September 2019 Archeology E-Gram
Print edition

NPS NEWS

Preserving Historic Projectiles at Gulf Islands National Seashore
Gulf Islands NS resources and facilities were decimated by the 2004 hurricane season. A seawall impounded water in the Fort Pickens Historic District, threatening thousands of objects in the park's museum collection.

For the past 15 years, the park's 286 historic cannonballs have sat in emergency crating. The crating kept the cannonballs safe, but prevented curators from properly managing and tracking them. Now, the cannonballs are being moved to proper storage. Reinforced, high weight capacity shelving allows curators to access each cannonball which sits on plywood mounts and archival foam.

The museum collections of Gulf Islands NS are stored in secured NPS and partner facilities in Jacksonville, FL, and Natchez, MS. The ultimate goal is to consolidate all collections in Natchez, MS. Park collections facilities are not open to the public, but the park shares stories about the resources through digital galleries and temporary exhibits.

Fort Pickens Cannonballs in their new home.(NPS photo)

Pipe sales ending at Pipestone National Monument
Pipes will no longer be sold at Pipestone NM. The NPS and the Pipestone Indian Shrine Association (Shrine) reached a decision on the sale of pipes in consultation with the monument's 23 federally-recognized affiliated Tribes. The Shrine is a nonprofit founded in 1955 that is the official cooperating association partner of the monument and has managed the store at the Visitor Center since 1958. The organization purchases the pipes and other pipestone products from local quarriers and craftspeople and then sells the items. The Shrine also manages the artisans who demonstrate pipestone carving at the Monument and to help interpret the history of the site. Cultural demonstrations of pipe carving will continue.

Native Americans have been quarrying the stone at the Monument for thousands of years. Over the years, some members of the Monument's affiliated tribes have protested the commodification of those objects, saying the sale of pipestone was a form of exploitation and disrespect that some Tribes likened to the sale

of Christian Bibles and crosses. Others, such as local quarriers and artisans, do not believe pipes are sacred objects until they are properly blessed for the individuals using them.

In 2013, several Tribes requested formal, government-to-government consultation on the issue. Glenn Livermont, former Monument superintendent, posed the question by letter in 2014 to the affiliated tribes to begin the consultation process. Fifteen of the 23 tribes said they wanted pipe sales to end. Seven tribes either chose not to weigh in or did not have a perspective they wanted to share with the NPS. At least one tribe wanted pipe sales to continue.

From report by Debra Fitzgerald, Pipestone County Star

Archeology Contributes to Better Understanding of Race Riot

An NPS review has found a 1908 Springfield Race Riot site suitable for a special resource study, a step in designation as a national historic monument. The site is in Springfield, Illinois. On the evening of August 14, 1908, racial tensions in Springfield ignited, in part due to the allegations of a white woman (which were later recanted), that she had been assaulted by an African American man, who was subsequently arrested. A crowd gathered at the Sangamon County Jail demanding the prisoner. Fearing trouble, the sheriff secretly whisked the prisoner to the safety of a nearby town. Upon learning that the prisoner had been removed, the crowd erupted into violence, resulting in two days of rioting, the lynching of two black men, the destruction of many downtown businesses and homes, and the death of five white men.

Excavation of house destroyed during Springfield Race Riot, 1908 (University of Illinois photo)

The State Militia was mobilized, crowds were dispersed, and order was again returned to the streets of Springfield. In total, 107 indictments were issued to the rioters who had destroyed and looted homes and

businesses, and participated in the lynchings. Only one person was convicted, of theft. Soon after this horrific weekend of violence, a prominent group of social reformers came together in February 1909 and formed the *National Association for the Advancement of Colored People* (NAACP).

Archeological investigations ahead of rail improvements through downtown Springfield has resulted in the discovery of the well-preserved foundations of five mid-nineteenth century houses located in a row along North Tenth Street that had been destroyed by fire during the riot. The excavation catalyzed discussions about how to preserve the memory of the riot and started a push to protect the site as a national monument. The planned new train tracks will be moved about 20 feet, leaving one of the houses protected in the ground, while the other four houses will be excavated and reburied.

To read an article about archeology related to the Springfield Race Riots, go to https://www.smithsonianmag.com/history/land-lincoln-long-buried-traces-race-riot-come-surface-180971036/

Grant helps Minnesota State University Moorhead professor study of 3,000-year-old Poverty Point
Minnesota State University Moorhead professor Rinita Dalan has been making trips to Poverty Point, Louisiana since 2006 to study remnants of human habitation that include six large earthen mounds. In addition to the mounds, the site includes earthen ridges enclosing an open plaza, part of which is slightly higher than the surrounding ground.

The research will employ a type of ground-penetrating radar not often used at archeological sites in the US to determine whether the plaza is man-made. The technology, from Norway University of Technology and Science, creates three-dimensional images of underground structures. The equipment will employ a sled that carries multiple transmitter and receiver devices that will allow for a 3D view of what lies deep in the ground. The partnership has been made possible through a $29,577 grant from the NPS.

The earthworks at Poverty Point are a UNESCO World Heritage Site.

Historic Spring on Parklands at Risk from Border Wall Construction
Federal officials are building a wall along 44 miles of the border in Organ Pipe Cactus NM and the adjacent Cabeza Prieta Wildlife Refuge. They plan to pump millions of gallons of groundwater — some of which dates to the last Ice Age — to build the border wall. The wall building activities threaten a spring near Lukeville, Arizona, which has slaked the thirst of desert travelers for centuries.

Fresh water bubbles out of the granite at Quitobaquito Springs, making it a key watering hole. Unlike many of the others, Quitobaquito was spring-fed and always had fresh, drinkable water. The oasis was part of a prehistoric trade route, the Old Salt Trail, where northern Mexican commodities including salt, obsidian and seashells were plentiful. The traders were followed by Spanish missionaries, Western settlers, and other travelers and nomads.

The springs and surrounding desert wetlands are just 200 feet from the border, where crews plan to bring in heavy earth-moving equipment to install steel barriers. Scientists have raised concerns that the springs could dry up if crews pump groundwater from the area for the barrier's concrete base.

The U.S. Customs and Border Protection (CBP) is creating an environmental stewardship plan to show the potential impacts of wall construction on more than 60 miles of the border. The plan is to use existing

wells near the border and to dig new wells. At the request of the NPS, new wells will not be dug within 5 miles of the springs and water levels will be monitored during construction. NPS data shows the water flow at Quitobaquito Springs has steadily declined since the 1970s. Hydrologists at the University of Arizona caution that drilling anywhere in the aquifer could affect the springs.

CBP did not provide specific information about the wells, but said the contractor needs 84,000 gallons of water per day. The construction near the Lukeville port of entry is estimated to last 45 days.

From report by Curt Prendergast Arizona Daily Star

Water flow at Quitobaquito Springs, seen here in 1962, has steadily declined since the 1970s. NPS photo

Construction to Impact Archeological Sites in Organ Pipe Cactus National Monument
Upgrading the border barrier could damage or destroy 22 or more archeological sites within Organ Pipe Cactus NM in coming months. The administration's plan to convert an existing five-foot-high vehicle barrier into a 30-foot steel edifice could pose irreparable harm to unexcavated sites of Sonoran Desert peoples. NPS archeologists identified these risks as CBP seeks to fast-track the construction. DHS has taken advantage of a 2005 law to waive ARPA, NHPA, and the Endangered Species Act that would have slowed, and possibly stopped, the barrier's advance in the stretch in Arizona.

CBP officials said the agency has looked at "most" of the 22 archeological sites identified in a NPS report and found just 5 that are within the 60-foot-wide strip of federal land on the U.S. side of the border where

the government will erect the barrier. The officials said they have not delayed or otherwise altered their construction plans to conduct more detailed surveys or excavations in the area. CBP officials acknowledged that trucks and earth-moving equipment driving through the fragile desert risk harming sites outside the specific construction zones. The officials said they are following NPS guidance as to where workers can drive.

Construction crews do not yet have a plan to begin work at that location, CBP officials said. The agency has had discussions with NPS officials about collecting and analyzing lithic materials from one site. "We've been working very closely with the park," said a CBP official, who spoke on the condition of anonymity to discuss the administration's plan for building near archeological sites along the border.

At least a dozen American Indian tribes claim connections to the lands within the Organ Pipe Cactus NM. They include the Tohono O'odham Nation, which formerly inhabited a large swath of the Sonoran Desert. Members of the nation, who have revived the practice of following the Old Salt Trail, have protested the idea of any new construction in an area once inhabited by their ancestors, the Hohokam, who lived there between 200 and 1400 A.D.

CBP has announced plans to complete this section of barriers through the national monument by January. Those plans call for new fencing in five or six non-contiguous areas, including areas where the archaeological sites are found. The project within the monument includes a new steel bollard fence running continuously for 9.1 miles, reinforced with an 8- to 10-foot-deep concrete-and-steel foundation.

September is Suicide Prevention Month

Perhaps you or someone close to you or your co-workers have been directly impacted by suicide. As the 10th leading cause of death in the US, over 47,000 Americans died by suicide in 2017, an average of 129 suicides per day. We have lost too many NPS employees to suicide, and the impacts for families and coworkers and our community are profound. There have been at least eight NPS employees who have died by suicide within the last two years.

Lack of understanding of suicide, its signs and risk factors, combined with the stigma surrounding suicide and mental illness create barriers that prevent those who are suffering or suspect someone else is suffering from getting help. If we can reach out to all employees across the NPS and initiate conversations about suicide it will help break down the negative stigma surrounding the subject of suicide and inform those who may be in need that there is support available and places to go for help.

What are some warning signs?

Talking about wanting to die, being a burden to others, feelings of hopelessness, or having no reason to live are signs that someone may be considering suicide. Also, changes in behavior or mood, such as increased depression, agitation, or anxiety; withdrawing or losing interest in activities; acting recklessly or impulsively; or self-isolating from family and friends may be signs.

What should I do if I think my coworker or friend is suicidal?

Be a good listener. Truly listen, and let your friend know you are there for him or her. Talk about it! Ask your friend to talk about what is troubling him/her. Openly ask "are you planning to kill yourself?" or "are you thinking about suicide?" Take all suicidal talk seriously. Do not judge, argue with, or try to "fix" your friend. Get help. Find a mental health professional or call 911 in an emergency. Stay with your friend until you know he/she is safe.

There are ways that each one of us can help.

- Know what to look for. Read about the signs and symptoms of those who may be considering suicide.
- Start a conversation about suicide. Bring up the topic with your coworkers or family.
- Know where to go for help. Whether you are considering suicide or you know of someone who is, learn about the many resources available.

Following are some immediate resources available:

National Suicide Prevention Lifeline
suicidepreventionlifeline.org
1-800-273-TALK (8255)
Suicide intervention support 24/7

Employee Assistance Program: Esypr
www.espyr.com, password: interioreap
1-800-869-0276
Suicide intervention support 24/7

NPS Website
Inside.nps.gov/suicideprevention

Our goal is to lose no more NPS employees, family members, or members of our communities to suicide, and it will take the efforts of our entire organization to realize this goal.

E-Mail for the E-Gram

Joan Bacharach, Museum Curator writes about information in the August E-Gram's **SLIGHTLY OFF TOPIC: Marking the Introduction of Slavery into North America** "Thanks for including our programs! Much appreciated." If you haven't read it yet, take a look; it has resources for considering slavery in the history of the United States.

The E-gram would love to give a shout-out to your programs or projects! Just let us know.

Climate impacts on Mesa Verde National Park Already Apparent

Park managers say climate conditions are already apparent at Mesa Verde NP, and are only slated to get worse. Established in 1906, Mesa Verde NP was the first park in the country established specifically to protect archeological sites. Within its boundaries are nearly 5,000 known sites, including 600 cliff dwellings, from the ancestral Puebloans who lived in the region from about 600 to 1300 CE. Every bit as important as the ruins is the landscape the ancestral Puebloans relied on for survival. Yet studies have found the Mesa Verde landscape is particularly vulnerable to drought and heat.

Tim Hovezak, cultural resource manager for the park, says nearly 70% of the landscape at the 52,485-acre park has been altered in the last few decades by drought-driven fires. Record droughts have set the stage for massive fires that have wiped out much of Mesa Verde's piñon-juniper forests. In its place, grasslands, often with invasive species, now cover the hillsides. And with each blaze, untold damage can befall the ruins throughout the park.

A UNESCO report identified Mesa Verde as one of the most at-risk World Heritage sites across the globe. Historic drought and above-average temperatures that have gripped the region for the past two

decades have set up conditions for fire and beetle outbreak. From 2002 to 2005, more than 33% of the piñons in Mesa Verde's old-growth woodlands were killed by the *Ips* bark beetle and other drought-related factors. Since 1996, a series of fires have burned nearly 28,800 acres – just about half of the park.

Wildfires are a natural part of the landscape, but recent fires have been hotter and larger in scale, because of the drought driven by climate change. When wildfires burn, so, too, do archeological sites – the very thing that draws nearly a half million people to Mesa Verde every year.

From report by Jonathan Romeo Durango Herald

Tova Spector, chief of resources at Mesa Verde NP, says that the springs at Spruce Tree House have dried up. A recent NPS study found the hot and dry conditions that have persisted in recent years at Mesa Verde are beyond the historical record of climate fluxes in the past.

FEDERAL NEWS

First People in the Americas Came by Sea, Site on Bureau of Land Management Land Suggests
Charcoal and bone in a site at Cooper's Ferry, Idaho, have been determined to be 16,000 years old and are the oldest radiocarbon-dated record of human presence in North America, according to work reported in *Science*. The findings indicate that people lived at Cooper's Ferry more than a millennium before melting glaciers opened an ice-free corridor through Canada about 14,800 years ago. The only rival to Cooper's Ferry as the oldest site in North America is the Gault site in Texas. Researchers dated that site to about 16,000 bp BP by optical luminescence, a method with larger margin of error than radiocarbon dating.

That suggests the first people in the Americas must have come by sea, moving rapidly down the Pacific coast and up rivers. Although the site is more than 500 kilometers from the coast, the Salmon, Snake, and Columbia rivers link it to the sea. It's easy to see how seafaring people might have reached Cooper's Ferry, says Loren Davis, the Oregon State University archeologist who led the excavations. "As people come down the coast, the first left-hand turn to get south of the ice comes up the Columbia River Basin. It's the first off-ramp."

Over 10 years of excavation, archeologists have uncovered stone spear points, blades, bifaces and hundreds of pieces of debris. Although the site is near the Salmon River, most of the bones belong to mammals. The team also found a hearth and pits containing stone artifacts and animal bones. Many of the spearpoints found there belong to the Western Stemmed Point tradition, smaller and lighter than the hefty Clovis points. Such tools have been found at early sites from British Columbia to Peru, and as far inland as Texas. Similar points are known from Japan from about 16,000 to 13,000 years ago.

Coopers Ferry Site Photo credit: Loren Davis

The area is now federal land but was long occupied by the Nez Perce Tribe, or the Niimíipuu. They know Cooper's Ferry as Nipéhe, founded by a young couple after a flood destroyed their previous home, says Nakia Williamson, the tribe's director of cultural resources. "Our stories already tell us how long we've been here…This [study] only reaffirms that." He hopes the excavations—in which Nez Perce archeologists and interns participated—will help others recognize the deep ties the Nez Perce have to their ancestral lands.

By Lizzie Wade, Science

The Federal Archeologists Bookshelf: will be back soon.

Renovated Fort Hall Greenhouses to Bolster Area's Native Culturally Significant Plants
Three unused greenhouses are now helping the Shoshone-Bannock Tribes preserve culturally significant native plants. The greenhouses, on the grounds of Shoshone-Bannock Junior-Senior High School, were overhauled last fall and now represent one of the region's most modern facilities for plant propagation.

The tribes intend to grow native plants for entities such as the BLM, which needs seedlings to re-vegetate following wildfires. Susan Filkins, with the BLM's native plants program, said the tribes have previously partnered with her program. They raised bitterbrush and sagebrush for the BLM. Fitkins anticipates BLM will partner with the Fort Hall program on future contracts.

The BLM contributed financially toward the roughly $135,000 renovation. The greenhouses have the capacity to produce up to 3 million plants per year, ranging from riparian to high desert species. Members of the tribal Language Cultural Preservation Department have offered guidance to the greenhouse staff.

The greenhouse is raising culturally significant plants for use in landscaping outside of the Shoshone-Bannock Tribal Museum. Other riparian plants will re-vegetate a stream bank near the museum, and a

wetland at the Fort Hall Bottoms of the Snake River. Students from the school will assist in growing the seedlings. Tribal Council Chairman Ladd Edmo believes his community's children will learn about their heritage when they participate in raising riparian plants that were crucial to their ancestors' survival.

By John O'Connell, Idaho State Journal

GRANTS AND TRAINING

National Park Service Awards Grants for Tribal Projects
The NPS announced $524,000 in grants for 12 projects to support America's Native cultures. Congress appropriates funding for the Tribal Heritage Grant Program through the Historic Preservation Fund (HPF). The HPF uses revenue from federal oil leases on the Outer Continental Shelf, providing assistance for a broad range of preservation projects without expending tax dollars.

From the preservation of a 16th century pueblo and petroglyphs on mesa cliffs in New Mexico to creating video documentaries of traditional burial practices in Oklahoma, these projects are critical to preserving Tribal heritage. Other projects funded by these grants will locate and identify cultural resources, preserve historic properties listed in the National Register of Historic Places, support comprehensive preservation planning, preserve oral history and cultural traditions, provide training for building a historic preservation program, and support cultural and historic preservation interpretation and education.

Fort Sumter NHP Offers ARPA Training for Cultural Resources Professionals
Go beyond flakes, features, and fauna, to a working knowledge of Archaeological Resources Protection Act (ARPA) and its implementation! This dynamic, interactive class is taught by highly-experienced instructors including an archeologist and a Special Agent. Course content is supplemented with real case studies. You will learn about the nexus between ARPA and related cultural resource (and some natural resource) laws, including NAGPRA, NHPA, and SURPA. ARPA can be applied to incidents like vandalism, arson, museum theft, and failure to comply with §106. The class explores different ways of using ARPA and embracing other disciplines within cultural resource management.

This class is developed for cultural resource professionals, including archeologists, Tribal Historic Preservation Officers and staff, architects, and curators.

Date: December 2–6, 2019
Location: Fort Sumter National Historical Park
Tuition: No tuition cost. Travel costs must be paid by attendee's home park, program, or office.

Contact: Cari Kreshak, cari_kreshak@nps.gov

SLIGHTLY OFF TOPIC: Protecting Cultural Resources from Wildfire: How to Wrap a Cliff Dwelling 101

by Stephanie Mack and Macie Monahan
In the summer of 2019, Tonto NM staff, Brett Cockrell, Stephanie Mack, and Macie Monahan, led a crew on a mission to wrap two Salado cliff dwellings to protect them from the impending Woodbury Wildland Fire in the nearby Superstition Wilderness. This crew included Tonto NF Fire staff, Capstone Fire & Safety Management, Casa Grande Fire Department, and Arizona Fire and Medical Authority. So, how do

you wrap a cliff dwelling without negatively impacting 700+ year old wood?

The dwellings illustrate connections between the Salado and their environment. They constructed the dwellings using local wood including ponderosa pine, juniper, saguaro ribs, and many other Southwestern species. Protecting these cliff dwellings from the fire was a major priority for Tonto NM. The Integrated Resources staff decided to cover the cliff dwellings in a fire resistant aluminized structure wrap to shield the prehistoric wood, and preserve the dwellings as a whole.

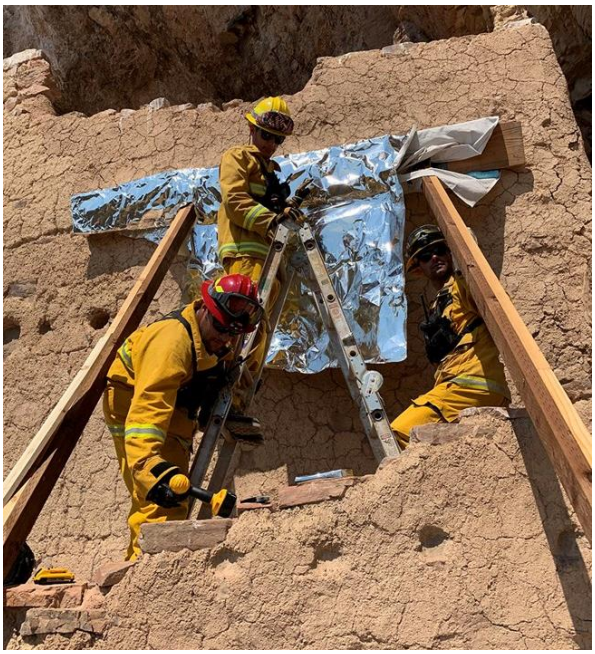
Preserving the dwellings started by removing nearby wood fuels and then attaching the fire resistant wrap without stapling directly into the prehistoric wood. Fire entered the park on June 21, 2019, and, due to the efforts of the fire crews and resource staff, both cliff dwellings were unharmed. Once the fire was no longer a threat, the wrap was carefully removed.

This historic achievement for Tonto NM was the first time in park history where the dwellings were protected from wildfire. With teamwork, problem solving, and a passion for preservation, the cliff dwellings remained unharmed. The crew who wrapped the cliff dwelling truly exemplified the mission of the National Park Service by preserving our nation's treasures for future generations.

Doorframe Lintels: Two techniques were used to wrap doorframe lintels. The first involved encasing the lintels with the wrap and securing it into place with paracord. The second technique was similar, but instead involved placing non-structural stone above the lintels on top of the wrap.

Roofs: One by two inch wooden planks were hung from prehistoric support beams using paracord. Then aluminized structure wrap was stapled to the planks. The wrap was enclosed around the feature in a tent-like fashion and weighted to the ground using non-structural stone.

Support beams: Support beams were covered with the wrap and held in place by paracord.



Non-prehistoric wood: In both dwellings, there are many instances of historic stabilization work completed by the National Park Service, which used wood. As this wood is not a contributing factor to the integrity of the dwellings, the wrap was stapled directly to the beams.

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.