



# Archeology Program

National Park Service  
U.S. Department of the Interior



## December 2017 Archeology E-Gram

### NPS NEWS

#### **Brenda Todd Selected as Superintendent of Knife River Indian Villages National Historic Site**

Brenda Todd will be the next superintendent of Knife River Indian Villages NHS in Stanton, North Dakota. Todd is a 10-year veteran of the NPS and is currently the Program Manager at the Public Lands History Center at Colorado State University. She holds a Ph.D. in anthropology with a specialization in archeology from the University of Colorado, Boulder. She has worked with tribes and agencies throughout the country and conducted fieldwork in the Southwest and Midwest.



Her tenure with the NPS began in the Office of Indian Affairs and American Culture in the Intermountain Regional Office. She served as a Cultural Resource Specialist and later became a Project Manager with the Denver Service Center Planning Division. While at the center, Todd worked with over 30 parks on management challenges and oversaw the development of the Knife River Indian Villages NHS Draft Archeological Resources Management Plan.

Her new assignment will begin February 4, 2018.

*by Alexandra Picavet*

#### **Trail of Tears National Historic Trail Celebrates 30 Years of Partnerships**

The Trail of Tears NHT marked its 30th anniversary in December 2017. President Ronald Reagan signed the law designating the trail on December 16, 1987. Portions of the Trail pass through or adjacent to eight NPS units, several National Forests, and a number of state and county parks. Dozens of private landowners also share their piece of this tragic story by opening their properties to the public.

In 1830, Congress passed the Indian Removal Act, compelling the removal of southeastern Native American tribes to places west of the Mississippi River. Ignoring an 1832 Supreme Court decision ruling the Cherokee had sovereign rights to their lands, President Andrew Jackson forced removal of American Indian tribes. From early 1838 through late 1839, thousands of Cherokees and other indigenous people were marched or ferried west over 5,000 miles of roads, trails, and rivers.

The non-profit Trail of Tears Association (TOTA) formed in 1993 to protect and preserve of trail resources and to promote awareness of the Trail's legacy. Since 1996, over 70 partnerships have been established to preserve and interpret key sites along the Trail of Tears NHT.

For more information about the history of the Trail of Tears, go to [nps.gov/trte](http://nps.gov/trte) or [www.nationaltota.com](http://www.nationaltota.com).

*From story by Jeffrey Denny*

### GRANTS AND TRAINING

#### **National Park Service Accepting Proposals for the Save America's Treasures Grant Program**

The NPS in partnership with the Institute of Museum and Library Services, the National Endowment for the Arts, and the National Endowment for the Humanities is now accepting applications for \$5 million in matching grants to support the preservation of nationally significant historic properties and collections

through the Save America's Treasures program. The Save America's Treasures program was established by in 1998. In 2014, the American Architectural Foundation (AAF) became the official nonprofit partner of the Save America's Treasures program.

The program requires applicants to raise project funds from other sources to "match" the grant money, which is awarded after a competitive review of project proposals. Grantees must provide dollar-for-dollar match, meaning for each federal dollar put towards the project, at least one non-federal dollar must also be used. Buildings and collections which have previously received Saving America's Treasures grants are not eligible to receive a second grant for the same building or collection.

Save America's Treasures has assisted more than 300 National Historic Landmarks (NHL), 28 properties contributing to NHL historic districts, over 250 buildings individually listed in the National Register of Historic Places, over 70 properties contributing to National Register historic districts, as well as hundreds of nationally-significant collections in museums across the country.

The Save America's Treasures program is funded using revenue from Outer Continental Shelf oil releases, not tax dollars. The program began in 1999 and has leveraged over \$315 million in federal appropriations to attract \$377 million in private investment to help communities preserve nationally significant properties and collections across the country, creating more than 16,000 jobs along the way.

Eligible projects include the conservation of collections and physical preservation work to historic buildings. All projects must be nationally significant; meaning listed as National Historic Landmarks or at the national level of significance in the National Register of Historic Places, or a case made for a collection's national significance.

The deadline for applications is February 21, 2018 (11:59 p.m., EST). More information, including grant application materials, is available on the grant program website at <https://go.nps.gov/sat>

### **National Park Service 2018 Archaeological Propection Workshop**

The National Park Service's 2018 workshop on archaeological propection techniques, *Current Archeological Propection Advances for Non-destructive Investigations of the Marksville Prehistoric Indian Site (16AV1), Louisiana*, will be held May 21--15, 2018, at the Marksville State Historic Site in Avoyelies Parish, Louisiana. The site is the type site for the Marksville Culture, a local variant of the Hopewell Tradition. The site contains numerous earthworks built by the indigenous prehistoric people of the southeastern North America.

This will be the twenty-eighth year of the workshop dedicated to the use of geophysical, aerial photography, and other remote sensing methods as they apply to the identification, evaluation, conservation, and protection of archaeological resources across this Nation. The workshop will present lectures on the theory of operation, methodology, processing, and interpretation with on-hands use of the equipment in the field.

Lodging will be at the Paragon Casino Resort in Marksville, Louisiana. The lectures will be at a meeting room in the Paragon Casino Resort. The field exercises will take place at the Marksville Prehistoric Indian Site at the Marksville Sate Historic Site.

Co-sponsors for the workshop include the NPS Midwest Archeological Center and the National Center for Preservation Technology and Training, as well as the Marksville State Historic Site and the Office of

Cultural Development, Division of Archaeology of the Louisiana State Historic Preservation Office. There is a registration charge of \$475.00.

Application forms are available on the Midwest Archeological Center's web page at <http://www.nps.gov/mwac/>. Payment will be made by credit card through the Friends of NCPTT at <https://www.ncptt.nps.gov/training-conference-events/>.

For further information, please contact Steven L. DeVore, Archeologist, NPS, Midwest Archeological Center, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, Nebraska 68508-3873: tel: (402) 437-5392, ext. 141; fax: (402) 437-5098; email: [steve\\_de\\_vore@nps.gov](mailto:steve_de_vore@nps.gov).

### **National Park Service Park NAGPRA Program Offers Recorded Webinars**

During FY 2017 the NPS Park NAGPRA program conducted the following webinars as part of the 2017 Park NAGPRA Training Series:

- *Disposition of Unclaimed Cultural Items* April 26, 2017
- *Plans of Action & Comprehensive Agreements* May 24, 2017
- *Inadvertent Discoveries/Intentional Excavations* June 28, 2017
- *NAGPRA in the Parks*
  - Day One – Overview, Basics, Definitions, Collections Aug 7, 2017
  - Day Two – Collections, Intentional Excavations/ Inadvertent Discoveries (Section 3) Aug 8, 2017
  - Day Three – Section 3, Consultation, Claims, Transfer of Control/Custody, Reburial Aug 9, 2017

The first three webinars -- *Disposition of Unclaimed Cultural Items*, *Plans of Action & Comprehensive Agreements*, and *Inadvertent Discoveries/Intentional Excavations* -- are now available for viewing in the Training Opportunities section of the NAGPRA page of Inside NPS. The three *NAGPRA in the Parks* videos will be uploaded as soon as captioning is completed.

Also available is *The "WHY" of NAGPRA*, a presentation by Dr. Joe Watkins which took place during the August 2015 *NAGPRA in the Parks* webinar.

### **SLIGHTLY OFF TOPIC: Archeologist Challenging Idea that Prehistoric People in the Southwest Relied on Corn**

University of Cincinnati archeology professor Alan Sullivan is challenging the idea that prehistoric villagers planted corn to survive the dry and hostile conditions of the American Southwest. He argues instead that people routinely burned the understory of forests to grow wild crops 1,000 years ago. "There has been this orthodoxy about the importance of corn," said Sullivan. "It's been widely considered that prehistoric peoples of Arizona between A.D. 900 to 1200 were dependent on it. But if corn is lurking out there in the Grand Canyon, it's hiding successfully because we've looked and haven't found it."

Sullivan has spent more than two decades leading archeological field research to Grand Canyon NP and Kaibab NF, and published papers outlining the scarce evidence of corn agriculture at more than 2,000 sites. The Upper Basin, where Sullivan and his students work, is home to mature forests of juniper and pinyon trees. On these high-elevation plateaus, Sullivan and his students have unearthed ceramic jugs adorned with corrugated patterns and other evidence of prehistoric life. Sullivan is particularly interested in the cultural and social practices of growing, sharing and eating particular types of food.

"What would constitute evidence of a corn-based foodway?" he asks. Like a detective, Sullivan has pieced together clues from scientific analysis to make an argument that people used fire to promote the growth of edible plants such as amaranth and chenopodium, wild relatives of quinoa. These plants are "ruderals," the first to grow in a forest disturbed by fire or clear-cutting.

Lab analysis identified ancient pollen from dirt inside clay pots that were used 1,000 years ago. "They've identified 6,000 or 7,000 pollen grains and only six [grains] were corn. Everything else is dominated by these ruderals," Sullivan said. And, the corn itself looked nothing like hearty ears of sweet corn people. The ears were puny, about one-third the size of a typical cob, with tiny, hard kernels.

So if prehistoric people were not growing corn, what were they eating? Sullivan found clues around sites that people set fires big enough to burn away the understory of grasses and weeds but small enough not to harm the pinyon and juniper trees, important sources of calorie-rich nuts and berries. Evidence for this theory was found in ancient trees. Raging wildfires leave burn scars in growth rings of surviving trees. In the absence of frequent small fires, forests would accumulate vast amounts of underbrush and fallen timber to create conditions ripe for an inferno sparked by a lightning strike. But examinations of ancient juniper and ponderosa pine trees found no burn scars, suggesting big fires are a relatively new phenomenon in Arizona.

This year, Sullivan found contemporary evidence supporting his theory that prehistoric people generated a spring bounty by setting fires. Sullivan returned to the Grand Canyon last spring to examine forest destroyed by the Scott Fire, a massive 2016 fire that laid waste to 2,660 acres of pines, junipers and sagebrush. Despite the intensity of the forest fire, Sullivan found edible plants growing thick everywhere underfoot just months later.

"This burned area was covered in ruderals. Just covered," he said. "That to us was confirmation of our theory. Our argument is there's this dormant seed bed that is activated by any kind of fire." NPS archeologists have found evidence that corn grew below the rim of the Grand Canyon, said Ellen Brennan, NPS cultural resource program manager for the park.

"It appears that the ancient people of the Grand Canyon never pursued corn agriculture to the extent that other ancestral Puebloan peoples did in other parts of the Southwest," Brennan said. "In the Grand Canyon, it appears that there continued to be persistent use of native plants as a primary food source rather than corn."

The first assumptions about what daily life was like in the Southwest 1,000 years ago came from ethnographic observations of Native Americans such as the Hopi, said Neil Weintraub, archeologist for Kaibab NF. He worked alongside Sullivan at some of the sites in the Upper Basin. "Corn is still a big part of the Hopi culture. A lot of dances they do are about water and the fertility of corn," he said. "The Hopi are seen as the descending groups of Puebloan." While Native peoples elsewhere in the Southwest no doubt relied on corn, Weintraub said, Sullivan's work has convinced him that residents of the Upper Basin relied on wild food—and used fire to cultivate it.

Weintraub recently studied the forest burned in the Scott Fire. The exposed ground was thick with new undergrowth, particularly a wild relative of quinoa called goosefoot, he said. "Goosefoot has a minty smell to it, especially in the fall. We actually started chewing on it. It was pretty pleasant,"

Fire also seems to increase the diversity of forest species. Vegetation surveys find less biodiversity in forests today than he found in his archeological samples. Today, federal land managers conduct controlled burns when practical to address this problem, even in national parks such as the Grand Canyon.

The National Park Service often lets fires burn in natural areas when they do not threaten people or property. But increasingly people are building homes and businesses adjacent to or within forests. Forest managers are reluctant to conduct controlled burning so close to population, Sullivan said. "The fire management program for Grand Canyon NP seeks to reintroduce fire as a natural agent of the environment," Brennan said. "That is to reduce ground fuels through prescribed fire, mechanical thinning, and wildland fire."

Scientists also are studying how to adjust forest management techniques in the face of climate change, she said. "Program managers are working to understand how climate change affects forest management and how to restore forests to the point where fire can follow a more natural return interval given a particular forest type," she said.

*From story by Michael Miller, Phys Org*

Read more at: <https://phys.org/news/2017-11-archaeologist-idea-prehistoric-people-southwest.html#jCp>

*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.

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