



**National Park Service
U.S. Department of the Interior**

NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the National Park Service's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	P14AS00175
Project Title	Assessment of Landbird Monitoring in Chihuahuan, Sonoran and Southern Plains Parks
Recipient	New Mexico State University
Principle Investigator / Program Manager	Dr. William Gould
Total Anticipated Award Amount	\$33,000.00
Cost Share	None
New Award or Continuation?	Continuation of Cooperative Agreement H2370114000
Anticipated Length of Agreement	From date of award until 9/1/2015
Anticipated Period of Performance	From date of award until 9/1/2015
Award Instrument	Cooperative Agreement
Statutory Authority	16 USC 1(g) ; 16 USC 1a-2(j); 16 USC 5933
CFDA # and Title	15.945 Cooperative Research & Training Programs Resources of NPS CESU's
Single Source Justification Criteria Cited	Continuation
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OVERVIEW

The Southern Plains (SOPN), Sonoran Desert (SODN), and Chihuahuan Desert (CHDN) networks of parks have identified land birds as a vital sign for long-term monitoring. Land birds have important functional roles in ecosystems and are considered useful indicators of ecosystem integrity. These three networks, SOPN, SODN, and CHDN collaborate on a regional effort and in collaboration with the U.S. Fish & Wildlife Service to monitor breeding birds among various habitats across the southwestern U.S. The broad goal of the landbird monitoring program is to detect biologically significant changes in population parameters over time. Ideally, we would estimate population size or abundance for all species each year and compare these estimates over time. Such a goal, however, is not realistic either financially or logistically.

To meet these challenges, we have tried to design a program that maximizes the strength of our inferences within the context of our finite resources. The overall objectives of our monitoring are to: (1) estimate the proportion of sites occupied for a given species, (2) estimate density when feasible, and (3) estimate bird species richness and composition. The specific objective of this project is to begin preliminary analyses for these estimators in each of the three networks in order to evaluate the reliability and feasibility of our estimates given our current sampling regime. This will allow us to make any adjustments necessary to improve our bird monitoring program, with the ultimate goal of providing accurate and cost-effective ecological data to public land managers in the American Southwest.

Project goal and objectives

The goal of this project is to initiate analyses of extent landbird monitoring data from each of the three networks in order to evaluate the reliability and feasibility of our estimates given our current sampling regime. Our specific objectives are to answer the following questions:

1. ***How efficiently can we estimate the proportion of sites occupied by a given species given our current sampling approaches? How do park size, stratification, and species abundance (rare vs. common) affect our results?***
2. ***Can we effectively estimate trends in density for individual species over biologically-meaningful time scales with our approach?***

Project Description

The emphasis on this project is will be on estimating *occupancy* and *density*. Occupancy is a measure of presence or absence of a species in space that, when evaluated across time, indicates changes in the distribution of a species. Like those for density, techniques for estimating occupancy explicitly account for variation in detectability, thereby adjusting estimates for individuals that are present yet undetected during surveys, a situation that can confound the results of most wildlife surveys. When deriving estimates, the cooperator should consider the use of stratification and covariates to enhance the analysis and to provide broader inference about bird populations.

The priority for analyses of occupancy is for the Sonoran Desert Network, where the longest periods of consistent data collection under this protocol has occurred. In addition to evaluating the reliability and feasibility of SODN, these analyses will enable us to better explore how to synthesize data into a comprehensive report for each area. Although the priority will be for SODN, a sample from each network will be analyzed for occupancy using a range of species from common to rare in order to inform our sampling.

The analysis of density will focus on the most common species for which there are sufficient detections to enable estimates. Estimates of density will be based on distance sampling to explicitly account for detectability of individuals of a species through estimation of a detection function. The NMSU will use appropriate software and techniques to estimate and to identify appropriate detection functions and level of truncation, grouping and use of covariates. As for occupancy, the priority for analyses of density will be for the Sonoran Desert Network, although a sample should be analyzed for density in the other two networks.

The NMSU will summarize the analysis results in a brief report, including any recommendations for changes in our sampling that might improve our overall bird monitoring effort. In addition to this report, the NMSU will provide any files or software code used in the analyses.

RECIPIENT INVOLVEMENT

Lead the analysis of extent landbird data from selected parks of the Sonoran Desert, Chihuahuan Desert, and Southern Plains Network to address the following monitoring design questions:

1. How efficiently can we estimate the proportion of sites occupied by a given species given our current sampling approaches? How do park size, stratification, and species abundance (rare vs. common) affect our results?
2. Can we effectively estimate trends in density for individual species over biologically-meaningful time scales with our approach?

NATIONAL PARK SERVICE INVOLVEMENT

Substantial involvement on the part the National Park Service is anticipated for the successful completion of the objectives to be funded by this award. In particular, the National Park Service will be responsible for the following:

NPS staff will be responsible for all aspects of data management, quality assurance/quality control, and data queries. NPS has outstanding in-house expertise in data processing and management that is directly pertinent to the project. NPS and FWS staff will work with the NMSU to provide guidance and support for all aspects of the project including the interpretation of results, report writing, and data interpretation at the scale of individual parks. Finally, NPS will be responsible for report editing, peer review, and eventual publication of the results in the NPS Natural Resources Publication Series.

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR SINGLE SOURCE POLICY REQUIREMENTS

Department of the Interior Policy (505 DM 2) 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, and for which competition would have a significant adverse effect on the continuity or completion of the activity;
- (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.

The National Park Service did not solicit full and open competition for this award based the following criteria:

(2) CONTINUATION

SINGLE SOURCE JUSTIFICATION DESCRIPTION:

THIS IS A NOTICE OF INTENT TO AWARD

This is a Task Agreement (P14AC01193) under Cooperative Agreement (H2370114000) in the amount of \$33,000.00 with a period of performance from date of award until 09/01/2015.

"This proposed project between New Mexico University and NPS is authorized to go through the Desert Southwest CESU at the negotiated overhead rate of 17.5% because it passes the test of substantial involvement by the NPS, public purpose and consistency with the mission of the CESU Network".

Also, on the SF 424 forms that the partner sponsored programs office fills out for each project, requires a CFDA number - 15.945, which is the number associated with the CFDA Title: COOPERATIVE RESEARCH AND TRAINING PROGRAMS - RESOURCES OF THE NATIONAL PARK SERVICE (CESU).

STATUTORY AUTHORITY

NPS enters into this Agreement pursuant to:

- A. 16 U.S.C. §1g authorizes the NPS to enter into cooperative agreements that involve the transfer of NPS appropriated funds to state, local and tribal governments, other public entities, educational institutions, and private nonprofit organizations for the public purpose of carrying out National Park Service programs.
- B. 16 U.S.C. §1a-2(j) Cooperative research and training programs authorizes the NPS to enter into cooperative agreements with public or private educational institutions, states, and their political subdivisions, for the purpose of developing adequate, coordinated, cooperative research and training programs concerning the resources of the national park system. Pursuant to such agreements, the cooperator may accept from or make available to the NPS technical and support staff, financial assistance for mutually agreed upon research projects, supplies and equipment, facilities, and administrative services relating to cooperative research units as the Secretary deems appropriate (research projects subject to Federal Acquisition Regulation excluded).
Modified 5/31/05 – Agreement Handbook Memorandum Number 2
- C. 16 U.S.C. §5933 Cooperative agreements. The Secretary is authorized and directed to enter into cooperative agreements with colleges and universities, including but not limited to land grant schools, in partnership with other Federal and State agencies, to establish cooperative study units to conduct multi-disciplinary research and develop integrated information products on the resources of the National Park System, or the larger region of which parks are a part.