

FISCAL YEAR 2005 SECRETARY OF DEFENSE
US ARMY ENVIRONMENTAL AWARDS NOMINATION



FORT LEONARD WOOD, MO

CULTURAL RESOURCES MANAGEMENT



SUSTAINING
THE ENVIRONMENT
FOR A SECURE FUTURE

INTRODUCTION

Fort Leonard Wood is located in the northern Ozarks in south-central Missouri, approximately 120 miles southwest of St. Louis and 85 miles northeast of Springfield. Fort Leonard Wood is home to the US Army Engineer School, the US Army Chemical School, the US Army Military Police School, the US Army Maneuver Support Center (MANSCEN) and the Fort Leonard Wood Garrison.

The training objective of Fort Leonard Wood is to support core missions of the MANSCEN, train and deploy assigned US Army Forces Command units, provide excellent quality-of-life facilities and services for Soldiers, families and civilians and promote civic and other partnerships.

The current population of Fort Leonard Wood is approximately 28,000 persons, including military personnel and dependents, US Army Reserve, National Guard, civilian and contract employees.

Fort Leonard Wood's 61,410 acres contain a rich diversity of cultural resources including pre-Columbian and historical settler archaeological sites and World War II and Korean War era properties. The installation contains nearly 600 prehistoric and historical archaeological sites, including prehistoric Native American caves, rock shelters, cairns and petroglyphs ranging from Late Paleo or Dalton to Late Woodland (8000 B.C. – A.D. 1400) and historical towns and farmsteads circa 1830-1940.

The military history of the installation began in 1940, with the construction of housing and training facilities. In the spring of 1941, the post received 10,000 Soldiers and by the summer of 1941, 16,000 more had arrived. The 1,600-building installation was designed for a capacity of 45,000 Soldiers. During the first six months of 1943, about 40,000 Soldiers were trained daily at Fort Leonard Wood. By 1946, World War II was over, training was halted and the post was deactivated. The post remained inactive until 1 August 1950 when it was reactivated during the Korean conflict. On 16 March 1956, it was designated as the United States Army Training Center and five days later was declared a permanent installation. Activity peaked in 1967, when post personnel trained about 123,000 Soldiers for the Vietnam conflict.



Petroglyphs depicting a shaman at the Lohraff Archaeological Complex

BACKGROUND

Fort Leonard Wood's Integrated Cultural Resources Management Plan (ICRMP) provides a comprehensive overview of all cultural resources; serves as a guide to databases, maps and site files; facilitates Cultural Resource Management Program integration; and supplies standard operating procedures for managing the cultural resources at Fort Leonard Wood. The ICRMP is current and due to be revised in 2008. The ICRMP focuses on the timely identification and evaluation of archaeological resources, both historic and prehistoric. By the end of FY 2005, cultural resources surveys totaled 60,764 acres (96 percent) of Fort Leonard Wood. To date, 308 archaeological sites, 22 historic buildings and a World War II prisoner of war stonework complex are eligible or potentially eligible for the National Register of Historic Places (NRHP). A Programmatic Agreement is in development with the Missouri State Historic Preservation Office regarding the historic buildings and structures on the installation.

Key cultural resources personnel at Fort Leonard Wood include the Cultural Resources Manager, Cultural Resources Manager Point of Contact, Historical Archaeologist, Natural Resource Specialist and other personnel within the Environmental Division.

PROGRAM SUMMARY

Fort Leonard Wood's Cultural Resources Management Program has strived to develop and employ new techniques and programs for managing and preserving the many cultural resources on the installation.

Innovations range from developing a new methodological approach to determining the significance of historical archaeological sites to compiling Installation Maintenance and Repair Manuals for the 22 NRHP eligible buildings on Fort Leonard Wood. Other innovations have led to the location and recovery of subsurface features and artifacts in a timely and less invasive manner and new levels of communication between Fort Leonard Wood personnel and appropriate federally recognized Native American tribes.

Tremendous achievements have been made over the last two years to implement the ICRMP. The sections below detail how specific projects have addressed cultural resources management, mission enhancement and community involvement and outreach.

ACCOMPLISHMENTS

Historic Buildings and Structures

Using the Installation Building Survey (1941-1956) as a framework, the Cultural Resources Management Program, in cooperation with the Construction Engineering and Research Laboratory (CERL), compiled Installation Maintenance and Repair Manuals for the 22 NRHP eligible buildings on Fort Leonard Wood. These manuals provide Fort Leonard Wood with accurate, up-to-date assessments and recommendations to preserve and properly maintain the buildings'



Archaeological foundation and chimney at the Elkins-Gray Farmstead, circa 1900

historic elements incorporating the Secretary of the Interior's standards for treatment of historic buildings. The manuals have been distributed to both the users (Fort Leonard Wood Museum, Environmental Division and Lodging) and those responsible for the maintenance of the historic buildings. Providing guidance to the users and maintenance personnel ensures the continued preservation of the historic buildings. The manuals have also fostered greater communication between historic property users and the Cultural Resources Management Program.

All historic buildings at Fort Leonard Wood are still actively used in a variety of capacities, either in direct support of the mission or quality of life. The following examples detail the use of several of the historic buildings:

- The WWII Temporary Building National Register Eligible District (Museum Complex) contains 13 buildings. The chapel, one of the 13 buildings, is used every week by the 14th Military Police Brigade. The other buildings in the district (mess halls, barracks, administrative buildings) contain displays interpreting the WWII, Korean and Vietnam eras;
- The WWII-era Garlington House, the Red Cross Building (the Ike Skelton House) and the Franklin Guest House are VIP guest quarters utilized by the Billeting Division, Directorate of Morale, Welfare and Recreation; and

- The Rolling Heath School House, circa 1912, is the only extant pre-installation building on Fort Leonard Wood. It is used for educational programs throughout the year and is the primary venue for the Cultural Resources Management Program's annual Missouri Archaeology Month, National Preservation Month and Earth Week activities.

The Integrated Facilities System, the real property inventory, is up to date for the 22 NRHP eligible buildings on the installation.

Historical information has been entered for each building. Once the ongoing building inventory project is complete (spring 2006), the system will be updated again to reflect the new data.

Archaeological Resources

Inventory of Sites

To date, 573 archaeological sites have been recorded on Fort Leonard Wood. Of these, 368 are prehistoric Native American sites ranging from Late Paleo or Dalton to Late Woodland (8000 B.C. – A.D. 1400). The remaining 180 sites date to the early 19th century through 1940. Twenty-five sites contain both prehistoric and historical components.

Of the 573 sites, 308 have been determined to be eligible or potentially eligible for the NRHP.

Site Protection

Sixty-four caves have been recorded on Fort Leonard Wood property. All contain active ecological systems and many contain archaeological evidence and Pleistocene-age paleontological resources. Caves are highly vulnerable to vandalism

and unintentional adverse impacts. The proper management of cave resources on Department of Defense (DoD) installations requires detailed baseline inventories, a systematic hierarchical ranking and programmed monitoring. The use of caves has provided an alternative military training environment and, although seven cave sites were selected for military training, many caves are restricted and have been protected through monitoring, stabilization or gating. Funding was secured from the Legacy Resource Management Program in FY 2003, and analyses were completed in FY 2005. A final report documenting the archaeological and biological resources – including detailed maps, photographs, species lists and a management plan – will be completed in 2006.

The CERL, Illinois State Museum Society, University of Illinois Natural History Survey and Missouri Department of Conservation collaborated on the project. Fort Leonard Wood has shared both acquired data and management plans with several federal and state agencies, including the National Park Service, US Forest Service and the Missouri Cave and Karst Conservancy, whose intent is to use the information as a model for similar programs. Results of the study have been presented at four DoD and natural resources conferences and workshops. In addition, a summary article appeared in the winter 2005 *Federal Facilities Environmental Journal*. Finally, CERL, in conjunction with the Cultural Resources Management Program,



Rolling Heath Reunion Attendees: (L-R) former students Paul Ramsey and Napoleon Ramsey with Cultural Resource Manager Point of Contact Dr. Richard Edging and local historian, Alex Primm.



World War II Temporary Buildings Historic District

developed a brochure highlighting the project that has been made available at multiple national and regional environmental conferences.

Research Initiatives and Scientific Contributions

Fort Leonard Wood staff completed the Historic Landscape Project, an innovative methodological approach to determining NRHP eligibility of historical archaeological sites, in FY 2005. A broader physical context for the historic-era landscape emerged from the staff's use of existing archaeological site data, historic context information, historic maps and photographs, archival records, relevant geographical data, architectural information and distinguishing landscape characteristics. This comprehensive perspective allows Fort Leonard Wood to determine which 19th and 20th century archaeological sites are most likely to contain useful information and ensures the installation's efforts are focused on significant sites. From this model, the installation developed a strategy to conduct archaeological investigations at 11 historic sites. The staff presented a poster highlighting the project components at the 2004 Society for Historical Archaeology (SHA) conference and discussed the implementation and results at the 2005 SHA conference. In addition, Fort Leonard Wood personnel shared this landscape approach methodology with many archaeologists, universities, companies, agencies and a tribal organization, and several of them are adapting it for use on their specific sites.



Kenton Lohraff, Natural Resources Branch Wildlife Biologist, at Freeman Cave, one of 64 caves surveyed as part of the LRMP Cave Survey Project

Curation

The Cultural Resources Management Program has an ongoing curation program through an agreement with University of Missouri, Columbia (UMC) and the US Army Corps of Engineers, Saint Louis District. The UMC American Archaeology Division Collection Center contains a state-of-the-art facility that fully complies with 36 CFR 79. This money-saving arrangement allows Fort Leonard Wood to store its collections at a regional facility rather than incurring the cost of a similar facility at the installation. Over 80 percent of all artifacts and all Native American Graves Protection and Repatriation Act-related human remains and funerary objects collected from Fort Leonard Wood lands have been processed and permanently housed at the facility. Curating the Fort Leonard Wood collections at the UMC facility also provides access to the collection for scientific study by archaeologists and the general public.

By utilizing this regional facility alternative, Fort Leonard Wood personnel do not have to construct their own curation facility (potentially saving the installation hundreds of thousands of dollars) and hire curation staff, thereby saving annual salary and overhead costs, in addition to the cost of maintaining an on-site facility. The actual cost of curation since 1995 is \$97,840, covering box and site fees for all artifacts recovered and sites recorded since the 1980s.

Cultural Resources Awareness and Education

The Cultural Resources Management Program participates in Missouri Archaeology Month,

“Fort Leonard Wood’s cultural resources program is a reflection of a true commitment to innovative solutions to meet mission needs at the installation. Its leadership in developing the tools and best practices for a cost-effective program has been a benefit to other federal and state agencies and the community. I commend Fort Leonard Wood for their efforts in protecting the Nation’s cultural resources and providing community outreach while sustaining the military mission.”

- Toni Patton-Williams,
Office of the Deputy Assistant Secretary of the
Army for Environment,
Safety and Occupational Health

National Preservation Month and Earth Week by offering both adult and children’s activities including lectures, cave tours, school fieldtrips, archaeology open houses and teacher workshops. Five standardized lesson plans have been developed and distributed to elementary and secondary schools in the Fort Leonard Wood region. The lessons focus on archaeology, Native American rock art, historic farmsteads, one-room schools and historic cemeteries. Cultural Resources Management Program personnel are regularly invited to give presentations on post for events like Native American Heritage Month in November and off post at local universities.

When feasible, public tours are arranged to archaeological sites during Phase II investigations, and Fort Leonard Wood commanders and surrounding community leaders, in addition to the general public, are invited to attend. The goal is to show the value and necessity of archaeological investigations while reinforcing how the Cultural Resources Management Program supports the military training mission.

In FY 2004, *Made in the Timber: A Settlement History of the Fort Leonard Wood Region* by Steven D. Smith was published by Fort Leonard Wood and CERL. The book emphasizes the development of a regional history within the framework of the Ozark cultural and geographical landscape, and unifying these into a history of Pulaski County. Three thousand copies were provided to the Fort Leonard Wood and Pulaski County communities, all regional and local libraries, historical societies and interested public. Former residents of the Fort Leonard Wood lands and their descendents have been especially appreciative of the attention focused on their families and history. In turn, the Army has received grateful acknowledgement for its role in preserving the history of the region.

Mission Enhancement

The Cultural Resources Management Program has enhanced Fort Leonard Wood’s ability to carry out its training mission. To develop additional resources, Fort Leonard Wood, in coordination with Integrated Training Area Management, selected survey areas to coincide with needed training areas and cleared a site in FY 2004 for a new convoy live fire training

course. In addition, the preservation of the Museum Complex and chapel relocation and restoration has provided a chapel for the 14th MP Brigade, offered a more accurate portrayal of a WWII-era company area and assists in teaching basic trainees and other military personnel about the historical value of Fort Leonard Wood. Creating the building inventory of 1956-1971 era buildings in FY 2005 assisted in preparation for new barracks complex development at Fort Leonard Wood.

CONCLUSION

The Cultural Resources Management Program at Fort Leonard Wood has fostered a research approach within the context of compliance-generated projects. While the goal is to comply with federal preservation laws, the integration of a research framework has resulted in a series of exceptional scientific and historical projects that have served

as a standard for archaeological, historical and geomorphological research in the northern Ozarks. However, while important archaeological and historical data has resulted from this work, it is not an end in itself. By complying with federal preservation laws, the Army is able to maintain its military missions and conduct training over vast tracts of land. Highly sensitive cultural and biological areas are monitored monthly and their

locations updated annually on GIS maps that inform the Fort Leonard Wood Command. Additionally, compliance with federal preservation laws regarding historic buildings and stonework has enabled the Army to expand its mission in the developed cantonment area.

“The Fort Leonard Wood cultural resources team members not only developed effective strategies, they applied them, accomplished their goals and ensured that the results were shared with the professional and local community.”
 - Robin Burgess,
 Senior Archaeologist,
 Bureau of Land
 Management

On the cover: A Tennessee Army National Guardsman sharpens his skills at Fort Leonard Wood, Mo.