



# Archeology Program

National Park Service  
U.S. Department of the Interior



## July 2016 Archeology E-Gram

### NPS NEWS

#### **Passing of Pioneer Gender Archeologist Joan Gero**

Archeologist Joan Gero died on July 14, 2016. She was 72 years old. Gero was Professor Emerita of Anthropology from American University and a Research Fellow in the Anthropology Department, Museum of Natural History, Smithsonian Institution. She was a lifelong fellow of Clare Hall, Cambridge, and taught at the universities of Cambridge, Uppsala (Sweden), Catamarca (Argentina), Magdalena (Colombia) and the University of South Carolina. She conducted archeological excavations in the Andes (Peru and Argentina) with grants from the National Endowment for the Humanities, National Science Foundation, Fulbright, the Wenner-Gren Foundation and the Heintz Foundation. In addition to the Andes, Gero excavated in Britain, Labrador, Massachusetts, and South Carolina.

Gero dedicated her career to exposing inequality and focused on gender issues, with particular attention to spotlighting issues of feminist concern within the current practice of archeology. Her article "Socio-politics and the woman-at-home ideology" was one of the first publications to highlight the inequities and expectations faced by female archeologists. She went on to publish numerous other gender studies, including "Archaeology and the Study of Gender" with Janet Spector; "Original Narratives: The Political Economy of Gender in Archaeology" with Sarah Williams; "Engendering Archaeology: Women and Prehistory" and "From Programme to Practice: Archaeology and Gender," both with Margaret Conkey. She also received a Squeaky Wheel Award from the American Anthropological Association's Committee on the Status of Women in Anthropology.



In addition to her contributions to feminist archaeology, Gero was active in the global politics of archeology. She worked tirelessly for the World Archaeological Congress (WAC) over many decades. She was the nationally elected senior North American representative for WAC from 1999 to 2008. When the arrangements to hold WAC-5 in Brazil fell through, Gero agreed to coordinate the meeting in Washington, D.C., in 2003. It supported some 230 participants from Indigenous groups and low-income countries and provided a surplus that put WAC on a secure financial footing for the first time. From 2003 to 2008, Gero was Head Series Editor of the One World Archaeology book series. In 2003 she became a founding member of the Advisory Board for Archaeologies: The Journal of the World Archaeological Congress. From 2007, she was a member of WAC's Standing Committee on Ethics. Together with Stephen Loring, Gero received a Lifetime Achievement Award from the World Archaeological Congress.

Gero's final contribution to archeological theory is "Yutopian: Archaeology, Ambiguity and the Production of Knowledge in Northwest Argentina," (2015) an account of excavations in an early settlement in northwestern Argentina. Her unique approach to writing a site report offers a new model as she demonstrates how the decisions made in conducting scientific research play a fundamental role in shaping the knowledge produced in that project. She was able to visit Argentina, and her field site, shortly before her death.

Gero was an active mentor and valued colleague. Her office door was always open, and her wit, sage advice, and enthusiasm for anthropology never faded. She inspired generations of archeologists, both men and women, to commit to archeological careers and to include gendered perspectives in every aspect of research. North American archeological research might have gone in a different direction without her energetic commitment and enthusiasm. Her family, students, and friends, both two-legged and four-legged, will miss her greatly.

*By Karen Mudar*

### **Stephanie Stephens Named Chief Curator of the National Park Service**



The Cultural Resources, Partnerships, and Science Directorate has selected Stephanie Stephens as the NPS Chief Curator. Stephens began her NPS career in 1989 at Joshua Tree NP as a museum aide. In 1998, Stephens moved to Alaska as the curator/registrar for the NPS Alaska Regional Curatorial Center (ARCC) and served as a roving curator for all Alaskan national parks.

Since 2003, Stephens has been the Alaska Regional Curator and manager of the ARCC. She has also served as acting superintendent of the Western Arctic National Parklands and was the subject matter expert on museum collections for the Flight 93 Serious Accident Investigation Team.

Stephens brings to the Washington Office extensive regional and park experience in professional support, policy direction, park and program oversight, funding management, consultation, technical assistance, and collaboration with other partner museums and native organizations.

Stephens earned a BA in anthropology from California State University, San Bernardino, and an MA in Liberal Studies with an emphasis in Museum Studies and Public Administration from the University of Oklahoma. Stephens will begin her duties in August 2016.

*By Hampton Tucker*

### **NPS Helping Tribes and Museums Repatriate Native American Remains and Objects**

The NPS has announced over \$1.6 million in grants to Indian tribes and museums to assist in repatriation of human remains and cultural items to Indian tribes and Native Hawaiian organizations. The grants are provided to 14 Indian tribes and 14 museums for projects related to repatriation, including consultation and documentation of collections. The grants are administered by the NPS National Native American Graves Protection and Repatriation Act (NAGPRA) Program.

Enacted in 1990, NAGPRA requires museums and federal agencies to inventory and identify Native American human remains and cultural items in their collections, and to consult with Indian tribes

organizations regarding repatriation. Section 10 of the Act authorizes the Secretary of the Interior to award grants to assist in implementing provisions of the Act.

For more information, go to <https://www.nps.gov/nagpra/>.

*From story by Jeremy Barnum*

### **Wendy Davis Selected as Superintendent of Keweenaw National Historical Park**

Wyndeth (Wendy) Davis, a 27-year veteran of the NPS, has been selected as the Superintendent of Keweenaw NHP. She is currently the Associate Manager for Interpretive Planning at the NPS Harpers Ferry Design Center.

Davis is an award-winning Interpreter in the NPS, who has enhanced the field of interpretation for the Service. She has spent her NPS career building and maintaining unique partnerships to accomplish shared goals and create new ways of doing business. Davis graduated summa cum laude with a MS in Anthropology/Archaeology from the University of Oregon.



She begins the new assignment on September 4, 2016.

*By Alexandra Picavet*

### **Young People Join Effort to Identify Slave Ship *Guerrero* at Biscayne National Park**

July 18-23, 2016 divers of Youth Diving With a Purpose (YDWP) joined Biscayne NP to search for and identify the slave shipwreck *Guerrero*. The *Guerrero* wrecked near or on Key Largo reef in 1827 with 561 enslaved Africans on board. Suggestive remnants of an appropriately aged wreck have been identified on earlier dives.

Diving instructors include previous students of YDWP. Rachel Stewart trained with the Tennessee Aquatics Project (TAP), and joined YDWP four years ago. Julian Perez, who trained at the Harbor School in New York and has been with YDWP for four years, is also a DWP instructor. Joshua Harrison also trained with TAP. This will be his second year as an instructor. The three are interns with the NPS.

YDWP is made up of youth 15 to 23 years old. It was created in 2013 by the organization Diving With a Purpose to train young people to be underwater archeology advocates. To date, 48 young people have been trained in maritime archeology with YDWP. They are part of the investigation of the historic continuum of trade in human beings that funded the world's economy for centuries with implications that are still being considered today.

For more information about the project, go to the Diving With a Purpose Facebook page at <http://divingwithapurpose.org>

### **Join the IAD Celebrations this October!**

Summer means that International Archaeology Day (October 15, 2016) is getting closer and the 2016 list of Collaborating Organizations is getting longer! Are you on the list yet? Be sure to submit your event to be part of the action! Completing the event form will automatically add any organizations you include on the Sponsoring Institution/Organization line to the 2016 IAD Collaborating Organizations list. Not ready

to list your event? Fill out the [Collaborating Organization agreement form](#) to have your organization listed on the website now. You can add your event to the website later when you are ready.

### **3-D imagery of Native American Artifacts from Grand Teton National Park**



Staff at Grand Teton NP are working with Idaho State University (ISU) and various tribes to better document Native American artifacts from the park's David T. Vernon Collection and create digital 3-D visualizations. Laurance S. Rockefeller gifted the Vernon Collection, consisting of more than 1,400 Native American artifacts, to Grand Teton NP in 1972. ISU researchers Yolonda Youngs and Donna Delparte are working with NPS Museum Curator Bridgette Guild on the project, funded through the NPS National Center for Preservation Technology and Training.

Three-D exhibits are planned for the Craig Thomas Discovery and Visitor Center in the park. The displays of the objects – such as moccasins, saddle blankets, cradles or shirts – will allow visitors using electronic notebooks or tablets set up by displays to virtually zoom-in, rotate and closely examine them. The ISU researchers have taken hundreds of photos of these objects to create the visualizations.

The work will develop datasets to aid in creation of interpretive materials about objects, and training materials for park staff. The project will be finished by January 2017.

*From Idaho State Journal*

### **Final Regulations for Gathering Published**

The NPS has modified the regulation governing the gathering of plants in national parks to allow members of federally-recognized Indian tribes to gather and remove plants or plant parts for traditional purposes, and published the changes in the Federal Register on July 12, 2016. To be eligible under the rule, a tribe must have a traditional association to lands within the national park system and plants must be gathered only for traditional purposes. Agreements between tribes and the NPS will identify what plants may be gathered and in what quantities, and be subject to permits that identify the tribal members who may conduct these activities.

The rule retains the existing regulation that prohibits commercial uses of gathered materials. The final rule will require an Environmental Assessment and a finding of no significant impact for any agreement between a park and a tribe. Additionally, the rule will not abrogate, nullify, or diminish any rights to gather plants by any tribes that have gathering rights under treaty provisions, or through federal statute, or have a separate gathering agreement created under this rule.

The changes to the regulation take effect 30 days after July 12, 2016. After that time, tribes will be able to enter into agreements to conduct gathering activities.

Read the final rule at <https://www.gpo.gov/fdsys/pkg/FR-2016-07-12/pdf/2016-16434.pdf>

### **Ex-Superintendent of Effigy Mounds National Monument Sentenced for Stealing Human Remains**

Former NPS Superintendent of Effigy Mounds NM Thomas Munson was sentenced in federal court on July 8, 2016, for stealing the remains of more than 40 American Indians. As part of his plea agreement, he wrote a public acknowledgement expressing his guilt and apologized for his actions. During the sentencing hearing, Munson was ordered to serve 10 weekends in jail and a year of home confinement. He must also complete 100 hours of community service and pay \$108,905 in restitution and a \$3,000 fine.

On or about July 16, 1990, Munson removed the remains from the museum collection of Effigy Mounds NM and concealed them in his garage for more than two decades. Munson's intent was to circumvent the requirements of the soon to be enacted Native American Graves Protection and Repatriation Act (NAGPRA). Munson thought thwarting the law would allow the monument to keep the associated funerary objects in its museum collection.

Although subsequent park administrators were aware of the disappearance, they did little to recover the bones. In 1998, an investigation by an outside contractor failed to resolve the mystery. "There will eventually come a day when this story likely sees the light of day," current superintendent Jim Nepstad wrote in a memo, "and at that time the NPS will be confronted with the difficult task of defending itself against the shameful actions of some of its employees."

For years, Munson lied about the fate of the bones, saying that they might have been accidentally thrown away or taken to an archeological center. Only after a 2011 investigation did Munson finally return one box of bones. In 2012, another investigation uncovered a second box of bones in Munson's garage. Both boxes had suffered from improper storage.

*From story by Christina Beck, Christian Science Monitor*

### **FEDERAL NEWS**

#### **Congress Reauthorizes Army Corps of Engineers' Veterans Curation Program**

On July 7, 2016, President Obama signed the *Army Corps of Engineers Veterans Curation Training Act*, which became P.L. 114-189. Under this initiative, the Corps trains active duty and veteran armed forces personnel in curation and historic preservation techniques, in part through cataloguing the Corps' enormous number of archeological materials. The bill authorized a total of \$35 million for the program through 2020.

In 2009, the ACOE St. Louis District's Mandatory Center of Expertise for the Curation and Management of Archaeological Collections (MCX-CMAC) implemented the Veterans Curation Program (VCP) and opened labs in Augusta, Georgia, and St. Louis, Missouri. The third opened in 2010 in Washington, D.C. and relocated to Alexandria, Virginia, in 2011.

Since the inception of the program, 323 veterans have been trained and employed by the program. Training offered through the VCP includes database management, report writing, digital assets management, digitizing records, records management, photography and scanning, objects inventory and tracking, and objects and records processing.

The ACOE Mandatory Center of Expertise for the Curation and Management of Archaeological Collections received SAA's 2016 Award for Excellence in Curation, Collections Management, and Collections-based Research and Education.

At a reception at the Alexandria laboratory on July 19, 2016, Michael Trimble, ACOE Chief, Curation and Archives, announced two new laboratories, one devoted to archives in Suitland, Maryland, and one on the Colville Reservation in Washington State. Trimble also announced that data from the projects will be available on the Digital Archaeological Record (tDAR) website after August 2016.

*By David Lindsay, Society for American Archaeology, and Karen Mudar*

### **U.S. files Complaint to Recover Acoma War Shield**

The U.S. is seeking to recover an Acoma Pueblo war shield that came up for sale earlier this year in Paris. The EVE auction house withdrew the shield from sale after lobbying by the tribe and U.S. government officials, including Interior Secretary Sally Jewell. The pueblo claims the shield is part of its cultural patrimony, and was stolen in a home burglary in the 1970s and smuggled out of the country.



The AUSA for New Mexico filed a complaint for forfeiture, a civil action to condemn the shield to the benefit of the U.S. The sale of the shield, the complaint says, violates the Archaeological Resources Protection Act because it is over 100 years old and was removed from Native lands without permission. Unwritten laws prohibit removal of items of cultural patrimony from the Acoma Pueblo.

New Mexico Senator Martin Heinrich has introduced STOP, the Safeguard Tribal Objects of Patrimony Act, which would prohibit the export of items obtained in violation of federal laws, including NAGPRA, ARPA and the Antiquities Act. The bill would increase penalties from a maximum of 5 years to 10 years for violations of NAGPRA. Besides barring exports, the bill would establish a two-year amnesty period during which people could voluntarily return to the tribes cultural objects obtained illegally.

In the U.S., it is illegal to sell ceremonial Native American items illegally obtained. But in other countries, such as France, it is not. The proposed budget for the Interior Department sets aside \$1 million for a cultural items unit within BIA Law Enforcement Division. In March, Congressman Steve Pearce, New Mexico, introduced a resolution calling on the federal government to work with the tribes globally to halt the practice of selling sacred cultural items.

*By Anne Constable, The New Mexican*

### **Bureau of Land Management Partners with Amah Mutsun on Land Deal**

The BLM in May 2016 entered into an agreement with the Ohlone Amah Mutsun Tribal Band to share authority for management of native plants, wildlife and archeology in the Cotoni-Coast Dairies property on the western slopes of the Santa Cruz Mountains in California. Amah Mutsun tribe members hope that Congress or President Obama will issue a declaration to turn the 5,741-acre federal property into the Cotoni-Coast Dairies National Monument. The tract is just outside Davenport, and is located in the traditional territory of the Amah Mutsun.

The Amah Mutsun lack federal recognition and therefore have no claim on their ancestral land. Recently, however, they created a land trust that would allow the tribe to buy property or enter into management agreements. The land conversion process began in 1998, when the Trust for Public Land bought nearly

7,000 acres of property from the Coast Dairies and Land Company. California State Parks manages about 400 acres of the Coast Dairies property, which includes seven beaches just south of Davenport. The Trust for Public Land has also retained a few parcels of farmland in the interest of keeping agricultural uses open.

Under the agreement, the BLM will develop a management plan for the property. Federal land management officials say they will work with locals to figure out what recreational activities they would like to see—such as mountain biking, equestrian uses and hiking.

*From story by Jessica and Matthew Renda, San Jose Inside*



### **The Federal Archeologist's Bookshelf**

*Ancestors of Worthy Life: Plantation Slavery and Black Heritage at Mount Clare* by Teresa S. Moyer. University of Florida Press 2015

Abstract: Black history at historic plantations concerns more than slavery and freedom; it also tells the story of why blacks in the past are omitted at places with so much of their history to tell. Historic plantations exemplify the ways that racism changes and stays the same through the circumstances that enable black history to be revealed or hidden. Mount Clare in Baltimore, Maryland, offers a case study of how white history is told over the stories of black heritage. During Mount Clare's management by the National Society of the Colonial Dames of America in the State of Maryland, black history and slavery were ignored in favor of white ancestry and the material evidences of whites' ancestors' societal prominence.

In her balanced discussion, Moyer examines the inextricably entangled lives of the enslaved, free blacks, and white landowners. Ultimately she argues that the inclusion of enslaved persons in the history of these sites would honor these "ancestors of worthy life," make the social good of public history available, and address systemic racism in America.

**GRANTS AND TRAINING:** No training announcements were submitted to E-Gram staff.

### **SLIGHTLY OFF TOPIC: Solar Calendar in Wupatki National Monument**

Archeologists exploring remote mesas of northern Arizona have confirmed the presence of a prehistoric solar calendar which has been marking the seasons for more than 700 years with a striking "shadow dagger" that travels across its sandstone face.

Researchers made these finds in the backcountry of Wupatki NM, which includes the ruins of dozens of sites built by Ancestral Puebloans known as the Kayenta and the Sinagua. Experts with the Museum of Northern Arizona (MNA) and the NPS set out to explore the isolated reaches of the monument in 2014, in order to document the full extent of the rock art and other features that scientists had not studied in decades or, in many cases, had never seen before.



“As a result of the current project, the NPS now has a complete library of photographic images of every panel, every element, and every feature [in the study area]”, said MNA’s David Purcell, who supervised the study. Researchers used time-lapse, video, and panoramic photos to document the petroglyphs. The recordings also provide a baseline record in the event of vandalism, and a way to recover looted images.

More recent markings include graffiti made by American travelers in the late 1800s, and historic-era images of horses, barns, and cattle, sometimes with visible brands, scratched into the rock by Navajo inhabitants. But the study also turned up evidence of human occupation dating back farther than some researchers expected. A petroglyph of a desert bighorn sheep is rendered in the Glen Canyon Linear style, a sign of Late Archaic culture, which dates back as much as 4,000 years.

The majority of the petroglyphs documented by the team seem to be the work of the Kayenta, who lived in the Wupatki area from about 1150 to 1300 CE. Among the Kayenta petroglyphs was a cluster of geometric forms. It was originally recorded by archeologists surveying the area in 1931 and wasn’t suspected to have played a role in tracking the movement of the sun until the 1990s. New research confirms that it is an “imaging calendar” — a time-tracking feature that uses the play of light and shadow — to mark the winter solstice, as well as the spring and fall equinoxes.

While the area around it is crowded with a variety of images, the calendar consists of only two large motifs. First, on the left or north side of the panel, partially protected by a rock overhang, is a set of eight circles, each 3 to 4 inches across, arranged in rows of two, three, two, and one. To the right, under another small projection of rock, is a large spiral, which winds counterclockwise into a coil 10 lines deep.

The solar calendar consists of two elements, a spiral and a set of eight disks. Using video and time-lapse photography during the “solar milestones” that mark the start of each season, archeologists observed the appearance of what they call a “shadow dagger” that interacts with these two elements in a unique way on those days. On both equinox days, the calendar begins totally immersed in shadow, until exactly 12 noon local time, when sunlight first falls on the panel, striking the projection of rock above the spiral, and forming the triangular shadow. As the hours progress, the dagger — the only shadow that appears on the spiral that day — narrows and moves upward, its leading edge running through the precise center of the spiral.



The left edge of the “dagger” bisects the spiral at the same time that the shadow at left aligns with the group of circles. (Photo: D. Purcell/NPS )

At the same time, to the left, the clutch of eight circles is encroached upon by another shadow, cast by the outcrop overhead. This shadow falls precisely along the bottom right edge of the grouped circles — at the same moment that the dagger bisects the spiral. As time passes, the shadow moves up, covering some rows of circles in darkness, while leaving others in the light. “We think that somehow this provides a countdown to the equinox or a count from the equinox to some other important date, such as planting,” Purcell said.

Another unique interaction takes place on the equinox, at sunset. At that time, light passes through a natural crevice in the mesa opposite the panel, forming what the researchers call a “bar of light” that touches the *upper* left edge of the group of circles. And the day after the equinox, again at sunset, this bar completely covers the whole group of circles, and touches the edge of the spiral, before receding.

“Because this bar of light moves so much in one day — it does not even touch the panel on the day before the equinox — this may confirm the exact date of the equinox,” Purcell said.

A few other rock-art sites in Wupatki have been thought to be solar calendars, but none of them, so far, has demonstrated the complexity and specificity observed in this one. It shows that its creators had an intimate knowledge of the equinoxes and the solstices, and how the light of those days fell upon that particular site.

The day after the equinox, a bar of light appears to isolate the circles, before moving right to graze the spiral’s edge. By contrast, on the day before the equinox, this light bar does not touch the panel at all. Given that the panel was crafted by the Kayenta, it’s possible that the solar calendar is a local manifestation of the same knowledge that the Ancestral Puebloans used to craft solar calendars elsewhere.

“The ethnographic literature is clear that ‘sun priests’ or ‘sun watchers’ are a common and important role in historic Puebloan society, and the timing of ceremonies and dances requires careful observation of solar milestones,” Purcell said.



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The solar calendar has much in common with Chaco Canyon’s now-defunct calendar known as the Three Slab Site — where three sandstone panels placed on end created a dagger of sunlight that either bisected, framed, or grazed an etched spiral, depending on the season being marked.

In an effort to learn more about solar calendars and what it can tell us about the Kayenta, their ties to Chaco, and the prehistory of northern Arizona, Purcell and his colleagues are continuing to study the thousands of photographs, maps, and hand drawings that the team has produced. Among the questions they’d like to pursue: Why

does the solar calendar mark the advent of every season except summer?

“The shadow pointer does *not* mark the summer solstice, and the other interactions visible on that day are not completely convincing as solstice markers, so we believe that the people who made the solar calendar were probably not there to observe the summer solstice,” Purcell said. “Since the summer solstice really marks mid-summer, not the beginning of summer, in northern Arizona, the date with which they would have been concerned is the beginning of the monsoons, which averages July 4.”

The new insights this research has provided into the rock art of Wupatki adds to the evidence of just how complex the Ancestral Puebloans’ understanding was of the natural world.

*Photographs from this research appear in the exhibit “Images on Stone: Petroglyphs of Wupatki National Monument,” at the Museum of Northern Arizona in Flagstaff, Arizona March 26-September 5, 2016.*

*From story by Blake De Pastino, Western Digs*

**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 [www.nps.gov/archeology/public/news.htm](http://www.nps.gov/archeology/public/news.htm) on the NPS Archeology Program website.

**Contact:** Karen Mudar at [dca@nps.gov](mailto:dca@nps.gov) to contribute news items and to subscribe.