

SUBMIT A COMPELLING RESEARCH PROJECT

The examples below touch briefly on the scope of research supported by WNPA's research grant program and represent compelling projects. Click [Research Proposal Examples](#) to view past research proposals deemed outstanding by the WNPA Research Committee.



Photo courtesy of NPS

Archaeology | Aztec Ruins National Monument “Closing the Gap at Aztec Ruins: Refining the Dating Sequence Using Corn and Pottery”—Though much of Aztec Ruins National Monument's architectural construction has been dated with tree-ring analysis, WNPA supported Paleo Research Institute's study to illustrate changes in material culture and site occupation at Aztec Ruins National Monument. Using accelerator mass spectrometry radiocarbon dating techniques, researchers dated corn samples and provided evidence proposing early interpretations of Aztec Ruins National Monument's occupation were incorrect. These findings provide NPS and the public with another perspective on the human story of Aztec Ruins National Monument.

History | Nicodemus National Historic Site “Collecting and Sharing the History of Nicodemus through Site Bulletins”—Four descendants of people who live in the community of Nicodemus were paired with two NPS staff from Nicodemus National Historic Site to research, write, and develop eight site bulletins to share the history of Nicodemus. The bulletins reflect the heritage of those who lived in Nicodemus, covering topics such as education, spiritual and gospel music, and quilting. The process of developing the bulletins also strengthened the individual and community relations with the historic site and NPS staff and fostered a desire in the descendants to get involved with the interpretation of their history.

Earth Science | Great Basin National Park “Meadow and Lake Sediment-Based Reconstructions of Holocene Fire Histories for Sub-alpine and Montane Ecosystems in Great Basin NP”—Great Basin National Park and Ohio University collaborated on a WNPA-funded research project to study and reconstruct Holocene fire histories for subalpine and montane ecosystems in the park. With biophysical changes on the extreme end of the range of variations, this project's intent was to improve the understanding of how regional climate change will affect fire frequency by documenting the fire regimes (frequency, severity, and extent) and assessing linkages between past fire regimes and long-term trends in temperature and drought conditions.

Citizen Science | Saguaro National Park “Graduate Student Mini-Grants for the 2011 BioBlitz” and “Evaluating Efficacy of Community Engagement Programs at Saguaro”—The WNPA-funded BioBlitz project provided grants for paying advanced graduate students to organize several projects (a study of endophytes, a bird survey, preparations to update a 1940 survey of 13,000 saguaros, and a beetle inventory) and oversee their assigned citizen-scientist volunteers. A BioBlitz is a 24-hour survey of all the living species within a designated area, and this event was the largest in Saguaro's history, with 2,000 schoolchildren, 1,500 members of the public, and more than 600 ambassador volunteers collecting data. The second WNPA-funded project focused on studying community engagement. This included offering underrepresented local populations free park admission and programming opportunities followed by tracking how many people used the free passes and took part in the programming opportunities.



Photo courtesy of NPS

Life Science | Pinnacles National Park “Lead Exposure, Altered Stress Response, and Reproductive Success in the California Condor”—In 2013 Pinnacles National Park lost 20 percent of the condors they manage. Researchers at University of California, Santa Cruz, in conjunction with Pinnacles National Park and US Fish and Wildlife Service, received a WNPA research grant to study the effects of chronic lead exposure on the California condor's stress response. This research assessed the biological effects of multiple contaminants on condor health and survival. The outcomes of the study helped park management to work with partners to develop best practices for treatment of low, middle, and high blood lead levels; develop additional research questions to document how chronic lead poisoning impacts reproduction; and to interpret and share research with the public and park visitors to promote awareness and understanding that will support condor recovery in the wild.

Learn more about the research grant by visiting [WNPA | Research](#).