



Archeology Program

National Park Service
U.S. Department of the Interior



September 2014 Archeology E-Gram

Fort Union National Monument Completes Investigation of the Civil War Star Fort

Researchers from the University of Wyoming, through an agreement with the NPS Rocky Mountains Cooperative Ecosystem Studies Unit, conducted remote sensing studies to record the original configuration and construction of the Civil War-era fort at Fort Union NM. The earthen fort was built in the shape of an 8-sided star in 1861 to address the imminent threat of the Confederate Army moving to take Fort Union and thus control of the Santa Fe Trail and the gold fields of Colorado.

The fort is exceptional for several reasons: First, it is integrally associated with the Battle of Glorieta Pass (March 26-28, 1862), a crucial western engagement of the Civil War and a decisive Union victory that ended Confederate incursions into the American Southwest. Second, it is the sole surviving earthen star fort erected west of the Mississippi River. And third, it is the most intact, least-disturbed Civil War-era bastioned earthen fort surviving anywhere within the United States today. It was from here that the 1st Colorado Volunteers deployed to meet and defeat the Confederate army at the Battle of Glorieta Pass. The fort was occupied by the Army from 1861 to 1866, and by civilian personnel for a period after that.



Metal detecting crew, Leader Doug Scott, and Superintendent Charlie Strickfaden

The project used remote sensing techniques to determine surface and subsurface features within the 33 acre fort, and to aid park management in determining future research and preservation needs. Aerial LiDAR was used to create contour maps at different contour intervals to assess erosion patterns, and to determine more ephemeral surface features. A combination of magnetometry, soil resistivity, and ground penetrating radar determined subsurface areas of fort features and architectural layout.

In August, an interagency crew of staff and volunteers, led by retired NPS archeologist Doug Scott, surveyed outlying areas south and west of the fort for locations where the 1st Colorado Volunteers and New Mexico Volunteers encamped for 84 days before and after the Battle of Glorieta. The park established temporary interpretive exhibits and talks with visitors during the project, and researchers explained what the nature of the work was and how it will help interpret and protect the star fort.

New Shipwreck Surveys Completed at Isle Royale National Park

Park divers at Isle Royale NP recently completed shipwreck surveys in Passage Island cove, in the northeast corner of the park. Under the direction of Sara Kerfoot, student in the Nautical Archeology Program, East Carolina University, divers surveyed, mapped, and photographed two shipwreck sites.

One of the wrecks, a 26-foot Coast Guard vessel, caught fire in the spring of 1949 after the boat operator turned on the engine for the first time that season. The vessel was pushed from the boathouse, burned to the waterline, and subsequently sank. The charred remains of the vessel lie in 27 feet of water.

The location of another sunken vessel, a 36-foot cabin cruiser, was confirmed in 2012 when Lara Hutto, hydrographic technician with the Great Lakes I&M Network, surveyed the cove with the NPS sonar vessel *Echo*. Park divers were unable to complete surveys and an assessment of the wreck until this year. The wreck is approximately 50 years old and rests on a slope near shore between 15 and 34 feet of water. Fully intact with no visible signs of damage, the cause of this wreck remains a mystery.

More wreck assessments are underway at the park this season. Eight of the park's ten major shipwrecks were added to the NPS archeology database (ASMIS) and park divers will continue to complete these valuable cultural resource assessments.

Contact: Paul Brown, Chief of Natural Resources, Isle Royale NP, Paul_Brown (at) nps.gov

Joint NOAA/NPS Shipwreck Survey Underway at Golden Gate National Recreation Area

The National Oceanographic and Atmospheric Administration (NOAA) and the NPS have announced a two-year project to better understand the “underwater cultural landscape” of the Gulf of the Farallones National Marine Sanctuary and the adjacent waters of the Golden Gate NRA.

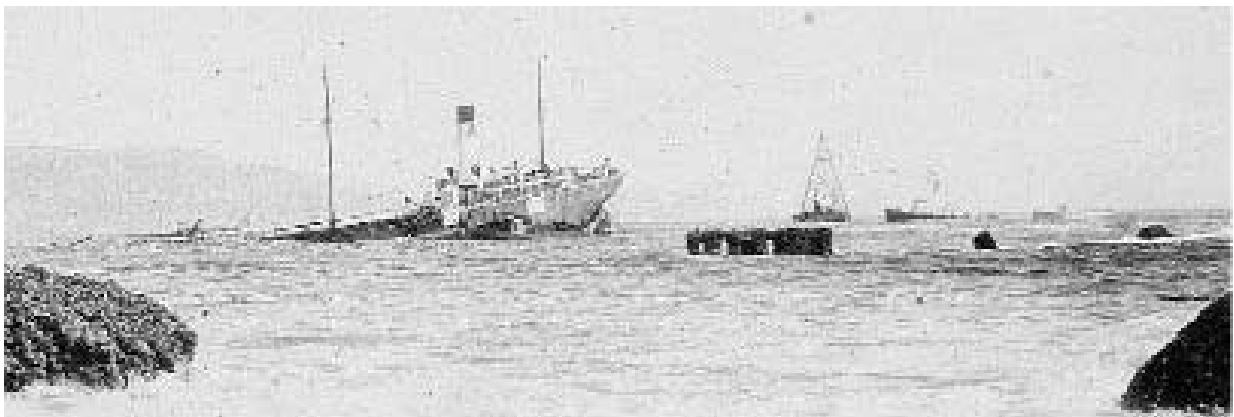
For 100 years, from the California Gold Rush of 1849 to the great shipping mobilization of World War II, San Francisco was among the greatest seaports of the day. Into that port came the vessels of the world, and many of them came to grief because of the frequent fogs, swift currents, and rocky shores of the Golden Gate. It is estimated that over 300 vessels – from Spanish galleons and clipper ships to tugboats and oil tankers – have been lost in the waters of the park and the marine sanctuary.

Using state-of-the-art remote sensing technology deployed from the research vessel *Fulmar*, NOAA staff have rediscovered lost shipwrecks, better-defined known wrecks, and even discovered previously unknown vessels just offshore of San Francisco Bay.

The effort has been led by James P. Delgado, director of NOAA's Maritime Heritage Program, and supported by the research of Robert Schwemmer, West Coast coordinator of maritime heritage, and NPS historian Stephen Haller.

To date, the project has led to the rediscovery of the underwater remains of:

- The steamer *City of Chester*, which sank after a collision in 1888, taking 16 unlucky passengers down with her in spite of the heroic rescue efforts of her Chinese crew;
- The clipper ship *Noonday*, sunk in 1863; and
- A previously unknown tugboat hulk in deep water off the Farallone Islands.



The *Frank Buck* sinking in 1938, with the remains of the engine of the *Lyman Stewart* visible at center.

The engines of the *Frank Buck* and *Lyman Stewart* have long been visible at low tide to those who hike the California Coastal Trail at San Francisco's Lands End, but the NOAA survey has brought these ships to life with spectacular underwater imagery.

To view the most recent project imagery, visit the NOAA website at: <http://sanctuaries.noaa.gov/farallones-shipwrecks/>

To learn more about the shipwrecks of the Golden Gate, visit the NPS website at: http://www.nps.gov/history/history/online_books/maritime/goga.pdf

By Alexandra Picavet, Public Affairs Specialist

Live Civil War Cannonball Found at Richmond National Battlefield Park

On September 22, 2014, resource management staff advised protection rangers that they had found what appeared to be a cannonball within the moat of Fort Gilmer. An employee discovered the cannonball while doing trail maintenance. The cannonball was six inches in diameter and weighed 12 pounds.

Rangers responded and, with assistance from the park's historian, determined that it was a live cannonball with an intact fuse. The shell was possibly one of the repurposed artillery shells thrown from the parapet of the fort as a hand grenade into attacking United States Colored Troops during the 1864 battle.

The Henrico Bomb Squad and the Fire Department removed the cannonball, took it to a range and detonated the weapon.

By Tim Mauch, Chief Ranger

Lummi Nation Returns to English Camp, San Juan Island National Historical Park



Lummi Nation master carver Jewell James speaks before the totem pole he fashioned in his studio.

Members of the Lummi Nation for the first time in decades brought ceremony and dance to San Juan Island in July and August to reintroduce traditional fishing practices to Lummi youth, launching from the shores of the San Juan Island NHP English Camp unit.

English Camp is the site of a Lummi winter village (including a 600-foot longhouse) and is considered the ancestral home and birthplace of the Lummi people. During the winter, Garrison Bay was an ideal spot for a village because it is protected from harsh winter winds by the surrounding hills. The placid waters provided a safe place to dock canoes, gather clams and fish during the winter.

The Lummi began exploring reef net sites during the park's annual encampment weekend in late July. Following the San Juan County Fair, the Lummi canoe called "XWLEMI" (Lummi) was transported to English Camp. Lummi Nation members presented the NPS and Friends of San Juan Islands with sand, water and a cedar tree from Lummi Nation. Chief Bill James, addressing the gathering in Xwlemi Chosen (Lummi language), blessed the beach with sand and water from Lummi Nation and the canoe was

launched. The Lummi Youth Canoe family paddled around the bay as their ancestors once did, singing the Flood Song, the Lummi's creation song.

"This was the best moment of my summer—seeing the Lummi youths launch a canoe...and paddle around Guss Island" [sacred in their origin myth and part of the park], said Superintendent Lee Taylor.

The group from Lummi Nation camped for two nights at English Camp. A few weeks later they returned to bless a totem pole that had been on a 1,700-mile journey in the United States and Canada to raise awareness of American Indian and First Nation peoples' commitment to the environment.

By Mike Vouri and Lee Taylor

NPS Southeast Archeological Center Launches “15 Questions with an Archeologist”

The NPS Southeast Archeological Center has launched a new podcast series “15 Questions with an Archeologist.” This podcast is an interview that seeks to ask as many archeologists as possible the same 15 questions. These questions are designed to cover the areas in which archeologists are most often queried. They are also design to provoke though and commentary on our profession. This podcast adds to a growing library of interviews with NPS archeologists available through the Archeology E-Gram.

Join us for the fun and learn something as well!

Direct download: [Episode 00 Final.mp3](#)

Category: [Archaeology](#)

Conversation with an Archeologist: Erika Stein Espaniola, Superintendent, Kalaupapa National Historical Park

Erika Stein Espaniola is one of our youngest superintendents, and her journey from archeological technician to head of Kalaupapa NHP is just one example of the places that an archeological background can take you! Erika didn't start out wanting to be a park superintendent. In fact, she didn't even want to be an archeologist. She took basic undergraduate anthropology courses, at the University of California, Santa Barbara, but didn't feel a pull to archeology until her senior year, when she went to an archeological field school in Mexico, working at a Maya site on the Yucatan Peninsula.

The field school gave Erika a solid foundation in basic excavation, survey, and mapping techniques to enter the job market. After graduation, she worked in CRM, doing monitoring and mitigation. It wasn't a very good fit, however, and after ten months she went back to the field school as a volunteer. During this second season, Erika had an epiphany, after observing the hydrological dynamics at the site; she wanted to be an underwater archeologist. She said “It was crazy. The site was named Tres Lagunas, and by this time there were actually five lagoons, so the water level was definitely changing, we surveyed the site, but walked around the lagoons. No one was paying attention to the submerged resources.”



This decision sent her to James Cook University in Townsville, Queensland, Australia one of the few places with a maritime archeology program. There she learned to survey, map, and excavate submerged resources, practicing on the purposefully wrecked ships surrounding Magnetic Island, on the Great Barrier Reef.

After finishing an MA at James Cook, Erika went to Hawai`i, where her family had relocated. Again, she got a job in CRM but it still wasn't a good match. She didn't want to do mitigation, she realized; she wanted to do preservation, for an organization known for its preservation - the NPS. The first thing was to get into the Federal system, so off she went to an archeology technician job for the US Forest Service in California. Within 6 months, an archeology technician job came available at Kalaupapa NHP.

Kalaupapa is such a special place that we had to take a break from talking about Erika and talk about Kalaupapa. The park encompasses the Kalaupapa Peninsula, about 2 miles long, and 2.5 miles wide, on the north side of Molokai, one of the most remote locations in Hawai`i. Visitors and residents come to the park by air or by walking down the sea cliffs on the Kalaupapa trail.

The park shares the site with the Hawai`i Department of Health. About 90 people live there, 45 NPS employees and 30 Department of Health staff, who care for the remaining population of Hansen's disease patients, about 16 individuals. Kalaupapa was the site of a colony from 1866-1969 that isolated over 8,000 people determined to have Hansen's disease, formerly called leprosy. There are more people buried in the cemeteries on the peninsula than currently live in the town.

The peninsula also hosts the remains of habitations, agricultural terraces, canoe ramps, and walls that are reminders of the Native Hawaiian people who lived there for more than 900 years before they were displaced by the leprosarium. The walls, dry set masonry, stretch for miles along the windswept peninsula and into the valleys. These archeological resources brought Erika to Kalaupapa.

Erika moved to the park in late 2007, as an archeological technician. How could you afford it? I asked her. Erika said that government housing was available, which made it feasible. She lived in the Bay View dorm for 18 months, sharing a kitchen, but not sleeping quarters. Most people live in Kalaupapa during the week, and hike out on the weekends.

Erika moved into the Archeologist position in 2008. Two years later, the Chief of Cultural Resources moved on, and Erika was appointed acting Chief of Cultural Resources. She was the acting chief for a year before being chosen for the permanent position. She was in that position for 18 months when then superintendent Steve Prokop decided to accept the superintendent's position at Redwood National and State Parks. He also urged Erika to accept a 120 day detail as acting superintendent of Kalaupapa NHP.

It was a great opportunity for her, but a really big responsibility; and one that would take her away from the Archeologist series. She was in a daze for a week while she tried to decide what to do, repeatedly burning herself and her dinner and leaving cups of undrunk coffee in unexpected places. In the end, though, she accepted the challenge. The position was advertised before she even started the detail, but she applied anyway, and learned that she liked being a superintendent, which was a good thing, because she was offered the job. She finished her first year as a superintendent in June 2014.

What was your first year like? I asked her. Hectic! She officially began her duties five days before she got married! The first thing that happened was Barge Day, when a barge brings freight into the community and takes away trash. In December, a commuter plane crashed into the ocean off shore of the airport,

killing the State Director of Health. The Department of Health will eventually close their operations and her staff is working hard with the Regional Office to develop a general management plan to guide Kalaupapa for the next 15-20 years, including defining uses for the Health Department buildings.

Erika decided to hold an all employee activity day to build up morale – a Makahiki Day festival. “That’s one of the benefits of being a supervisor,” she laughed. “You can say ‘This is what we are going to do; go away and make it happen’ and they do!” Erika’s staff planned such a successful day of throwing fishing nets, spear throwing, and other Hawaiian activities, that employees want to make it a regular event. Even though she is the superintendent, Erika is the only archeologist in the park, and most archeological issues still come to her. As time permits, she plans to finish an archeological inventory survey that she started several years back as well as complete the site record for the shipwreck at Kalaupapa.

Being a superintendent is about capacity building. Erika has found is that a superintendent can be an advocate for archeological resources at a different level. A superintendent with a background in archeology or cultural resources can ensure that cultural resources are considered in decision-making. That specialty isn’t always represented in a management team, so it’s a really great thing for Kalaupapa’s archeology. While she enjoyed being chief of cultural resources, a superintendent has so many more opportunities to influence the stewardship of resources in a park because the superintendent gets to set the priorities for the park. “And that’s pretty neat!” she concluded.

Thanks for talking to us, Erika!

Vandals Destroy Part of Petroglyph National Monument Trail

Storms destroyed part of the Rinconada Canyon trail, in Petroglyph National Monument, a year ago. Since then, Diane Souder, Chief of Interpretation and Outreach, and a trail crew have been working to repair it to keep people on the trail and protect resources. “We were nearing completion of the project, we had hoped to open the Canyon up by October 1st,” said Souder.

Recently, however, vandals hotwired a Bobcat tractor and drove it into the Rinconada canyon, knocking down posts and cables, and sand ladders that made it easier to walk through sand on the trail. Nearly 20 posts and 600 feet of cable were destroyed.

Because it’s a national monument, the vandalism sparked a Federal investigation but the Albuquerque Police Department is helping. They checked out footprints, dusted for prints and collected tools the vandals left behind. The perpetrators could face Federal charges.

From story by Katherine Mozzone

NPS Awards \$1.7 Million in Grants to Protect Four Significant Civil War Battlefields

NPS Director Jonathan B. Jarvis announced more than \$1.7 million in grants from the Land and Water Conservation Fund to help preserve land at four of America’s Civil War battlefields threatened with damage or destruction by urban and suburban development. The grant projects are at the Thompson’s Station (TN), Ream’s Station (VA), White Oak Road (VA), and Harpers Ferry (WV) battlefields.

In making the announcement, Jarvis underscored President Obama’s call for full and permanent funding for the Land and Water Conservation Fund, through which a small portion of revenues from federal oil and gas leases on the Outer Continental Shelf is dedicated to helping states and local communities create ball fields, bike trails and other recreational facilities, expand hunting and fish access, preserve

battlefields, and undertake conservation projects. The program, which only been fully funded at its \$900 million authorized level once in its 50-year history, will expire this year without action from Congress.

The battlefield grants are administered by the NPS American Battlefield Protection Program, one of more than a dozen programs administered by the NPS that provide states and local communities technical assistance, recognition, and funding to help preserve their own history and create close-to-home recreation opportunities. Consideration for the Civil War battlefield land acquisition grants is given to battlefields listed in the National Park Service's Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields.

Grants are awarded to units of state and local governments for the fee simple acquisition of land, or for the non-federal acquisition of permanent, protective interests in land (easements). Private non-profit groups may apply in partnership with state or local government sponsors. Complete guidelines for grant eligibility and application forms are available online at: <http://www.nps.gov/abpp/>

Contact: Elizabeth Vehmeyer, Grants Management Specialist, at 202-354-2215.

NPS Funds Investigations of Red Bank Battlefield Park

When a breathless Jonas Cattell dashed into Fort Mercer that October day in 1777, the enemy wasn't far behind. The 18-year-old had overheard talk of an attack on the American fort and ran the 10 miles from Haddonfield to Red Bank, Gloucester County, New Jersey, bypassing Hessian mercenaries along the way. Cattell's timely warning gave American defenders time to reposition their artillery for a trap that decimated the Hessians. About 400 soldiers – a third of the German force – died from cannon and musket fire and were buried in a mass grave at what is now Red Bank Battlefield Park, on the site of Fort Mercer.

Next spring, Fort Mercer will become an archeological dig, funded with a \$46,200 grant from the NPS. Nearly 240 years after the battle, elementary school students will visit the site during the dig and will be allowed to touch objects. The fort also will be surveyed using ground-penetrating radar and other tools to locate the mass grave. Artifacts including musket balls, grapeshot, swords, buttons, buckles, and other uniform accoutrements are likely to be recovered and eventually exhibited. The human remains will be offered to the German government, or reburied in place.

From story by Edward Colimore, Inquirer Staff Writer

International Archaeology Day

International Archaeology Day, held each year on the third Saturday of October, is a celebration of archeology and the thrill of discovery. Every year archeological organizations across the United States, Canada, and abroad present archeological programs and activities for people of all ages and interests. Whether it is a family-friendly archeology fair, a guided tour of a local archeological site, a simulated dig, a lecture or a classroom visit from an archeologist, the interactive, hands-on International Archaeology Day programs provide the chance to indulge your inner Indiana Jones.

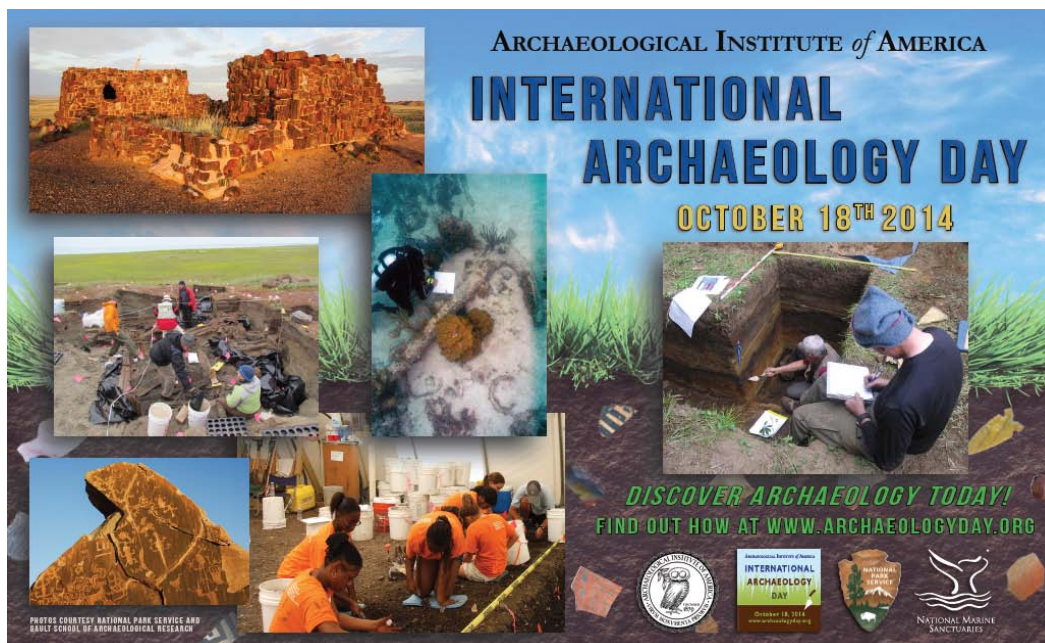
The first Archaeology Day was celebrated around the world in 2011 as National Archaeology Day. Participation covered 37 U.S. states, 4 Canadian Provinces, and included an event in the United Kingdom. Despite a late start in organizing the event and fairly limited resources, over 115 programs were associated with the first Archaeology Day. Fourteen groups officially joined as Supporting Organizations. These ranged from large national organizations like the Society for American Archaeology (SAA),

Society for Historical Archaeology (SHA), and the American Anthropological Association (AAA) to small county museums and local libraries. Over eighty Archaeological Institute of America Local Societies joined the celebration. In all, almost 15,000 people participated in the inaugural event.

The event grew significantly in its second year, due in part to an earlier start on organizing. In 2012, over 60,000 people participated in approximately 275 events and we had 125 Collaborating Organizations. In 2012, participation spread to include events in 49 U.S. States, eight Canadian Provinces, Australia, Egypt, France, Germany, Ireland, and the United Arab Emirates.

In 2013, the name was changed to International Archaeology Day to better reflect worldwide participation. Nine new countries were added to the growing number of places around the world celebrating Archaeology Day. A total of 375 events were planned and the number of Collaborating Organizations swelled to 188. Despite a few larger events being canceled due to a sixteen day shutdown of the U.S. government, approximately 75,000 people participated in events in 2013.

To learn more about International Archaeology Day, go to <http://www.archaeological.org/archaeologyday/about>



New Video on Looting Released by PBS

In the Owens Valley of California, looters have been stealing or destroying ancient artifacts, including petroglyphs thousands of years old. In this production from the Advanced Laboratory for Visual Anthropology, archeologists, Native American tribal members, and Federal land officials talk about their efforts to recover these priceless pieces of the past and protect them for future generations.

The 30 minute video, while aimed at the general public, is suitable for college-level introductory archeology classes, with some amplification. The film implies, but does not state, that the stolen petroglyphs were on Federal lands administered by the BLM. Instructors will want to point out that Federal laws, such as ARPA and NHPA only pertain to Federal lands. Also, while ARPA permits the

collecting of arrowheads (a concession to President Carter), collectors can be charged under agency-specific regulations regarding the theft of government property.

The film gives a good overview of formal and informal Federal cultural resource managers' positions. The interviews with buyers and sellers at a flea market only emphasize the need for robust public education about the importance of our cultural heritage.

To watch the video, go to <http://video.pbs.org/video/2365309153/>

Bureau of Reclamation Asks Public to Leave New Melones Lake Artifacts Alone

The BOR asked the public to avoid handling or removing any historic artifacts that might appear as the waters recede in New Melones Lake, California. New Melones, east of Stockton, is just 23 percent of capacity. Lake levels should continue to drop into the fall, until the rains come. The remains of historic sites are becoming exposed and visitors are not allowed to dig, handle or remove anything from the lake bed. Metal detectors are not permitted.

To report finding ruins or artifacts, call (209) 536-9094.

NPS National Center for Preservation Training and Technology Offers Grants

The NPS Preservation Technology and Training (PTT) Grants program provides funding for innovative research that develops new technologies or adapts existing technologies to preserve cultural resources, including archeology. Grant recipients undertake innovative research and produce technical reports that respond to national needs in historic preservation. Since the inception of the grants program in 1994, the National Center has awarded over 300 grants totaling more than \$9.1 million in Federal funds.

In order to focus research efforts, for the FY2015 funding cycle NCPTT requests proposals that advance the application of science and technology to historic preservation in the following areas:

- Planning for and responding to climate change and the impacts of natural and man-made disasters on cultural resources;
- 3D documentation and visualization techniques for sites, landscapes, buildings and objects;
- Mobile application development for cultural resource detection, documentation, management, and preservation;
- Development and testing of protective coatings for cultural materials.

(NOTE: NCPTT does not fund "bricks and mortar" projects).

Applicants are encouraged to contact NCPTT to discuss their ideas prior to submitting a proposal. NCPTT staff will provide feedback on the degree of fit between the proposed idea and the mission of the grants program, along with suggestions for improving competitiveness. For Archeology & Collections, contact Tad Britt, [tad_britt \(at\) nps.gov](mailto:tad_britt@nps.gov). You may also call (318) 356-7444 and an operator will connect you with the appropriate party.

The deadline for submission is Tuesday, November 05, 2014. All applications must be submitted through grants.gov. For application instructions and guidance, go to <http://ncptt.nps.gov/grants/how-to-apply/>

Fiber Identification and Analysis for Conservation

The National Center for Preservation Technology and Training (NCPTT) and The Museum of Fine Arts Houston are hosting a three-day hands-on workshop on fiber identification and analysis for conservation. The workshop will be held March 24-26, 2014, at the Museum of Fine Arts Houston in Houston, TX. This

course covers basic polarized light microscopy (PLM) and methods of sampling, characterization and identification of mammalian hair and selected natural and synthetic fibers. Emphasis is placed on hands-on exercises involving sample preparation and specimen manipulation as well as the characterization and identification of actual specimens.

Nicholas Petraco and Fran Gale are the instructors. This workshop is only open to 20 participants, so register early to reserve your spot. Tuition for the class is \$399.

More information, schedule, and registration can be found at;
<http://ncptt.nps.gov/events/fiber-identification-and-analysis-for-conservation/>

Projects in Parks: Berkeley Rockshelter Lithics: Inferences about the Prehistoric Use of Mount Rainier National Park

By Kipp Godfrey and Bradford Andrews

Archeologists from Pacific Lutheran University have analyzed lithic artifacts from Berkeley Rockshelter in Mount Rainier NP to determine how the site was during the Late Holocene. The assemblage included evidence of lithic tool production, and a variety of stone tools, including many projectile points. Archeologists suggest that Berkeley Rockshelter functioned as a field camp, used by hunters to repair broken equipment while on hunting forays far from their homes. This archeological evidence from Berkeley Rockshelter adds to our knowledge of what life was like in the prehistoric Pacific Northwest.

To read the full report, go to <http://www.nps.gov/archeology/sites/npSites/berkeleyRockshelter.htm> (after October 2, 2014)

Slightly off topic: Archaeology or Archeology?

Ever wonder why some people spell archeology with an “ae”? Fortunately, NPS archeologist Barbara Little has taken time to research this spelling issue. She writes:

“...Both spellings are correct, but there are some twists and turns to the answer! If you look up the word in a dictionary, you’ll find it under “archaeology” with the variant “e” spelling also listed, but you probably won’t find it under “archeology.”

The “ae” is a diphthong, which is a gliding vowel sound normally represented by two adjacent vowels. However, typographically, some diphthongs are represented as single ligature characters (that is, joined letters), so “ae” becomes æ. If you have occasion, take a look at actual pieces of printers type -- those small lead alloy sticks with letters that are composed one-by-one into forms and then printed on a printing press (before linotype and way before digital). You’ll find not only a’s and e’s but also æ’s. Think Benjamin Franklin! You also can see such printing re-enacted at Colonial Williamsburg if you want to watch the painstaking process of publishing newspapers and books one letter at a time. I can imagine printers thinking that ligature characters were a terrific idea because they’d save a step: pick up one piece of type to place in your composing stick instead of two.

Here’s the particularly odd part: in 1890 or 1891, the US Government Printing Office (GPO), decided to economize by eliminating the ligatured ae. This decision was probably also helped along by the trend in American English to simplify, so that the “ae” diphthong was replaced by an “e” in pronunciation and spelling. The decision also came soon after the introduction of the linotype machine when the technology and practice of printing was changing: always a likely time for more changes to occur. The GPO adopted

new spelling rules that called for a simple substitution of e for the ligatured ae in all cases in which its earlier rules had required the ligature. No allowances were made for the history of individual words or for common usage, hence the new spelling "archeology".

The history of the word as it was derived from Latin would have argued for the "ae". In 1685 Jacob Spon of Lyon first used "archaeologia" to designate a discipline concerned with the study of ancient monuments in his *Miscellanea eruditaе antiquitatis*. The British Archaeological Association began publication of *The Archaeological Journal* in 1844. Archaeology as a new word was by then fully established in English. In both these cases the word was spelled with the "ae".

Regardless of that long history, the GPO style influenced university presses and boards of editors, notably at Chicago, Columbia and Yale. In turn, their spelling styles influenced the archaeologists who published with them, some of whom began to teach their students that the "e" spelling was preferable to the "ae" one. And there have been rumors about what the different spellings mean! For some archaeologists, the two spellings symbolize competing aspects of the field. The supposedly antiquated spelling with the "ae" is supposed to connote classical or a humanist-oriented archaeology, while the supposedly modern "e" is thought to suggest anthropological or a social science-oriented practice. There logically is no such significance to the spelling.

You can see the spelling used by The Society for American Archaeology. Not surprisingly, the U.S. National Park Service has archeology programs. But, oddly enough, one of the most important national laws protecting our archaeological heritage is indeed the "Archaeological Resources Protection Act" passed by the U.S. Congress in 1979. Go figure."

2006

(Author's note: This explanation owes a lot to John Howland Rowe, intrepid historian of anthropology: specifically to some of his research found in a column by Patty Jo Watson in the American Anthropological Association's ANTHROPOLOGY NEWSLETTER from June 1975, 16(6): 11-12.)

Reprinted with thanks from the Society for American Archaeology website. Read the original essay at: <http://www.saa.org/ForthePublic/Resources/OtherUsefulResources/Whyarethetwodifferentspellingsarchaeology/tabid/1078/Default.aspx>

Archeology E-Gram, distributed via e-mail on a regular basis, includes announcements about news, new publications, training opportunities, national and regional meetings, and other important goings-on related to public archeology in the NPS and other public agencies. Recipients are encouraged to forward *Archeology E-Grams* to colleagues and relevant mailing lists. The illustrated *Archeology E-Gram* is available on the *News and Links* page <http://www.nps.gov/archeology/new.htm> on the NPS Archeology Program website.

Projects in Parks is a feature of the *Archeology E-Gram* that informs others about archeology-related projects in national parks. The full reports are available on the *Projects in Parks* web page <http://www.nps.gov/archeology/sites/npSites/index.htm> or through individual issues of the *Archeology E-Gram*.

Contact: Karen Mudar at dca@nps.gov to contribute news items, stories for *Projects in Parks*, and to subscribe.