

NATIONAL PARK SERVICE
FINANCIAL ASSISTANCE: NOTICE OF INTENT TO AWARD

This announcement is not a request for applications.

This announcement is to provide public notice of the National Park Service's intention to award financial assistance for the following project activities without competition.

ABSTRACT	
Funding Announcement Number	P17AS00505
Project Title	Inventoring Endemic Insects at White Sands National Monument
Recipient	Michigan State University, Eric H. Metzler
Anticipated Federal Funding	\$27,538
Anticipated Period of Performance	July 28, 2017-October 31, 2019
Award Instrument	Cooperative Agreement
Statutory Authority	54 U.S.C. §100703, Cooperative Study Units
CFDA # and Title	15.945 CESU
Single Source Justification Criteria	Unique Qualifications, Continuation
Point of Contact	Katie Gaertner, Katie_gaertner@nps.gov

BACKGROUND AND OBJECTIVES

This project will allow baseline data to be obtained on endemic insects within the World's Largest Gypsum Dune Field at White Sands NM. The inventory will focus on moths, but also capture data for all other species of insects that are caught. Insects, accounting for more than half of all eukaryotes (higher plants and animals) on Earth provide a strong indicator of environment health and stability, and the ability of an endemic pollinator to be an indicator species make reasons for studying moths that much greater. One well known example of this co-dependency is yuccas and yucca moths. Current threats to the dunes and associated ecosystem include climate change, and air pollution. Developing a monitoring program for these threats is extremely expensive, complex, and slow to initiate. Developing a baseline inventory for insects is a cost effective quick approach that can support all other investigations in the future.

This study will provide important baseline for the insects and endemic pollinators that can be used to track changes in environmental health and suability. Conducting this study will help enable WHSA to achieve GPRA Goals 1(a), 1(b) and II(b)1, related to natural resource management and interpretation. This project will provide the monument with a quantified list of historically under-inventoried taxa, a snapshot of the selected groups of organisms selected.

The information from this inventory will provide new media for public interpretation and understanding. From this inventory, new species will be documented and a final report on the significance of the unique characteristics of the white sands gypsum dune field that supported this incredible dune field. The associated analyses, species descriptions, and photo documentation will provide important baseline information about unique environmental conditions that formed and preserve this incredible diversity of moths.

STATEMENT OF WORK

The focus of this project is to document and record endemic insect species and their diversity. The data gathered and images produced will provide baseline documentation for sensitive areas within the monument and new information on endemic species of the monument that can be shared with the public. The tasks for this project are outlined below:

Task 1. Field campaign

- 1) Locate a series of sampling sites (1-5 ha) at White Sands and representing variety of habitats (e.g., dune, interdune, non-dune gypsum, woody thickets, playas, swales, streams, ponds, riparian vegetation and shorelines) and locate all sites on a GIS layer.
- 2) Sample those particular sites (see below) representing certain environments, record site information on data forms (location, habitat, etc.).
- 3) Sample each site at different seasons (spring, summer, fall, winter) for one to two years.

Task 2. Lab Analyses

1. Sample sorting and initial identification.
2. Curation of specimens (appropriate standard methods for various taxa).
3. Identification of taxa by staff and by sending curated specimens to outside taxonomic experts for final identifications and determinations of undescribed taxa.
4. Deposition of voucher and other specimens.
5. At list one specimen display will be prepared for WHSA, for use of public interpretation highlighting the species richness of WHSA.

Task 3. Data entry and quality control

The designated cooperator will enter the field plot data into their plot database. Several days will be allocated for review of any collections and any updates to the species lists for the parks. A progress report will be submitted at the end of the first year, documenting any notable findings or observations up to that point and describing project status.

RECIPIENT AGREES TO:

1. Conduct fieldwork using qualified personnel.
2. Conduct data inventory, field data gathering, data analysis, and data entry using NPS data management applications and guidelines.
3. Provide project reports including informal briefings on the project and written final reports.
4. Complete application procedures, including a detailed fieldwork schedule, to obtain park research permits prior to initiating fieldwork and abide by all conditions of research permits.
5. Not conduct ground-disturbing research activities without prior approval from park superintendents.
6. Not publish or publicly divulge specific locality information for sensitive, rare, or endangered species located at the park without prior approval.

NATIONAL PARK SERVICE AGREES TO:

1. Provide information needs, priorities, guidelines, data management specifications and applications, and technical specifications for the park.
2. Provide cultural clearance and documentation according to Section 106 of the National Historic Preservation Act and any other applicable statutes, regulations, and guidelines.
3. Provide environmental clearance and documentation according to the National Environmental Policy Act and any other applicable statutes, regulations, and guidelines.
4. Assist recipient in applying for research permits using NPS's Internet-based Research Permit and Reporting System.
5. Review inventory plans, draft reports, technical information, study/ research methods, and maps and provide written comments for the final report.
6. Provide knowledgeable personnel in the area and/or obtain and provide existing resource inventory and monitoring data and materials useful to the project.
7. Transport researchers to remote park areas through White Sands Missile Range.
8. At its discretion, the NPS may choose to have a peer review of the draft report.

SINGLE-SOURCE JUSTIFICATION

NATIONAL PARK SERVICE SINGLE SOURCE POLICY REQUIREMENTS

Department of the Interior Policy (505 DM 2) and National Park Service Policy FAP&P 1443-2015-06 requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.

In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria:

- (1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives;
- (2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of, an activity presently being funded, for which competition would have a significant adverse effect on the continuity or completion of the activity. A single source on the basis of continuation must demonstrate that competition would result in a substantial duplicate cost to the government that cannot be recovered through competition.;
- (3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;
- (4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;
- (5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.

NPS did not solicit full and open competition for this award based the following criteria:

This will be a continuation the systematically inventory moths for several habitats within the monument that began by the associate PI Eric Metzler in 2006. Mr. Metzler was recruited by the monument do conduct the study as a research volunteer. Mr. Metzler would continue to donate his time through this project, this funding would help cover the out of pocket expense associated with DNA testing, travel to national museums to confirm new species and to the monument, and the expense of lab and field supplies. To date, Mr. Metzler has identified over 500 of moths, and confirmed 14 new species, from an area covering less than one percent of the monument.

The survey will be a continuation of a study that has been well developed and refined. To date 500 moth verities have been identified from an area lest than one percent of the monument. These methods have been very affective and are technically sound. Because all work is been done on a volunteer basis, completion for the fund would likely be at a much great cost, and would have a significant adverse effect on the continuity and completion of the project.

Eric H. Metzler, is a recognized expert on Lepidoptera, he has discovered over 30 species of moths new to science from the monument, and to date has published the descriptions of three of the species. Metzler is volunteering his time, nearly over 4,000 hours, this funding will be used only for Metzler's out-of-pocket expenses pertinent to the study.