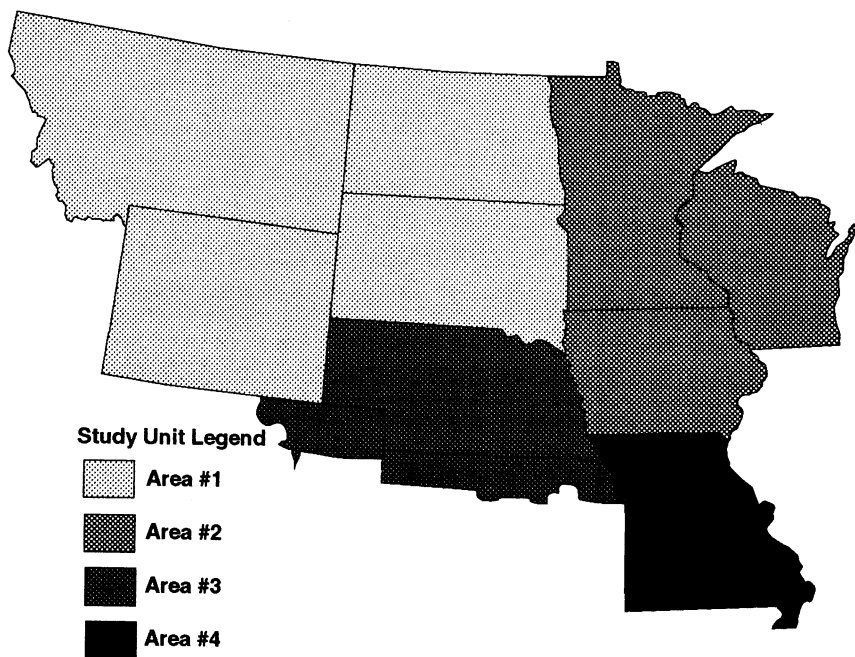
versities or private firms under contract with federal agencies. The information gathered by these efforts is quite significant and can substantially further our understanding of the past, if properly utilized. Unfortunately, most of these reports are not published and do not have wide distribution outside the state where they were produced. Few efforts have been made to synthesize this information for large regions of the United States, and this has hampered the development of detailed planning efforts in many parts of the country. The Southwestern Division Overview (SWDO) and the Central and Northern Plains Overview (CNPO) were initiated by the U.S. Army Corps of Engineers and the Department of Defense to alleviate some of these problems for archeological site management and planning.

## The Overviews

The SWDO and CNPO are syntheses of archeological and bioarcheological knowledge gained by means of research in the Great

Plains of the United States and adjacent areas. The SWDO includes information concerning all the lands in the Southwest Division of the U.S. Army Corps of Engineers administrative unit. It encompasses the states of New Mexico, Texas, Louisiana, Oklahoma, Arkansas, and parts of southern Kansas and Colorado. The CNPO covers the area from Wisconsin to Montana and Wyoming, and from northern Kansas to the Canadian border (Figure 1). The SWDO, funded by the U.S. Army Corps of Engineers, was completed and published in eleven volumes in 1989 and 1990. The CNPO is funded by the Department of Defense's Legacy Program (Project No. 68). It is in the final stages of completion and seven volumes will be published in 1995 and 1996.

The structure of the overviews are similar, although changes have been made in the CNPO based on the reviews and experience gained in producing the SWDO. Each overview contains a number of technical reports, an annotated bibliography volume, and a management volume. Technical reports are written for each subdivision in the region. The SWDO was divided into six regions, and the CNPO into four (Figure 1). Each technical report is a substantial volume written by scholars who are experts in the region. The technical report summarizes the history of archeological research in its region, reviews knowledge concerning past environmental changes, provides a prehistoric and historic archeological summary, and collates and synthesizes information gained from



**Figure 1. Central and Northern Plains Overview Study Units**

studies of human osteology (bioarcheology). The final chapter in each overview attempts to synthesize the archeological, osteological, and environmental information using generalizing concepts borrowed from cultural ecological studies. The use of these concepts is intended to counter the tendency of archeologists to view all archeological cultures as unique entities bounded by a specific time period, and usually confined to contemporary state political boundaries. The technical reports provide the most recent summaries of archeological research in each region and many of them are the first-ever syntheses of the archeological research in a particular area.

The bioarcheology sections are written by leading physical anthropologists and pull together information concerning the numbers of excavated graves from archeological sites and the time periods they represent. Most importantly, these sections summarize information about the past learned from osteological studies of human skeletons. This information has never before been gathered and summarized. The SWDO bioarcheological sections are in great demand by physical anthropologists interested in American Indian populations. For this reason, the bioarcheology sections of the technical overviews produced for the CNPO project will also be published in a separate bioarcheology volume.

A key element in each overview is an annotated bibliography of the substantive archeological literature to facilitate access to unpublished or local and regional literature which is not widely distributed. These bibliographies are cross-indexed by state, county, time period, type of project, subject matter, cultural affiliation, and key words. Four volumes of citations and indices were produced for the SWDO region. It was clear that an automated bibliographic system was needed to manage the

vast number of citations. The National Archeological Data Base (NADB), managed by the National Park Service, was being developed when SWDO was in production, and the SWDO citations were among the first included in this data base. All CNPO citations will also be included in NADB, and hence the substantive archeological literature for one-third of the nation will be available on-line. This is a major achievement.

Included in each overview is a management guidelines volume. The management volume reviews state and federal historic preservation laws, discusses federal regulations dealing with archeology and historic preservation, reviews the principles of historic preservation planning, and provides a guide for use of the technical reports, annotated bibliographies, and other information presented in the overviews.

Another major component of the overviews is the development of automated systems by the Center for Advanced Spatial Analysis at the University of Arkansas to facilitate archeological research and preservation planning. Two major systems were used. One is the National Archeological Data Base mentioned above. The other system is the development of GIS-based data sets to provide insights into the large-scale problems raised by the overview. Nation-wide maps have been produced showing the relationships between archeological site density and surficial geology, potential natural vegetation, EPA ecoregions, contemporary land use, and the Normalized Difference Vegetation Index. These maps allow archeologists and historic preservation specialists to look for the first time at large-scale regional patterns.

#### **Management Use of the Overviews**

The two overviews provide a detailed archeological summary of over one-third of the United States,

and, through NADB, allow on-line access to the most important archeological and bioarcheological literature in this area. How can this information be used to facilitate the management of archeological sites at a federal wildlife refuge, a military installation, or a Corps of Engineers project? The easy answer to this question is that the overviews provide the general archeological context with which to interpret individual archeological sites and projects.

The legal context of a particular management action governs how the documents will be used. In the United States, the various historic preservation laws require federal agencies to take four basic actions. First, Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to "take into account" the effects of their projects on archeological and historic properties eligible for the National Register of Historic Places, and to afford the Advisory Council on Historic Preservation an opportunity to comment on the project (the Advisory Council is an independent federal agency that issues regulations on how to comply with Section 106 and advises federal agencies on ways to avoid adverse effects of their projects on significant sites). Second, Section 110 of the NHPA requires federal agencies to have an affirmative management program of inventory, evaluation, and treatment for the preservation of archeological and historic sites on lands they manage, even if no construction projects are planned on those lands. Third, federal agencies are required by the Archeological Resource Protection Act of 1979 (ARPA) to protect archeological sites on federal land from vandalism and looting, and to develop inventory plans for locating such sites. Finally, the Native American Grave Protection and Repatriation Act of 1990 (NAGPRA) requires federal agencies to protect Indian graves on lands they manage, and to repatriate any

Indian skeletal material and associated cultural items to the appropriate tribal authorities.

The best way to meet these obligations is to have an integrated cultural resource management program guided by good information and well-designed historic preservation plans. Historic preservation plans generally have four sections (Anderson 1992). The first is a technical synthesis, or an overview of all past archeological work performed and a summary of what is known about the archeology of a particular piece of land. The second is a compilation of all recorded archeological and historic sites, and a collection of the archeological reports written about the area. This can be as simple as collecting copies of all the reports and site recording forms, or it can be a computer data base depending on the size of the area, the number of sites recorded, and the number of projects conducted. The third section is a map volume. Again, this can be a simple folder with sites and project areas marked on USGS maps, or it can be a fully developed GIS system integrated with a site and project data base. It is critical to map areas where archeological surveys or projects have occurred, and not just the locations of known sites. The last section converts this information into a plan of action by analyzing what is known and not known about the significance and distribution of sites in an area, and the current and planned land use of the reserve or facility. This section contains priorities for future work, standards for conducting the work, and the managing agency's internal procedures for compliance with historic preservation laws and regulations.

Historic preservation plans facilitate compliance with federal laws by allowing archeological sites, or individual federal construction projects, to be considered collectively within an overall management context. This allows more accurate determi-

nation of the significance of archeological sites and the effects to them by individual projects. When archeological sites are dealt with on a case-by-case basis, they are almost always considered significant, and treatment plans are developed accordingly. It is far more cost-effective to deal collectively with the archeological resources in a particular management unit.

The SWDO and CNPO volumes provide essential information for the development of these planning documents by providing the historic context needed to develop these plans. The Secretary of the Interior's Standards for Preservation Planning (Federal Register, Vol. 48, No. 190, pp. 44716-44720) stress the use of historic contexts in preservation planning. These contexts, contained in the SWDO and CNPO volumes, describe the significant broad patterns of prehistory and history in an area that are used to determine the significance and management of individual sites. Historic contexts provide the background information needed to develop goals and priorities for future archeological work in

a given area. Thus the information provided in the SWDO and CNPO volumes is essential for compliance with Section 106 and Section 110 of NHPA, and Section 14 of ARPA. The SWDO and CNPO volumes also provide critical information needed for compliance with NAGPRA by identifying the major human skeletal collections and by providing the archeological context for determining their cultural affiliation.

In conclusion, any federal management unit in the SWDO or CNPO regions, whether a military installation, a wildlife refuge, a national forest, or a Bureau of Land Management district, can use the SWDO or CNPO volumes to obtain basic information about prior archeological research in the region, past environmental change, and summaries of the regional prehistory. In addition, on-line access to the key archeological literature is available to anyone with a modem. These overviews are important tools that will contribute to the overall preservation of archeological sites in a large portion of the United States.

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