WNPA | Research Grants | 2019

Request for Proposals

71 Park Partners Across the West

Arizona
Navajo
Wupatki
Sunset Crater Volcano
Canyon de Chelly
Walnut Canyon
Tuzigoot
Hubbell Trading Post
Montezuma Castle
Tonto
Casa Grande Ruins
Saguaro
Fort Bowie
Organ Pipe Cactus
Chiricahua
Tumacácori
Coronado

California
Whiskeytown
Port Chicago Naval Magazine
John Muir
San Francisco Maritime
Juan Bautista de Anza Trail
Eugene O'Neill
Pinnacles
Santa Monica Mountains
Mojave
Channel Islands

Colorado
Black Canyon of the Gunnison
Curecanti
Sand Creek Massacre
Bent's Old Fort
Great Sand Dunes

Kansas
Nicodemus
Brown vs. Board of Education
Fort Larned
Fort Scott

Montana & Wyoming
Little Bighorn Battlefield
Bighorn Canyon

Nebraska & Nevada
Lewis & Clark
Great Basin
Lake Mead

New Mexico
Capulin Volcano
Aztec Ruins
Chaco Culture
Bandelier
Trail of Tears
Santa Fe Trail
Fort Union
Pecos
Petroglyph
El Malpais
El Morro
Salinas Pueblo Missions
Gila Cliff Dwellings
White Sands
Carlsbad Caverns

Oklahoma
Washita Battlefield
Chickasaw

Texas
Lake Meredith
Alibates Flint Quarries
Guadalupe Mountains
Chamizal
Fort Davis
Lyndon B. Johnson
Big Thicket
San Antonio Missions
Padre Island
Palo Alto Battlefield

Utah
Golden Spike
Timpanogos Cave

Why Your Research Matters to Our National Parks

"We need to engage the next generation in preserving our heritage."

Al Remley, National Park Service Ranger
San Antonio Missions National Historical Park

For our national parks to flourish, each new generation must be able to connect with the public lands that are part of our natural and cultural heritage. As a researcher, you can play a role in bringing the parks to the people and people to the parks.

Since its founding in 1938, Western National Parks Association (WNPA) has funded scientific, historical, and social science research in national parks to help advance their management, preservation, and interpretation. Conducting a meaningful, scientific inquiry is only the beginning of WNPA-funded research. One of our key goals is interpretation—turning research findings into relevant, engaging narratives that both inform and entertain park visitors.

To ensure that this goal is met, we require our applicants to work closely with both the chief of interpretation and the superintendent for the park where the research will be conducted. WNPA's Research Committee will look most favorably upon applications that include a plan for interpretation-related products of research. These products might include workshops, posters, presentations, maps, guidebooks, fact sheets, or educational materials that can be displayed at the park.

A prototype of the interpretive materials or description of activities should be submitted as part of the final report. Researchers are encouraged to engage audience participation, add stories or anecdotes about the research process, and minimize scientific jargon.

WNPA supports research in all fields of scholarly research, including anthropology, archaeology, botany, citizen science, ecology, geology, history, natural history, social science, and zoology. Provided in this packet are examples that illustrate the scope of research supported by WNPA's research grants program.

What's the Process?

Research grant funding is limited to a maximum of $7,500 per project per year.

Proposals are typically generated in one of two ways. 1) A National Park Service (NPS) official determines a need for research and finds a principal investigator (PI), or 2) a researcher contacts the park with an idea for research. All research proposals must be approved by the benefiting/host park chief of interpretation and superintendent prior to submission to WNPA.

Persons interested in submitting a research grant proposal are strongly recommended to read through the attached research guidelines dated July 2018 before proceeding with the application process.

Note the most important changes to the application form and guidelines:

1. Requirement of the chief of interpretation to sign the form (page 16).

2. Inclusion of a one-paragraph description of the plan for an interpretation-related product of the research. We are providing an example from Pinnacles National Park.

3. Requirement of a prototype or more refined/definitive description of the interpretative product upon completion of the research and included as part of the final report.

Previous changes to the guidelines bear repeating:

1. WNPA's grants are for ONE YEAR only; applications for second or third years are not guaranteed and will only be considered following a successful first year.

2. Preparation of a brief exit report in addition to the final report.

Both reports are to be submitted electronically (e.g., PDF) to the park superintendent for review and distribution to park staff. Our goals for the exit report are to acquire clearly written abstracts that we can share through our website, to ensure that interpreters and other park staff understand project findings, and to confirm that the questions posed in the research proposal were addressed. Researchers are expected to submit reports with sufficient detail and clarity to assist resource managers and interpretive specialists with their tasks.

For FY 2019 project funding consideration, proposals must be received by WNPA research coordinator, Brenda Acker, no later than **Friday, August 31, 2018**.

Please mail the original proposal plus eight (8) hard copies and a cover letter from the park superintendent to Brenda for distribution to our Board Research Committee, who will review and consider each proposal.

The guidelines and application are available for download in a PDF format from our website at www.wnpa.org/#research. For an example of how to share your research findings, see the example at the end of this packet.

Our Research Committee will meet in late September/early October and review all proposals submitted. Parks will be notified of funding decisions shortly thereafter.

We would like to emphasize that WNPA looks to the park superintendent to ensure that all WNPA-funded research projects are being managed consistent with NPS policy, managed in a timely manner, and completed according to WNPA's research guidelines, with all required documentation and reporting. Please keep in mind that you should transmit final reports to WNPA **electronically,** making sure that explanatory data, charts, maps, and photos are readable and clearly stated.

If you have any questions, please do not hesitate to contact Brenda Acker at brenda.acker@wnpa.org.

Examples of Good Projects

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 PaleoResearch 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 that early interpretations of Aztec Ruins National Monument occupation were incorrect. These findings provide the NPS and the general 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 lived in the community of Nicodemus were paired with two NPS staff from Nicodemus National Historic Site to research, write, and develop eight site bulletins that 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 quilters. 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.

Life Science—Pinnacles National Park "Lead exposure, altered stress response, and reproductive success in the California condor"

In 2013, Pinnacles National Park lost 20% of the condors they manage. Researchers at UC Santa Cruz, in conjunction with Pinnacles National Park, received a WNPA research grant to study the effects of chronic lead exposure on the California condor's stress response. In collaboration with the U.S. Fish and Wildlife Service, 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, mid, and high blood lead levels;

to 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.

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 the University of Ohio collaborated on a WNPA-funded research project to study and reconstruct Holocene fire histories for sub-alpine 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 our 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 to pay 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 for their projects. A BioBlitz is a 24-hour survey of all the living species within a designated area, and this particular event was the largest in Saguaro's history, with 2,000 schoolchildren, 1,500 members of the public, and over 600 ambassador volunteers collecting data. The second WNPA-funded project focused on studying community engagement. This included offering under-represented 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.

Research Grants

Introduction

WNPA supports the acquisition of knowledge by providing grants in support of research that benefits the management, preservation, and interpretation of NPS resources served by the association. WNPA research grant funding is limited to no more than $7,500 per project per year. Grant proposals from superintendents are reviewed annually by WNPA's Research Committee, which consists of board members with extensive backgrounds in science and other relevant experience. WNPA's research grant program supplements research programs of the NPS.

The Research Grant Proposal

Contact Information: Please contact Brenda Acker, WNPA's research coordinator at the Home Office (520) 622-1999, or email brenda.acker@wnpa.org if you have questions about the suitability of the proposed research for WNPA funding. Ms. Acker also can answer questions regarding these guidelines and/or the attached new research and continuing research proposal application forms.

Funding Criteria

1. All funding requests must originate in a WNPA-affiliated park.

2. All new and continuing funding requests must be approved and submitted via cover letter by the superintendent.

3. A single park may submit no more than three (3) proposals each year (including on-going, multiyear projects requesting another year of funding).

4. Superintendents submitting more than one proposal in a year must rank each proposal in terms of its priority to park needs.

5. Proposals are to follow the format provided. New proposals must include the following information from the PI:

   a. Research design and methodology

   b. Identity and qualifications of the PIs directly related to this research

   c. Budget

   d. If the proposal is a request for seed money to justify proposing a larger project to another agency, or if the proposed research will augment an already funded or proposed non-WNPA project, clearly explain the relationship.

The proposal "JUSTIFICATION" page is to be completed by the submitting park. As part of the justification, the superintendent should explain the expected implications of the research for interpretation and management. Please state how the research will benefit park visitors. Note: The Research Committee looks favorably on those funding requests for research that will have a direct impact on visitor interpretation.

Who May Submit

The superintendent usually identifies the need for research and seeks a qualified PI or institution/organization to submit a proposal. However, qualified researchers may contact the superintendent directly regarding unsolicited proposals. Note: Proposals submitted by the NPS without identifying a PI will not be considered for funding.

Graduate students may not serve as project PIs. They may be listed as a Co-PI if the Lead PI is the academic supervisor. All graduate students working on a project must be identified.

WNPA will consider funding research proposals submitted by active NPS employees. However, WNPA will not fund their salaries or benefits.

Interpretive Products

A one-paragraph description of the plan for an interpretation-related product of the research and a prototype or more refined/definitive description of the interpretative product must be provided upon completion of the research and must be a part of the final report.

Budget Administration

A budget limitation of no more than $7,500 per project per year will be placed on all research projects. Priority will be given to those proposals requesting seed money or for proposals where matching cash or in-kind contributions are included. Therefore, it is very important to note any matching or in-kind funds on the budget sheet.

Research projects are generally funded for a period of one year. A proposal that is only a slight modification and/or extension of a one-year project in progress will be declined. If the PI believes a one-year pilot project will likely lead to a subsequent request to WNPA for further work, the proposal should be written as a multiyear project as described below.

Under special circumstances, the Research Committee will consider multiyear proposals for up to three (3) years if the initial proposal states the time it will take to complete the research, and if each year's objectives, methods, participants, and estimated budget (with justification) are explicitly outlined. Funding beyond the first year's budget will only be approved if adequate and timely interim reports have been received and only if requested through the continuation research proposal process each year on the forms provided. This request is a concise one- to two-page summary of progress to date, objectives for the next year(s), and any significant changes to the initial proposed projects and budget(s), together with the one-page budget and its justification for the year. Approval of first-year funding does not automatically assure funding of second or third years. Funds for second and third years cannot be released until all reporting requirements for prior years have been met. A park may have only one ongoing, multiyear project underway at any one time.

Travel, equipment, and supplies required by a PI to conduct his/her research must appear on the budget form and must be clearly explained in detail. All requests for salaries, stipends, or payment for any individual must indicate what work is to be done to merit the payment and the rate of pay for reimbursement. Graduate student stipends will be supported, but not tuition payments.

WNPA does not provide funds for publication costs through the research grant program.

The superintendent or the designated agent will act as the primary liaison between the PI and WNPA. It is the superintendent's responsibility to supervise the project and to ensure that the project is being conducted in a professional and timely manner, and that all required reporting is completed on a timely basis.

Generally 25% of the total grant can be released once WNPA receives written notice from the superintendent that the PI is ready to begin research and that it is after the proposed start date as indicated on page 1 of the application form. An additional 50% can be released once adequate progress has been made and an interim status report has been submitted to and approved by the superintendent and forwarded to WNPA. Without exception, 25% of the total funded amount will be withheld until the final report is accepted by the superintendent and subsequently approved by WNPA's Research Committee.

Indirect Costs

WNPA will not approve grants that include administrative or overhead costs of other organizations or institutions.

Equipment

An itemized list of equipment purchases (items in excess of $100) is required on the budget form. The purchased items become the property of the NPS when the project is completed, unless other arrangements have been made with WNPA. In addition, any supporting documentation resulting from WNPA-funded research, such as oral history tapes, photographs, collections, and specimens, generally becomes the property of the NPS; the PI and park superintendent are responsible for following current NPS policies and procedures involving disposition of documents or items of this nature.

Salary Restrictions

WNPA regards research as one of the normal functions of faculty members at institutions of higher education. WNPA grant funds may not be used to augment the salary of faculty members during the period covered by the term of faculty appointment or to reimburse faculty members for consulting if they receive a regular full institutional salary covering the same period of employment as the research project.

Date for Proposal Submission

Research proposals and renewal budget request(s) for the next year's funding of multiyear projects must be submitted to the WNPA research coordinator by Friday, August 31, 2018. Individual parks should set their own schedule to comply with this deadline. The proposed start date for research should not be before mid- to late-October and no later than June 1 of the year following submission. Requests will be reviewed and approved by the Research Committee in October, and parks will be notified of funding decisions shortly thereafter. A sample of WNPA's evaluation form is attached to illustrate the general approach of the Research Committee. Notification of board action will usually occur the week following the board of directors' fall meeting.

Progress Reports

Once research has started, the PI(s) must submit progress reports to the superintendent on April 1 and September 1. These reports should be not lengthy technical reports. A one-page progress report is sufficient. A copy of the report will be forwarded to the WNPA research coordinator for inclusion in an update presented to the board of directors. Failure to submit timely progress reports without cause will jeopardize funding until the reports are received. Failure to submit also may result in termination of funding.

Final Reporting Requirements

Exit Reports, Final Report, and Extension Requests

The PI must submit to the superintendent an exit report and a hard copy final report along with an electronic version in MS Word format. The exit report is a document that briefly addresses the Research Committee's concerns that the research results are understandable to a general audience, relevant to the park, consistent with original goals and methods, and responsible regarding major equipment purchased. The final report may take a form suitable to the discipline of the researcher, but it also should be understandable to park resource management staff and park interpreters. The final report should consist of no more than five (5) pages of text and five (5) pages of data, tables, and/or charts. Please include references to other products of the project, such as scientific articles published or in preparation, reports to other agencies funding the work, maps, checklists, GIS databases, and student theses. A one-paragraph description of the plan for an interpretation-related product of the research and a prototype or more refined/definitive description of the interpretative product must also be included. An example illustrating how to share research findings can be found in this packet.

The exit report and final report are due to WNPA one year after the PI's stated project completion date. Funding will be terminated if the exit report and final report are not received by that date. The only exception to the aforementioned rule is the granting of a no-cost extension for up to one year to complete the stated research. Such extension requests must be submitted to the research coordinator with proper justification and must be received two months before the scheduled completion date of the project.

Superintendent's Recommendation for Approval

After the superintendent approves the exit report and the final report, he/she must submit an electronic version of the report in MS Word format to the WNPA research coordinator. A letter indicating approval and recommending final payment should be submitted as well. It is critical that any data, maps, and photos contained in the report be in a readable format. The letter must also contain confirmation that an informal meeting was held between the PI and the park interpretive staff to discuss the research findings, including project relevance and value to interpretation as related to the park. The research coordinator will then email the reports to the Research Committee for review and final approval. A sample of the final report evaluation form used by the Research Committee to review exit reports and final reports is attached.

New research proposal to Western National Parks Association (WNPA)
The information supplied should be limited to the space provided and submitted on these forms.
A proposal received in any other format will be returned. Additional attachments are not permitted.

Title of project:	Park(s) in which research is to be conducted:
Name, address, and phone number of principal investigator, (PI)(s):	Payee information - individual name and address or Institution's name and address required:
Is this a multiyear project? Total amount requested: This year $ _____ If multiyear project, estimated amount: 2nd year $ _____ 3rd year $ _____	Desired start date: _____ Note: Not prior to October 1st
Project duration: Project final completion date: _____ (see research guidelines)	
Name(s) of research participant(s) who will acquire advanced degree(s) as a result of working on this project, if any:	Product(s) of research (articles, theses, maps, checklists, etc.) in addition to final report to WNPA (see research guidelines):

Abstract to be provided by PI(s). Do not exceed the half-page space provided below.

(1) JUSTIFICATION (to be provided by submitting park): This section should specify the following: 1) Are NPS-appropriated funds available for the project (Yes/No)? 2) Where does this project rank in the submitting park's research priorities for all funding sources? 3) Was this proposal solicited by the park? If not, why is this project important to the park? 4) How will this research enrich visitors' understanding of the park? 5) What are the implications for resource management?

(2) CONCISE STATEMENT OF RESEARCH OBJECTIVES, DESIGN, AND METHODOLOGY. This section should include the facilities and sites to be used. Note: Limit this section to the two pages provided.

(2) CONCISE STATEMENT OF RESEARCH OBJECTIVES, DESIGN, AND METHODOLOGY (Cont'd):

(3) CONCISE STATEMENT OF HOW YOUR RESEARCH CAN ENHANCE THE INTERPRETIVE MISSION OF THE PARK. Also include one paragraph describing the plan for an interpretation-related product of the research. Use this page only.

(4) QUALIFICATIONS OF THE PI(S) CONDUCTING THE RESEARCH. Use this page only. List only those qualifications directly related to this grant request. Include a list of other WNPA-funded research conducted by this PI.

Budget for New Research Proposal

Project title and submitting park: _____

_____

Personnel

PRINCIPAL INVESTIGATOR(S)	Funds requested from WNPA	Cash or in-kind contribution (Please specify which type and source.)
1		
2		
3		

OTHER PERSONNEL (Specify number in brackets. Specify duties to be performed to earn funds on next page.)	Funds requested from WNPA	Cash or in-kind contribution (Please specify which type and source.)
1		
2		
3		
4		
5		

TOTAL PERSONNEL COSTS _____   _____

EQUIPMENT COSTS (List item and dollar amounts for those items costing more than $100 each on next page.) _____   _____

TRAVEL AND SUBSISTENCE (Itemize on next page.) _____   _____

OTHER COSTS

1 Supplies and material		
2 Consulting services		
3 Computer services		
4 Subcontracts (Itemize on next page.)		

TOTAL OTHER COSTS _____   _____

TOTAL COSTS _____   _____
If multiyear project, summarize estimated subsequent year(s) budget(s) on next page.

COSTS (Cont'd). Note: Be sure to explain here the duties that will be performed by any funded individual.

A special note for researchers and the park superintendent:

WNPA is the funder of this grant on behalf of NPS, and WNPA monitors progress, administers the payment schedule, and determines successful completion or default.

All other decisions regarding the conduct of this research grant (e.g., park access, laws, safety, protocols, etc.) and uses of the research, data, and its products (e.g., release of information, publication, intellectual property, etc.) rest in the hands of NPS and are the responsibility of NPS. Researchers and NPS should clarify any questions or assumptions before accepting the grant.

Due to several factors, ALL WNPA grants are for ONE YEAR ONLY (1 year only); however, we welcome and will carefully consider applications for second or third years following a successful first year.

Best wishes and hopes for a successful project. Thank you from WNPA.

I have read and agree to abide by the research guidelines in effect at the time of this application.

_____   _____
Signature of Principal Investigator(s)   Date

_____   _____
Signature of Park Superintendent   Date

_____   _____
Signature of Chief of Interpretation   Date

For WNPA Use Only

WNPA Research Committee Review: Action and Date: Amount Granted:

Exit Report

Prepare this exit report as a MS Word file or PDF file for distribution to WNPA Research Committee members. This report, along with the final report, will be sent to the superintendent. The superintendent, the person overseeing research at the park, and the person overseeing interpretation and education at the park will review these two reports. The superintendent will send a signed letter to the WNPA research coordinator indicating the satisfactory completion of the project and the final report. The WNPA research coordinator will share the exit report, final report, and the superintendent's letter of satisfactory completion with members of the WNPA Research Committee.

Please address all questions. This exit report is intended to be useful, interesting, and easy to prepare. Please brag a little.

Title: _____

Principal Investigator(s): _____

Park: _____

1 ### Abstract
In fewer than 500 words for a general public audience (e.g., park visitors), what was/were your research objective(s) and what are your results and conclusions? Did your research result in new data, collections, or written records?

2 ### Relevance to the Park
In fewer than 500 words, how may your conclusions or findings affect, inform, or support park management, conservation, interpretation, education, or further research?

3 ### Process
In fewer than 300 words, does your final work match your proposal, or did you modify your approach or methods? Did you fulfill each of your grant proposal objectives? If not, why? What challenges, difficulties, or unanticipated issues did you encounter?

4 ### Bookkeeping
How did you spend the WNPA grant money? Who has custody of major equipment that you purchased for the project with WNPA funds? What other funds or in-kind contributions ultimately supported your work on this particular project?

5 ### Products
Have you already published your results, or are you preparing them for publication? If not, why not? Whom did you brief at the park? When? Please list presentations that you have made to park staff, other persons, or groups (e.g., conferences and scientific meetings). Also list any articles that were published about your project in newspapers, in newsletters, or on the Internet.

6 ### Evaluations
What observations, suggestions, or recommendations can you offer WNPA or NPS regarding park research or research grants?

This is the form that the Research Committee will use to evaluate your proposal.

Sample

Research Proposal Evaluation Form
For use by WNPA Research Committee

Title: _____

Principal Investigator(s): _____

Park: _____

Date: _____   Reviewer: _____

Elements 1 through 8 are to be rated on a scale of 1 to 7, with 1 being inadequate and 7 being superior. Circle the appropriate rating for each element.

		Inadequate						Superior
1	Currency/importance of problem and research objectives	1	2	3	4	5	6	7
2	Appropriateness of methods	1	2	3	4	5	6	7
3	Impact/implications beyond the park	1	2	3	4	5	6	7
4	Clearly defined interpretive products	1	2	3	4	5	6	7
5	Qualifications of PI(s)	1	2	3	4	5	6	7
6	Opportunities for leveraging additional resources	1	2	3	4	5	6	7
7	Implications for resource management	1	2	3	4	5	6	7
8	Overall evaluation	1	2	3	4	5	6	7

Other issues specific to this proposal that should be considered:

The finalists should earn high scores in all areas. Other factors that might set a proposal apart include citizen science (public involvement in research), innovation (interactive brochure, video for visitor center), bilingual materials, an understudied subject, outreach via the mass media or a critical window of opportunity.

This is the form that the Research Committee will use to evaluate your final report and exit report.

Sample

Final Report Evaluation Form
For use by WNPA Research Committee

Title: _____   Grant: _____

Principal Investigator(s): _____

Date Form Is Due to
Research Coordinator: _____

Park: _____

Date: _____   Reviewer: _____

Please circle the appropriate rating for each element:

		Poor				Superior
1	Are the aims/objectives of the research clearly stated?	1	2	3	4	5
2	Do the stated objectives conform to those originally proposed?	1	2	3	4	5
3	Are the research methods clearly stated and explained?	1	2	3	4	5
4	Is reference made to the pertinent literature?	1	2	3	4	5
5	Are the technical details clearly represented?	1	2	3	4	5
6	Are the findings/results explained clearly?	1	2	3	4	5
7	Are the results clearly related to the originally proposed work?	1	2	3	4	5
8	Are the findings/results interpreted in terms of their significance to the park?	1	2	3	4	5
9	Is the overall structure of the report clear and appropriate?	1	2	3	4	5
10	Overall evaluation:	1	2	3	4	5

Comments:

Final payment recommended: YES | NO

Research Proposal Checklist

For use by Principal Investigator(s)

☐ Proposed research is for a WNPA-affiliated park and approved by the park's superintendent.

☐ State whether proposal was submitted at request of park or if PI initiated.

☐ Proposed work is research, not interpretation that would be more appropriately supported by WNPA Interpretative Supports Account (ISA) funds.

☐ Proposed work considers policies specific to park regarding its unique or sensitive resources.

One-Year and New Multiyear Proposals (No more than three years)

☐ Must be submitted on supplied forms.

☐ New multiyear proposals must clearly state each year's objectives, methods, participants, and estimated budget.

☐ Continuing multiyear projects must submit a brief progress summary, justification of significant changes, and budget(s) for following year(s) on forms provided (see guidelines).

☐ Cover page completed.

☐ Abstract: Do not exceed allotted space; essential background only; maximize proposed research information.

☐ Justification: Include superintendent's signature and explanation of implications for park management and interpretation; PI signature.

☐ Concise statement of research objectives, design, and methodology. Clearly and succinctly described, with sufficient detail to permit assessment of methods and analysis.

☐ Concise statement of how research enhances interpretive mission. Be specific.

☐ Identity/qualifications of investigators directly involved in project.

☐ List all other past and current WNPA-funded research undertaken by PI(s).

☐ Graduate student(s) identified by name with degree program.

☐ Consultants/advisors identified.

☐ Budget does not exceed $7,500 per year.

☐ No salary or benefits for active NPS personnel.

☐ No administrative or overhead costs.

☐ Matching funds/in-kind contributions clearly identified.

☐ All budget items listed and clearly justified, including equipment over $100. (All equipment purchased by grant becomes park property.)

☐ Proposal reviewed on the basis of Research Committee's proposal evaluation form.

Reporting Requirement Checklist

For use by Principal Investigator(s)

Progress Reports

☐ Due April 1

☐ Due September 1

☐ Submitted to superintendent.

☐ One-page progress report is sufficient.
**Failure to submit reports results in withholding or termination of remaining funding.

☐ Prior to project completion, meet with park's interpretive staff to present findings and relate how results can be conveyed to park visitors.

Exit Report

☐ Original to superintendent along with an electronic version for WNPA research coordinator. NOTE: Report due at WNPA not later than one year after PI's stated completion date. Failure to comply terminates remaining funding. Exception: Approved no-cost extension for a period not to exceed one year.

Final Report

☐ Original to superintendent along with an electronic version for WNPA research coordinator. No more than five pages of text and five pages of charts, maps, and data. NOTE: Report is due at WNPA not later than one year after PI's stated completion date. Failure to comply terminates remaining funding. Exception: Approved no-cost extension for a period not to exceed one year.

☐ Provide references to other results of project, e.g. large-scale maps, GIS databases, theses, scientific articles/manuscripts in preparation, etc.

☐ Review your reports on basis of Research Committee's final report evaluation form.

Tell Your Story

Sharing Your Research Project

A vital part of your research is sharing it with others. It is, quite possibly, the most significant way that you as a researcher can help protect further research opportunities at other national parks across the country. Your contributions can help park staff make informed, science-based decisions to protect and preserve park resources. Sharing your research in an engaging way encourages others to make lasting, meaningful connections to the park and the resources it shelters. By doing this, you help others see the value and importance of preserving our natural and cultural resources.

Many Audiences to Reach

There is a wide variety of audiences with whom you can share your research—visitors to the park, staff members, teachers, members of the community, children, and students of all ages. By sharing your purpose (research question), what you've done (methods) and discovered (data and discussion), and what the big take away message is (implications for the park), you can spread your knowledge to countless people.

How to Share Your Research

Here are a few ideas on how to share your research—but use your creativity, too. This is by no means a complete list. Decide on your target audience(s), then choose a means of presentation that will best reach them.

Remember—your research is more likely to reach and engage your audience if

- you include anecdotes and interesting stories from your research.

- there is some level of participation; many people learn better by doing.

- you keep science terms and jargon to a minimum—explain in everyday language.

Ideas for Sharing Your Research Project

1. **Research assistants or shadows**

    - Enlist a visitor, volunteer, teacher, or student to assist and/or shadow your field study.

2. **NPS park website and/or WNPA website**

    - Pinnacles National Park posted some of their research data regarding the California condors and lead poisoning on the NPS website for all visitors to see.

3. **Social media**

    - Create a Facebook, Instagram, or Twitter account to highlight and document your research work. This could also include a blog that features the principals involved in the project and the focus of the research. Most importantly, tell the national parks' stories.

4. **Lecture or workshop presentation**

    - Give a 30- to 40-minute talk about your research experience, or offer a one-day workshop.

    - Pinnacles National Park research was presented at three scientific conferences.

    - Condor presentations were updated based on research from the Pinnacles National Park project to include information on how chronic exposure to lead threatens the species.
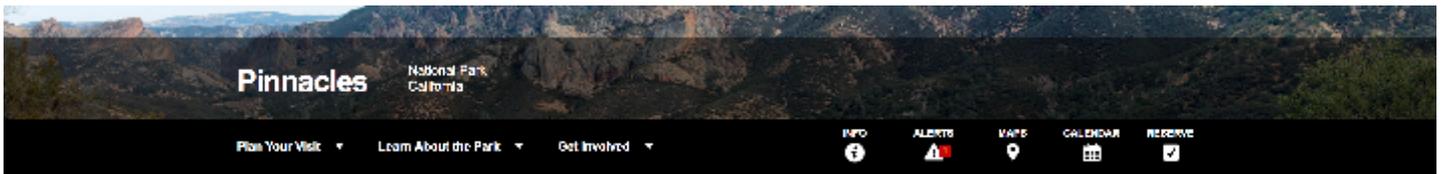
Lead Bullet Risks for Wildlife & Humans

Understand the Role of Hunting

Viable, thriving ecosystems include checks and balances. Hunting has been part of natural balances for thousands of years, depending upon grazing and browsing animals just like the coyote and mountain lion. Scavengers like condors can benefit from eating the scraps that hunters or predators leave on the land. Hunters that use non-lead ammunition carry on the proud tradition of wildlife conservation by preventing condors and other animals from being exposed to lead, a toxic substance.

5. **Fact sheet**

   - Prepare key topic headings, around 900 words of text, and interesting, high-res images. Collaborate with park staff to create a fact sheet summarizing your research and results.

6. **Journal article**

   - Write an article aimed at lay people (not fellow scientists) and look for relevant journals or news outlets that may publish it.

   - Pinnacles National Park created a manuscript of their research and submitted it to the *Journal of Comparative Physiology*.

7. **PowerPoint presentation**

   - Create a PowerPoint presentation (self-contained and self-explanatory, not a guided presentation) for display on a monitor so visitors can view it at their own pace. Spark more interest by having a relevant, hands-on item (ie, a feather) nearby.

8. **Poster**

   - Craft a poster (ideally 3' x 4') that is visually captivating and not a poster for a science meeting. Include the large concepts and key points about the "why" of your research. Emphasize images, graphics, and use a large font for easy readability.

9. **Discovery packet for visitors or students**

   - Collaborate with park staff to create a packet of instructions and equipment to carry out a small-scale version of your research. Include background information about your research project. Park staff can use these packets to guide visitors in doing the research that you do.

10. **Classroom data analysis activity**

    - Provide a dataset along with background information and photos of your research, as well as guiding research questions. Work with park staff to create an educational packet that middle and high school teachers can use in their classrooms to teach students how to analyze and interpret real-world research data.

11. **Activity for field trip or classroom**

    - Collaborate with park staff to make a fun, educational, hands-on learning experience, such as a product or game, that students can use to enhance learning on field trips or in the classroom.

12. **High-tech product or session**

    - Make an educational product or experience with new technology: record a podcast, hold a Skype call with a classroom of students, or film a virtual tour of your research area to share online.