



Archeology Program

National Park Service
U.S. Department of the Interior



September 2018 Archeology E-Gram

NPS NEWS

Archeologist Thadra Stanton wins the National Achieving Relevance in Education Award.



NPS archeologist Thadra Stanton has won the National Achieving Relevance in Education (ARE) award for archeological presentations to Southeast Region school children and initiation of a Girl Scouts of America Archeology Ranger patch at regional parks. Stanton's outreach and education programs teach youth about the need to protect and preserve archeological resources, as well as participate in simulated archeological projects. Stanton is the first archeologist to win the award.

Given annually by NPS in five categories related to NPS interpretation programs, the ARE award in education reflects achievement in one of NPS's primary missions—"to collaborate on teaching and learning about the interconnections of human culture and nature, natural systems, and the values of America's diverse heritage."

National Park Service Recognizes Palo Alto National Historical Park Archeologist

The NPS has awarded Palo Alto NHP Rolando Garza the 2017 Trish Patterson Student Conservation Award for Natural Resource Management in a Small Park. The awards committee cited Garza's integrated approach to managing and restoring natural resources as a means of preserving the cultural landscape as well as his efforts to leverage local, state, federal and non-governmental organizations to lend help, support and research for resource and educational programs at Palo Alto.

Garza spearheaded the restoration of the cultural landscape, which involved returning the battlefield to the way it looked in the mid-1800s. In those days, the coastal prairie was dominated by Gulf cord grass, which has a high tolerance for salt water. Around the turn of the century, after repeated flooding from hurricanes, engineers undertook massive drainage projects, which changed the hydrology of the area and allowed establishment of native woody species. Although the hydrology cannot be restored to its original state, native cord grass is being planted and vegetation managed.

"We'll plant 60,000 to 100,000 plugs this fall," Garza said. "The overall goal is to use fire as a natural element to maintain the grassland prairie." The FWS, The Nature Conservancy, the Natural Resources Conservation Service Kika de la Garza Plant Materials Center in Kingsville, and the Texas Parks and Wildlife Service all assisted. Garza also credited the University of Texas Rio Grande Valley, Texas Master Naturalists, support and guidance from the NPS Intermountain Regional Office, members of the NPS Gulf Coast Inventory and Monitoring Network, and "the hard work of dedicated volunteers."

Garza earned his BA in anthropology from the University of Texas and worked on cultural resource projects in Texas and New Mexico, including field director for the Texas DOT on the Freedman's Cemetery project in Dallas. This entailed the



restoration of a neglected and partially paved-over burial place for hundreds of freed slaves and their descendants. Garza joined the NPS Southeast Archeological Center in 1998 and investigated battlefields from the American Revolution, the War of 1812 and the Civil War as well as other historic and prehistoric sites in the NPS Southeast Region.

He returned to the Rio Grande Valley in 2001 for a job at Palo Alto NHP. Since his return, Garza has directed archeological investigations at the battlefield and the related Resaca de la Palma battle site, the original military earthworks at Fort Brown, and the Civil War-era Palmito Ranch Battlefield NHL. Garza also serves on the city's Historic Preservation Design and Review Board and the Brownsville Historical Association board of directors.

From story by Steve Clark, Brownsville Herald

Retired National Park Service Archeologist Given Award

Greg Burtchard, retired NPS archeologist, was awarded the Director's Appleman-Judd-Lewis Award for Excellence in Cultural Resource Management for 2015. Mr. Burtchard is a 16-year veteran of Mount Rainier National Park who has earned the recognition this award represents for his outstanding achievements in researching, understanding, protecting and managing park cultural resources. Mr. Burtchard's passion for pre-contact and historical archaeology is inspirational and his dedication, integrity, humanity and technical skills have expanded the knowledge of early human use, strengthened relationships with affiliated tribes, and earned the respect and appreciation of park staff, professional peers and academics.

The Director's Appleman-Judd-Lewis Award for Excellence in Cultural Resource Stewardship is awarded to recognize expertise and outstanding contributions to cultural resource stewardship and management. The awards were created to encourage creativity in cultural resource stewardship and management practices, particularly those that serve as examples or models for projects and programs throughout the NPS. The Appleman-Judd-Lewis awards recognize cultural resource contributions at the field level, as well as by superintendents and our colleagues in facilities maintenance.

Jeremy Sweat to Head National Park Service Intermountain Region's Planning & Compliance



Jeremy Sweat, chief of resource management at Bandelier NM, has been named chief of the NPS Intermountain Region Planning & Compliance Division. At Bandelier NM, Sweat supervised management of natural and cultural resources, and the environmental compliance program. Prior to his time at Bandelier NM, he served for six years as a program analyst in the Office of Policy, and as a legislative specialist in the Office of Legislative and Congressional Affairs.

Sweat joined the NPS in 2006 as a seasonal archeological technician at Great Smoky Mountains NP. Sweat earned his BA and MA in anthropology at the University of Tennessee. He will begin his new duties on October 14.

National Park Service Archeologist Experienced Plenty in 20-year National Guard Career

NPS archeologist Linda Plock had many jobs during her 20 years with the Nebraska Army National Guard: helicopter mechanic; flight medic/crew chief; journalist for the Guard newsletter; and Combat Lifesaver instructor. Now, she is an ethnobotanist at the NPS Midwest Archeological Center.

On September 24, she was more than 130 veterans on the first Female Honor Flight to Washington, D.C. Bill and Evonne Williams of Patriotic Productions in Omaha have taken more than 3,500 veterans on one-day Honor Flights to the nation's capital. This is the first time they have exclusively honored female veterans, all of whom volunteered for military service.

The flight consisted entirely of women, including Loretta Swit, who played Major Margaret "Hot Lips" Houlihan on the TV series "M*A*S*H." While in Washington, the veterans visited military memorials, attended a wreath-laying ceremony at the Tomb of the Unknowns at Arlington National Cemetery and had lunch at the Women in Military Service for America Memorial.

Plock always wanted to fly; she was a member of the Civil Air Patrol while at Lincoln High. Barred from flying in the military because of her gender, she became the first female copter mechanic in the U.S. Armed Forces. She was a member of the 24th Medical Air Ambulance Company based in Lincoln. The first 17 years of her service were spent in the U.S. In November 1990, however, the 24th Medical Company was activated for the Persian Gulf War, becoming the first Nebraska group to be called to combat since World War II. Plock was among nearly a dozen women deployed with her company. She retired from the National Guard in 1993.



Plock today and while deployed with the Nebraska Army National Guard in Saudi Arabia in the early 1990s.

Ocmulgee National Monument holds 27th Annual Indian Celebration

Ocmulgee NM held its 27th annual Ocmulgee Indian Celebration on September 14-16, 2018, which drew about 15,000 visitors to the park. More than 200 American Indians, representing over 24 federally recognized tribes, participated in this year's event. The American Indian groups demonstrated dancing, storytelling, and games from their different cultures. Other activities included living history

demonstrators and pottery, basket weaving, and beading demonstrations. On September 14, during the “school day” portion of the event, approximately 1,800 area school children attended.

Additional support came from local deputies, Ocmulgee National Monument Association staff, AmeriCorps, and 150 volunteers who collectively contributed 1400 hours of service.

For more information about Ocmulgee National Monument, go to <https://www.nps.gov/ocmu/index.htm>

Archeology Project Underway at Fort Union National Historic Site

Archeologists from the NPS Midwest Archeology Center are excavating at the Garden Coulee site, within the boundaries of Fort Union NHS. The Crow-Flies-High band of Hidatsa occupied the site from approximately 1867 to 1884. NPS archeologist Jay Sturdevant says the main goal of the team at the Garden Coulee site is preservation, rather than excavation. Teams are working to stabilize the riverbank to prevent site loss. New survey will help to identify what types of artifacts are at the site, as well as identifying other resources that could be impacted by the bank's erosion.



Alongside the work being done at the Garden Coulee site, work is being done with ground-penetrating radar to identify structures located near the fort. Fred MacVaugh, park ranger at Fort Union noted that while the geophysical surveys may identify structures' footprints, there are no plans to for excavation at this time. New structures and artifacts add to the history of the fort, and give a better insight into the lives of people who lived and worked there. Learning more about Fort Union helps to add to the history of residents in the area, as some are directly descended from those who lived, worked and traded at the fort.

For more information about Fort Union Trading Post, visit www.nps.gov/fous

From story by Mitch Melberg, Williston Herald

Yellowstone Science Issue Devoted to Archeology

Yellowstone Science Volume 26-1 is all about archeology! Here is a list of relevant titles:

The Yellowstone Story by Tobin Roop

A Brief History of Archeology at Yellowstone National Park by Elaine Hale and Ann Johnson

[Note: The Archeology E-Gram interviewed Elaine Hale about her work in 2013. To read the interview, go to <https://www.nps.gov/archeology/pubs/egram/1309.pdf>]

Obsidian: The MVP of Yellowstone's "Stones" by Robin Park

Historical Archeology by Elizabeth James & Thomas James

Archeology along the Nez Perce National Historic Trail by Daniel H. Eakin & Elizabeth James

[Note: This research was presented in a webinar by another author, Staffan Peterson. Watch the webinar at https://www.nps.gov/training/NPSArcheology/html/by_park.cfm]

Dendrochronology: The Study of Tree Rings by Dan Eakin & Elizabeth Horton

Archeology & Adaptation to Climate Change in Yellowstone by Staffan Peterson

Seasonal Use of Yellowstone by Thomas James

Archeological Significance of Yellowstone Lake by Douglas H. MacDonald

[Note: The Archeology E-gram presented research by MacDonald at Yellowstone Lake in the series “Projects in Parks.” Read about MacDonald’s research at <https://www.nps.gov/archeology/sites/npSites/yellowstoneLake.htm>.]

Fear of Yellowstone by Thomas James

A Volunteer's Impressions by John Reynolds

Yellowstone Science, first published in 1992, features articles about research, conferences, or other special events in the Greater Yellowstone Ecosystem. The publication provides scientists with an opportunity to share ideas and keeps the public informed about scientific endeavors in and around Yellowstone National Park.

To read these articles, go to <https://www.nps.gov/yell/learn/yellowstone-science.htm>

FEDERAL NEWS

Students and Bureau of Land Management Staff Participate in Archeological Excavation

The BLM Green River District Office and Arizona State University are conducting the second annual archaeological excavation at a historic site in Nine Mile Canyon with students from Utah. The excavation will be a hands-on experience, working side by side with archaeologists, educators and volunteers. Experts will be on hand to tour the site and answer questions. The public is invited to visit the excavation site while the work is being done.

Excavation at the site will be conducted over five weekends starting Labor Day weekend. Each weekend, students will camp near the site, excavate a Fremont pit structure, tour nearby rock art sites, make clay pots, and listen to speakers from archeology and historical organizations.

Partners include Montgomery Archaeological Consultants, Colorado Plateau Archaeological Alliance, Utah State University Eastern Prehistoric Museum, Utah Division of State History, Nine Mile Canyon Settlers Association, Nine Mile Canyon Coalition, Project Discovery Utah, Utah Rock Art Research Association, Project Archaeology and the Utah Statewide Archaeological Society (Castle Valley Chapter).

Contact: <https://ninemilevolunteer.weebly.com>

GRANTS AND TRAINING

Workshop for Advanced 3-D Imaging and Morphometrics for Archeology

The NPS National Center for Preservation Technology and Training will hold a workshop on Advanced 3-D Imaging and Morphometrics for Archeology on 15-18 October 2018 at the Arizona State Museum Conservation Laboratory.

The objective of this workshop is to share and discuss the latest uses of 3D imaging of archeological artifacts in order to improve the utility and precision of analyses that employ 3D data to assess morphological variation. Additional discussions will cover topics related to digital curation and public archeology. This four-day event will include lectures, a hands-on practicum, data analysis demonstrations, and discussions of best practices and data curation.

Contact: Tad Britt, tad_britt@nps.gov

Workshop for Ground Penetrating Radar

The NPS National Center for Preservation Technology and Training will hold a workshop on Ground Penetrating Radar on November 5-8, 2018 in Marksville, Louisiana. Attendees will collect, process, and analyze data from a site of archaeological significance, although numerous other examples will be also offered. Workshop staff will include representatives from key hardware manufacturers, software engineers, and leading experts in archaeological geophysics. The workshop is aimed at professional archaeologists from universities, consulting companies, governmental agencies, and elsewhere.

Lectures will be at a meeting room in the Paragon Casino Resort. Field exercises will take place at the Marksville State Historic Site. Lodging is available at the Paragon Casino Resort. Refer to NPS Ground Penetrating Radar-NPAN10G when making hotel reservations for the workshop rate of \$93 per night. The workshop is limited to 30 participants. Cost \$400.00, Student Rate \$200.00.

Co-sponsors for the workshop include the National Center for Preservation Technology and Training, the Friends of NCPTT, the Marksville State Historic Site and the Office of Cultural Development, Division of Archaeology of the Louisiana State Historic Preservation Office.

Contact: Tad Britt, tad_britt@nps.gov

Workshop: Working Together- Fire Managers & Archaeologists

The Southwest Fire Science Consortium is offering an interactive workshop that brings together fire and archaeology staff! Held November 27-29, 2018, the first day will consist of a one-day workshop on fire effects to archaeological resources. November 28-29th will be an interactive workshop and will cover the following topics:

- Importance of fire on the landscape and the importance of protecting cultural resources within that context
- How fire managers and archaeologists can more effectively work together.
- Basic fire effects on resources
- Process- roles and responsibilities and how to better communicate before and during wildfire events
- How to build an inclusive planning process pre-fire
- How to build relationships

The intended audience for the workshop have an interest in building relationships between fire and archeology staff, including (but not limited to): Fire managers and planners at **ALL LEVELS** (Fire Staff Officers/FMOs, Fuels Specialists, IMT members, Operations, etc.), Line Officers/Agency Administrators, Archaeologists, and READs. The workshop is funded by the Joint Fire Science Program (JFSP).

For more information, go to <http://www.swfireconsortium.org/2018/06/26/november-27-29-2018-working-together-fire-managers-archaeologists>.

SLIGHTLY OFF TOPIC: How to Collect Samples to Get the Best C14 Dates?

By Beta Analytic

Beta Analytic has developed sampling advice to help you select and prepare samples to ensure the best radiocarbon results from *any* radiocarbon dating service.

Bone & Teeth

We recommend you collect good cortical bone fragments from larger bones of the body, since these bone fragments preserve well. Larger bones include the femur, tibia, upper limb bone, skull plate and

mandible. For human teeth, preferred samples are single complete incisor or canine. If a molar is the only choice, all 4 roots must be attached.

Charcoal

To separate charcoal from sediment matrix, you may use tweezers or micro tweezers. For larger pieces of charcoal that are not covered in a lot of clay, you can use water flotation. It is best you wear gloves during water flotation and dry charcoal samples at temperatures less than 70°C for 12-24 hours prior to shipping.

Pottery

You can extract charred food residue from the interior surfaces of a sherd. The burned food residue has to be a patina that can be removed in small bits or chunks rather than a sooty powder. If you cannot extract burned food residue, you may collect "bulk sherd organics" - the total organic material from the clay or that the clay was in contact with. Extracting organic tempering agents for dating is a third option when either the organic material is charred or the firing temperature was too low to burn the material away. Please contact us if you're not sure what might be dated for your pottery sherd.

Wood

You can use water flotation to separate wood from sediment matrix. For conserved wood, make sure to select samples from a section that does not show any signs of insect activity or rot and does not seem like it has been treated with preservatives or additives. We recommend you collect conserved wood samples from the outermost section of the piece to make sure the outer growth rings are dated if you want to know the approximate time of death of the tree as close as physically possible.

Packaging samples for shipping

We recommend you place samples in ziplock bags or in aluminum foil for small samples. To protect the samples from being crushed during shipment, you may send them in small boxes rather than envelopes.

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 *Archeology E-Gram* is available on the *News and Links* page at www.nps.gov/archeology/public/news.htm on the NPS Archeology Program website.

Contact: Karen Mudar at karen_mudar@nps.gov to contribute news items and to subscribe.