



Archeology Program

National Park Service
U.S. Department of the Interior



April 2016 Archeology E-Gram

NPS NEWS

Archeology Highlighted at NPS National Capital Region Conference

Cultural and natural resource specialists gathered on April 21, 2016, to report on research activities in the NPS National Capital Region. Researchers gave presentations and posters on topics ranging from woodland bees (doing surprisingly well!), to deer populations and invasive plant species (doing too well!), to subsistence fishing in the Potomac River. Discussion during sessions was limited, but lively conversations took place during breaks, the poster session, and an evening event.

Archeological contributions included a presentation on research by regional archeologist Stephen Potter, that is changing the way the battle of Antietam is interpreted; a sobering talk by regional curator Bob Sonderman, who listed the potential impacts on collections from climate change, and advocated for regional centralization of holdings; Matt Virta spoke about two NHPA projects, commemorating the 50th anniversary of the passage of the Act. Here's a listing of the cultural resource presentations:

- Jean Brennan - *Integrating Cultural Resource Preservation Priorities at a Landscape Scale: Introduction to the NPS and Appalachian LCC Collaborative Research Program*
- Kirsten Crase - *Movement and Gathering Across Time: A Preliminary Report on the Potomac River Gorge Environmental History and Historic Resource Study Project*
- Elaine Eff - *Gone but not Forgotten: Storer College*
- Shirley Fiske - *Subsistence Fishing, Ethnographic Resource Study*
- Stephen Potter - *Bullets, Shrapnel, Case, and Canister: Archeology and GIS at the Piper Farm*
- Matthew Virta - *NHPA Section 106 Archeology Contributions: Successes (and Shortcomings) in Unexpected Situations at Two Historic Sites of the George Washington Memorial Parkway*
- Kathryn Smith - *Proximity to Power: How the Preservation of Lafayette Square Paved the Way for the National Historic Preservation Act of 1966*
- Bob Sonderman - *Our Collections at Risk: Climate Change Threats to NCR Museum Property*

By Karen Mudar

Archeologists Locate Graves at Fort Larned National Historic Site

Archeologist Stephen De Vore, NPS Midwest Archeology Center coordinated a crew from April 4-15 that surveyed 16 acres at Fort Larned NHS using geophysical surveying methods. De Vore was assisted by archeological technicians Allan Wolfrum and Clare Connelly, volunteers, and two inmates from the Kansas Department of Corrections.

Beginning in 1859, thousands of soldiers were stationed Fort Larned to preserve peace among Santa Fe Trail travelers and Native Americans. Historical accounts indicate that deceased civilians and military personnel, perhaps as many as 100, were buried near the fort.



Allan Wolfrum and Clare Connelly employ ground penetrating radar at Fort Larned NHS

DeVore's investigations also provide clues about buried archeological features, such as stone outhouse foundations. Although the existing sandstone buildings represent a nearly complete frontier military post, some buildings were constructed of wood or adobe and were torn down or allowed to decay.

"We got a good indication of where the stables were located," De Vore said. "There were 100 stalls and a cavalry unit that escorted the mail delivery."

From story by Jim Misunas, Great Bend Tribune

Arkansas Post National Memorial Partners with Arkansas Archeological Survey for Study



Volunteers Jamal Harvey, Gabrielle Clemons, and Rusty Eisenhower excavating at Osotouy Unit.

Investigations at the Osotouy Unit of Arkansas Post NM are part of an ongoing partnership between the University of Arkansas at Pine Bluff, Arkansas Archeological Survey and the NPS Midwest Archeological Center (MWAC). The Osotouy Unit, located 6 miles from the main unit, is associated with the Quapaw village of Osotouy occupied in the late 1600s. The French Arkansas Post was in the immediate vicinity from 1686 to 1749. Prehistoric mounds and Native American occupations are present within the Osotouy Unit.

The current work is focused on excavating locations identified during 2014 geophysical mapping. MWAC and Arkansas Archeological Survey staff carried out the excavations with help from 10 local volunteers and a representative of the Quapaw Tribe of Oklahoma. They identified a number of features containing Native American pottery and bones of deer and other animals that were part of prehistoric Native American diet. These results provide a more comprehensive picture of the archeological deposits at Osotouy than was available before.

University of Arkansas at Pine Bluff archeologist John House will be participating in the analysis cultural specimens from these excavations. Further field work at Osotouy is scheduled for the coming October.

University of Arkansas at Pine Bluff

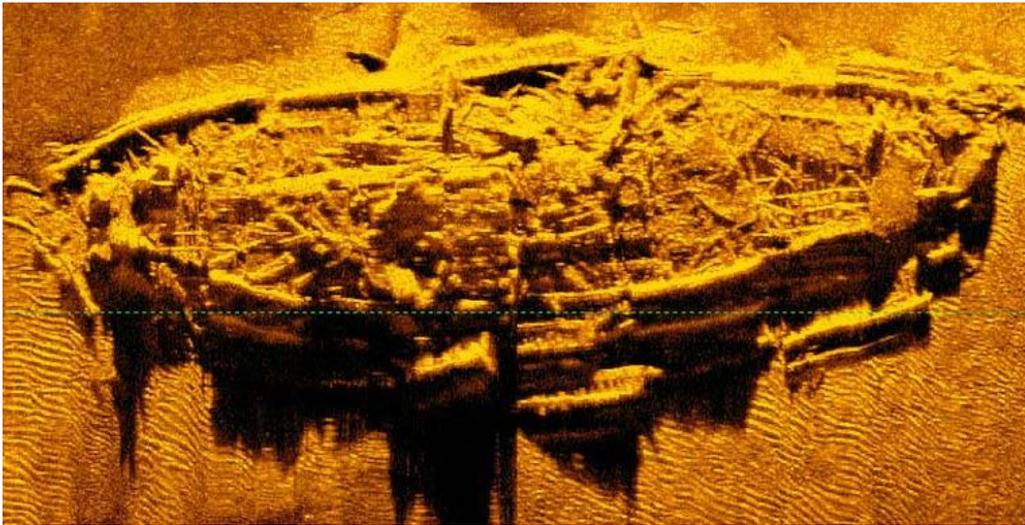
NPS Awards \$2.58 Million for Maritime Heritage Education and Preservation Projects

The NPS and US Maritime Administration (MARAD) have awarded \$2.58 million in Maritime Heritage Program grants for projects in 19 states that preserve sites and objects related to our nation's maritime history. The grants are made possible through a partnership between the two federal agencies that share a commitment to maritime heritage preservation and education. In accordance with the National Maritime Heritage Act of 1994, funding is provided by MARAD through the recycling of vessels from the National Defense Reserve Fleet. The grant program supports a broad range of maritime education and preservation projects, without expending tax dollars, while ensuring that the vessels are dismantled in an environmentally sound manner.

Grants for archeological activities include \$50,000 to St Augustine Lighthouse and Museum for Construction of an Archaeological Research and Education Center and \$144,569 to North Carolina

Department of Cultural Resources for Queen Anne's Revenge: Development of Large Artifact Conservation Wet Lab.

Maritime Heritage Program grants are available to state, tribal, and local governments; and private non-profit organizations for education and preservation projects. Education projects are funded in amounts between \$15,000-\$50,000; preservation projects are funded in amounts between \$50,000-\$200,000. Education grants can be used for school curriculum, interpretive programs and web pages and other purposes, and preservation grants include rehabilitation or restoration of ships and other maritime resources, including archeological resources.



NPS American Battlefield Protection Program Grantee Discovers Confederate Shipwreck

A possible Confederate blockade runner has been discovered off the North Carolina coast. Archeologists used sonar imaging to discover the 226-foot-long remains near Oak Island where historical documents indicate three runners used during the blockade of the port of Wilmington, the *Agnes E. Fry*, *Spunkie*, and *Georgianna McCaw*, are located. Wrecks of 27 blockade runners, Confederate ironclads and Union ships used in the blockade have been found in the area.

The Union blockade of the port of Wilmington began in 1861 and ended in January 1865, when Union troops overtook Fort Fisher. Blockade runners were the cigarette boats of their era, moving fast to avoid the Union ships. Military supplies were put on trains to Weldon, North Carolina, and then on to Lee's Army of Northern Virginia. Civilian supplies, mostly items that the Confederacy couldn't make, such as wine and liquor, fabric, books and shoes, were sold dockside.

The Underwater Branch of the North Carolina Office of State Archaeology and the Institute of International Maritime Research discovered the shipwreck with the help of a grant from the NPS American Battlefield Protection Program through the North Carolina Department of Cultural Resources. Billy Ray Morris, North Carolina Deputy State Underwater Archeologist and a team of divers will return to the site, about 30 miles downstream near Fort Caswell to confirm their finding.

From story by Martha Waggoner, Associated Press

Archeology National Historic Landmark Nomination

The National Historic Landmarks Committee of the National Park System Advisory Board will meet on May 9-10, 2016, at the Charles Sumner School Museum and Archives, located at 1201 17th Street NW, Washington, DC 20036. At this meeting, the Kimball Village Site will be proposed for recognition as a National Historic Landmark.

The Kimball Village site (13PM4) is an exceptionally well-preserved, late precontact Plains Village site of the Big Sioux phase of the Middle Missouri tradition. The site was occupied circa CE 1100-1250. Located on a natural terrace of the Big Sioux River near Iowa's Loess Hills, Kimball Village is marked by a mound rising over a meter above the modern floodplain surface. Site deposits are over two meters deep and include remnants of rectangular lodges aligned in rows, associated storage pits and hearths, traces of a possible defensive palisade and ditch, intact and dense stratigraphic layers, and an exceptionally large and rich artifact assemblage that indicates the Kimball Village inhabitants were strategic players in a vast transcontinental interaction and exchange network.

For more information, go to <https://www.nps.gov/nhl/news/spring2016mtg.html>

Navajos Win Court Ruling over Human Remains from Canyon de Shelly National Monument

The 9th U.S. Circuit Court of Appeals has restored a lawsuit to have human remains taken from Canyon de Chelly NM on the Navajo Reservation and held by the NPS returned to the tribe and overturned a lower court ruling that dismissed the lawsuit on the grounds that it was premature.

Archeologists removed human remains and funerary objects from Canyon de Chelly NM decades ago and the Navajo Nation wants the NPS to return the items immediately. The tribe said it never allowed the agency to remove remains or cultural objects because that would have contradicted traditional Navajo laws and violated the rights of tribal members. The NPS has said it will return the human remains, but it first must determine which tribe or tribes are their rightful owners. In a 2-1 decision, the 9th Circuit said the NPS's argument was flawed because the Navajo Nation's treaty that gave it exclusive use and occupation of Canyon de Chelly also gave possession of the human remains, not the inventory process. The NPS did not comment on the ruling.

Delegate Holmes Norton Introduces Bill to Designate Washington DC National Park

On April 12, 2016, Delegate Eleanor Holmes Norton introduced to Congress H.R. 4915 to designate the Civil War Defenses of Washington National Historical Park. It will be comprised of certain National Park System lands and, by affiliation and cooperative agreements, other historically significant resources located in the District of Columbia, Virginia, and Maryland, which were part of the Civil War defenses of Washington and related to the Shenandoah Valley Campaign of 1864.

Teaching With Our National Parks

To honor our national parks system this 2016 Centennial, the NPS Teaching with Historic Places program has launched a collection of lesson plans that feature historic places administered by the NPS. These lessons are free and ready for immediate use. The award-winning lesson plan series features many private and state historic sites, including archeological sites, listed on the National Register of Historic Places, but the NPS system oversees thousands of historic places that can be used to teach history, social studies, geography, STEM subjects, and more. Discover some of these with our new resource and bring the parks to your students this year.

To access these lesson plans, go to <https://www.nps.gov/subjects/teachingwithhistoricplaces/teaching-with-parks.htm>

FEDERAL NEWS

Burnt Corn Pueblo Site Gets Federal Protection from Bureau of Land Management

The BLM will use \$1.5 million from the Land and Water Conservation Fund (LWCF) to buy the Burnt Corn Pueblo archeological site, announced New Mexico Senators Tom Udall and Martin Heinrich, and Representative Ben Ray Lujan. The purchase, reached with help from the Trust for Public Land and the state's congressional delegation, will help protect the pueblo and open up access to more than 2,000 acres of public land.

Burnt Corn Pueblo contains nine structures but was inhabited for only a short time between 1290 and 1302 and was burned around 1310. Archeologist James Snead determined that the people abandoned their homes because of widespread conflict.

When landowner Buck Dant bought the property that included half the Burnt Corn ruin in 1998, he learned of damage from pot hunters and vandals and authorized research to quantify the damage and put a conservation easement on the land. He worked with the BLM, which owns adjoining property, to protect the site. Dant declined to discuss the sale.

The LWCF is funded by a portion of federal offshore drilling fees. Although \$900 million is deposited in its account annually, billions of dollars have been diverted to other uses. Udall said that he intends to “keep fighting for full, permanent funding” for the fund.

The state Galisteo Basin Archaeological Sites Protection Act authorizes the public acquisition of land within the boundaries by donation or purchase. Burnt Corn Pueblo is one of 29 national significant archeological sites in the Galisteo Basin. The Galisteo Basin Preserve, a land conservation and community development project of the Commonweal Conservancy, eventually will include 50 miles of hiking, biking and equestrian trails.



Archeologist James Snead has been excavating at Burnt Corn Pueblo for eight years.

From story by Anne Constable, The New Mexican

Fire Exposes Large Prehistoric Site in BLM Hi-Line District, Montana

A prescribed fire in the BLM Hi-Line District has uncovered thousands of newly recorded cultural features the agency has discovered on 300 acres of rolling prairie in northeastern Montana. A drone took photos of thousands of cultural features and triangulated the locations. BLM researchers pieced the individual features together and create 3D models of a much larger archeological landscape than previously believed. All told, 2,400 unknown features were recorded on 300 acres, or one feature per 3 to 5 feet of ground. The area includes vision quest sites, tipi rings, bison drive lines and depictions of people and animals. The diversity and density of the cultural features, all in one large connected landscape, makes the location stand out from other prehistoric archeology sites, according to Josh Chase, BLM Hi-line archeologist.

This year, another 300 acres were burned, revealing additional features, including what appear to be four human effigies. New drive lines discovered in the recent work suggests there are additional six bison jumps in the area. Carbon dating conducted on bison bones from nearby processing sites dates the site to 800- 1,000 BP.

Use of the prescribed fire and drones represents a shift in archeology away from invasive techniques at sensitive sites. Chase proposed additional analysis in 2010 and consulted with tribes in Montana, Wyoming and the Dakotas and the Montana State Historic Preservation Office.



BLM archeologist John Chase describes prehistoric vision quest structure uncovered by fire.

The site is entirely on public land but inaccessible because it's surrounded by private land used for ranching. The owners of that land are a big factor in the preservation of the site because they share an appreciation for the area's history. The agency wants to one day make the site accessible to the public after the culture features are properly interpreted.

From story by Karl Puckett, Great Falls Tribune

The CSS Gorgia Project Digital Archive

The Museum of Underwater Archaeology (MUA) has announced the creation of the CSS Georgia Project Digital Archive. Scuttled in 1864 in the Savannah River the Civil War vessel has been the subject of archeological and archival research since 1979. In partnership with USACE and site investigators, the MUA has created a digital archive to house videos, newspaper articles, reports, photographs, and presentations detailing research and outreach efforts by the organizations involved in the project.

This is an ongoing effort that will expand as new materials are created. In addition, the MUA will use this collection to create an online CSS Georgia Project museum exhibit.

You can view the collection by clicking on the link on the MUA home page at <http://www.themua.org>

BLM Awards \$50,000 to Museums of West Colorado

The BLM is assisting the Museums of West Colorado (MWC) with a \$50,000 grant to improve the way the museums store, preserve, catalog and curate collections. The MWC includes four museum facilities—Cross Orchards Historic Site, Dinosaur Journey Museum, Museum of the West, and the Whitman Educational Center. The collections have grown to 30,000 archeological items and 20,000 paleontological specimens. Executive Director Peter Booth, said the grant will be used for new shelving and security cameras, and database improvements.

The MWC is only one of two accredited museums on the western slope and one of 13 in the state, accredited by the American Alliance of Museums. The MWC is one of the few institutions designed as a federal Repository for BLM anthropological and paleontological resources in Colorado.

Artifacts Road Show returns to BLM Office, Billings, Montana

The BLM Billings Curation Center (BCC) hosted the 5th annual Artifact Road Show on April 14, 2016, during Montana Archaeology Month. More than 100 people brought in artifacts to be examined by regional experts including archeologists, historians, paleontologists and geologists.

The BCC is the main repository for artifacts recovered from activities on BLM-administered public lands in Montana, North Dakota and South Dakota. The collections are made available to professional researchers, archeologists, students and those interested in learning about the past in the local region.

From Billings Gazette



Bears Ears buttes are located in southeast Utah. (Photo by J. Brew, courtesy of Flickr).

Utah Governor Calls Special Session to Denounce Bears Ears Proposal

Utah Governor Gary Herbert called for a May 18 special session of the state's Legislature to pass a resolution opposing President Obama's use of the Antiquities Act to designate a 1.9 million acre national monument in southeast Utah known as Bears Ears. While such a resolution should easily pass, it won't have any legal force.

Herbert and the Utah congressional delegation oppose Obama protecting the area under the Act, arguing it would give local residents little say in how the lands are managed. House Natural Resources Chairman Rob Bishop (Utah) and Representative Jason Chaffetz (Utah) are pushing legislation that would designate a 1.1-million-acre Bears Ears National Conservation Area, a proposal Chaffetz in February described as a "middle ground" between what the county and environmentalists want. The lands eyed for protection at Bears Ears are federally owned and managed primarily by the BLM.

Herbert's announcement came one day after Interior Secretary Sally Jewell said in a speech in Washington, D.C., that she will visit Utah, where there are "a range of conservation proposals -- legislative and otherwise" -- to protect public lands. For some American Indians and conservationists, that was code for Bears Ears, a region in San Juan County bordering Navajo Nation.

Jewell called the Antiquities Act "one of the most important tools a president has to improve our country...I do not think the act should only be used in places where there is complete agreement, as some are suggesting," she said. The Bears Ears Inter-Tribal Coalition, a partnership of the Hopi, Navajo, Uintah

and Ouray Ute, Ute Mountain Ute and Zuni governments pushing for the monument, said it was encouraged by Jewell's decision to visit Utah. The proposal carries the support of several tribal governments including the Navajo Nation and Ute Mountain Ute. The National Congress of American Indians endorsed it last September.

The Committee also launched a probe to document funds federal government spends on art and archeology. A letter dated March 21, addressed to 25 different agency leaders, asked agencies to identify every artwork they possess, "including, but not limited to, paintings, mural and easel, photographs, prints, sculptures, *artifacts*, electronic-based artworks, textiles, ceramics, and stained glass." The letter seeks information on how much each agency and department has spent on artworks and *artifacts*, insurance premiums, contracts, and other related purchases since 2006. The inquiry further seeks details about the number of employees involved in managing and preserving these collections.

From story by Phil Taylor, E&E reporter, with contributions by Corbin Hiar; story by Krison Capps, The Atlantic; and Ian Smith, FedSmith Blogs

Bureau of Land Management Utah seeks nominations to Resource Advisory Council

The Utah BLM is seeking public nominations for four positions on its Resource Advisory Council, a 15-member panel that provides advice and recommendations to the BLM on land-use planning and management. Council positions open are in the following categories:

- **Category One** – Public land ranchers, representatives of energy and mineral development-associated organizations, the timber industry, transportation, off-highway vehicle use and commercial recreation.
- **Category Two** – Representatives of national or regional environmental organizations, archeological and historical organizations, dispersed recreation activities and wild horse and burro organizations.
- **Category Three** – Representatives of state, county or local elected office; representatives and employees of a state agency responsible for management of natural resources; representatives of Indian Tribes with or adjacent to the area for which the Resource Advisory Council is organized; representatives and employees of academic institutions involved in natural sciences; and the public.

Nominees must be residents of the state or states where the Council has jurisdiction and will be judged on the basis of training, education and knowledge of the council's geographical area. Nominees should also demonstrate a commitment to consensus building and collaborative decision making.

Application forms and more information on the Resource Advisory Council are available online at the BLM Resource Advisory Council [homepage](#). Nominations should be e-mailed to Lola Bird or postmarked by May 2, 2016.

Contact: Lola Bird at [801-539-4033](tel:801-539-4033); fax: 801-539-4013; email address: lbird@blm.gov.

GRANTS AND TRAINING

NPS Park NAGPRA Program Offers Training

The Park NAGPRA program is offering NAGPRA IN THE PARKS in Washington, DC, on June 8, 2016. The training will provide an overview of NAGPRA and prepare participants to respond to inadvertent discoveries and plan for intentional excavations as prescribed by the law. Topics include, but are not limited to – History/background, NAGPRA basics, collections (inventories and summaries), Section 3 (intentional excavations and inadvertent discoveries), culturally unidentifiable and unclaimed, tribal consultation, evaluating repatriation requests (claims), and reburial on park lands.

Course objectives: By the end of this course participants will: • Describe when NAGPRA applies and when it does not. • Distinguish among the five categories of cultural items covered by NAGPRA. • Describe the process for dealing with inadvertent discoveries and intentional excavations. • Describe the process for dealing with cultural items subject to NAGPRA in collections. • Describe the process of evaluating repatriation requests and determining cultural affiliation or custody of cultural objects subject to NAGPRA. • Describe when consultation is required and why. • Identify who to contact when NAGPRA assistance is required.

Registration is through DOI Learn. Search for “NAGPRA in the Parks” and select the June 8, 2016, class. All registrants will be added to a wait list before enrollment is completed. Park superintendents, resource managers, archeologists, curators, and other staff with NAGPRA duties are invited to attend.

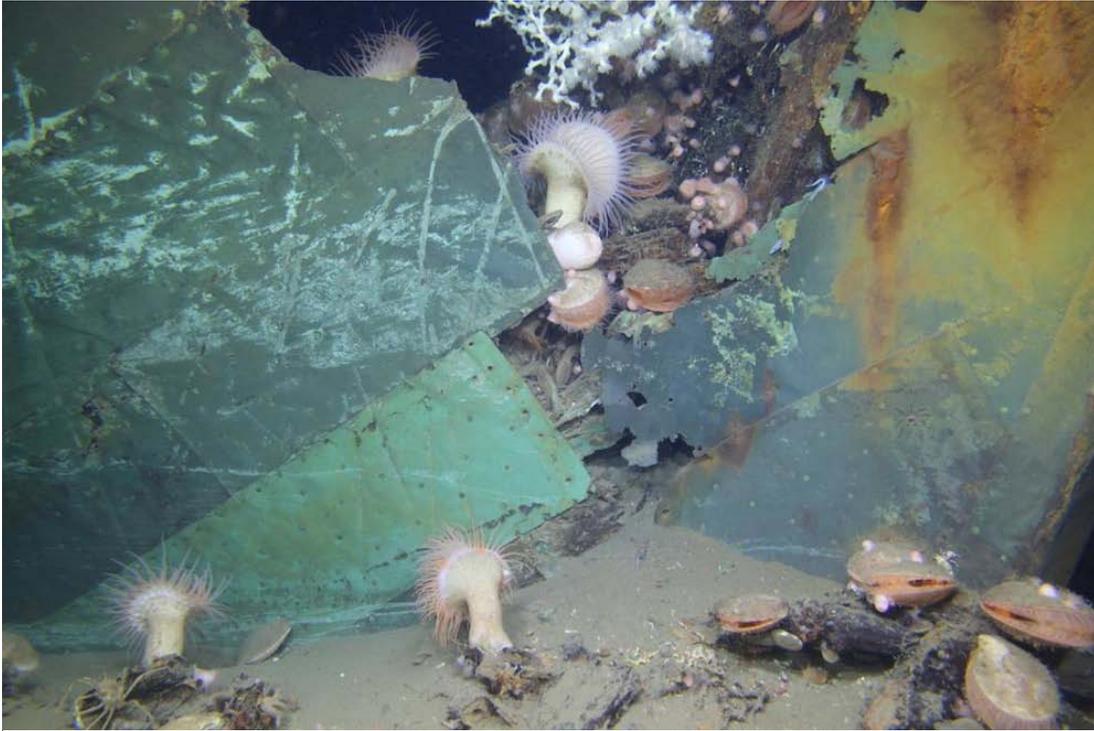
SLIGHTLY OFF TOPIC: Oil-Eating Microbes Threaten Shipwrecks and Ocean Life

The microbes that once thrived around deep-sea shipwrecks in the Gulf of Mexico have transformed significantly after the Deepwater Horizon oil spill in 2010, according to a new study. These dramatic changes to the microorganisms that live on and near historically significant vessels could wreak havoc on the vessels and ocean life itself, researchers say. There are more than 2,000 known shipwrecks on the ocean floor in the Gulf of Mexico, spanning more than 500 years of history, from the time of Spanish explorers to the Civil War and through World War II.

"The first time I saw a chart showing the abundance of shipwrecks along our coasts, my jaw dropped," said Jennifer Salerno, a marine microbial ecologist at George Mason University. "You can't look at an image like that and not question whether or not they are impacting the environment in some way."

These wrecks serve as artificial reefs supporting deep-sea ecosystems, "oases of life in an otherwise barren deep sea," Salerno said. "Once you put something, anything, in the ocean, microorganisms will immediately colonize it, forming biofilms. These biofilms contain chemicals produced by the microorganisms that serve as cues for other organisms like bivalves and corals to settle down and make a living on the wreck. In turn, larger and more mobile animals like fish are attracted to the presence of the smaller organisms — that is, food — and the three-dimensional structure of the ship itself, a good place to seek refuge from predators."

In 2010, the Gulf of Mexico experienced the worst man-made environmental disaster in U.S. history, after explosions at the Deepwater Horizon oil rig caused more than 170 million gallons of oil to spill into the water. In 2014, scientists launched a project to investigate the impacts of this catastrophe on deep-sea shipwrecks and the ecosystems they support in the Gulf. An estimated 30 percent of the oil from the spill ended up deposited in the deep sea, in areas that contain shipwrecks.



Bow of a 19th-century wooden-hulled sailing ship more than 2,000 feet deep, with copper sheathing on hull now colonized by *Lophelia pertusa* coral (white), Venus flytrap anemones, and other macrofauna. Credit: BOEM/Deep Sea Systems International.

The researchers found the Deepwater Horizon oil spill had a dramatic effect on nearby shipwreck microbial communities even four years after the disaster. Such changes might in turn impact other parts of their ecosystems. Specifically, in sediment layers within the Deepwater Horizon oil plume, the scientists detected "oil snow" — cell debris and other chemicals produced by microorganisms that have come into contact with oil, making the oil heavy and causing it to sink rather than float. In this oil snow, the researchers found DNA from bacteria whose closest relatives break down oil for energy.

"There are many known microorganisms that are able to consume oil for energy and metabolism. When oil is present, they have the potential to flourish," said Leila Hamdan, a marine microbial ecologist at George Mason University and co-leader of the project.

The presence of oil-eating microbes in these sediments is not surprising, because the Gulf of Mexico has plenty of natural oil seeps. "What is surprising is that we see so many of the same species in the same place at the same time," Hamdan said. "It seems that the chemicals in this oil snow material allow a handful of microorganisms to dominate these sediments. Imagine a party invitation goes out to 400 people, and one-third of them show up wearing exactly the same dress. What cue in the invitation caused them to all go choose that same outfit from their closets? "

By changing what microbes dominate shipwreck habitats, the Deepwater Horizon oil spill may have had untold effects on those ecosystems. "These communities have evolved over millions of years to be efficient and metabolically diverse," Hamdan said. "Any time a human activity changes these communities, there is potential for harm to the ecosystem."

The scientists also found that exposure to oil spurred microbes to increase metal corrosion. This suggests that the oil spill could potentially speed up degradation of steel-hulled wrecks.

"The microbial ecological and molecular biological datasets can help us track change over time and measure ecosystem recovery from the microscale," Damour said. "Marine archeological data, especially the 3D laser and 3D acoustic scans of the shipwrecks and their immediate surroundings, can help us observe and measure macroscale change over time. Are the shipwrecks degrading faster in some areas? Are the wrecks within the spill-impacted areas collapsing or in danger of collapse in the near future? How are the resident biological communities affected? These are all questions that are worth asking."

From story by Charles Q. Choi, Live Science Contributor

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 on the NPS Archeology Program website.

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