Request for Letters of Interest

Cooperative Ecosystem Studies Units

Project Title: Develop a Species Management Strategy for the Anastasia Island Beach Mouse at Fort Matanzas National Monument, Florida

Background

The Anastasia Island beach mouse (AIBM) (*Peromyscus polionotus phasma*) is a subspecies of oldfield mouse. While its natural range historically stretched for about 50 miles north of the Matanzas Inlet (St. Johns County, Florida), it is currently found only on Anastasia Island, a 14-mile long barrier island whose southern tip is located at the inlet. Its population is largely relegated to two remaining natural preserves- Anastasia State Park at the north end of the island, and Fort Matanzas National Monument (FMNM) at the southern end. Both parks preserve remnants of coastal sand dune ecosystems, the primary habitat required by AIBM. Due to its highly restricted range and vulnerability to hurricanes and coastal development, the subspecies is listed as endangered by the U.S. Fish and Wildlife Service.

Fort Matanzas National Monument, originally proclaimed a national monument by President Coolidge in 1924 to preserve the remnants of a Spanish colonial coquina watchtower, is today a 300-acre park managed by the National Park Service (NPS). A vegetation mapping project delineated 44 acres of dune habitat within the park as of 2015. About a quarter of this dune habitat is located on Rattlesnake Island, a separate island within the park that does not host AIBM. Only approximately 33 acres of park habitat supported AIBM in 2015.

In 2016, Hurricane Matthew severely impacted the coastline of St. Johns County, including FMNM. Upwards of fifty feet of dunes were washed away, while overwash inundated lower lying habitat proximate to the inlet. Hurricanes Irma (2017), Dorian (2019), Ian (2022), and Nicole (2022), in addition to numerous interspersed nor easters, have all exacerbated the continuing erosion of primary sand dunes and backdune habitat. Today, it is estimated that there is no more than 25 acres of quality dune habitat remaining within the Anastasia Island portion of the park upon which AIBM rely.

Goal:

Maximize the chances that AIBM will persist and recover from storm-induced negative impacts by achieving a sustainable population size and habitat within FMNM.

Objectives:

- 1. Assess the current condition and extent of potential AIBM habitat at FMNM.
- 2. Develop a species management strategy for AIBM that will include short and long-term management actions that can be implemented and sustained by park staff without causing unacceptable impacts to other park resources.

Major tasks will include- but are not limited to- remote sensing research, on-site surveying, preparation of a draft strategy for NPS review, and final strategy preparation and submittal based upon NPS comments.

Final Product

Complete a Fort Matanzas National Monument Anastasia Island Beach Mouse Management Strategy.

The species management strategy will be a written document that will assess the current condition and extent of potential AIBM habitat at FMNM and recommends reasonable management actions the park may take in the short and long-term to increase the resilience of AIBM within the park in the face of continuing climate change. Potential management actions that should be researched and evaluated in detail may include, but are not limited to, native species revegetation, beach/dune renourishment, vegetative thinning, and/or species translocation. The overall strategy should be comprehensive and quantifiable in nature.

Funding and Project Timeline

Funds will be released in Fiscal Year 2025. Project cost has been estimated at up to \$100,000. This amount will include the CESU overhead rate of 17.5%. A budget is not requested for the Letter of Interest; it will be requested to the cooperators invited to submit proposals.

Tentative start date for project is December 2024 or January 2025. The period of performance will be determined when the final proposal is selected, and agreement is awarded. It is expected to extend 12 months.

Principal Investigator Requirements

This project requires a principal investigator(s) with extensive experience in habitat assessment and restoration, public land management, and knowledge of T&E coastal species. Specific experience with beach mice and coastal dune habitats is preferred.

Only CESU partners with an NPS Master Cooperative Agreement are eligible to submit Letters of Interest.

Government-Furnished Data/Equipment

Monitoring of AIBM within the park has occurred on a regular basis since 2017, and all published data will be available upon request.

The park operates a ferry boat operation and will work with the selected cooperator to provide boat access to Rattlesnake Island and back for the purposes of completing any site surveys that are deemed necessary as part of the project.

Letters of Interest

Letters of Interest (LOI) should be sent to the e-mail address in the Contact section. A panel of NPS personnel will review the LOI's and select the top candidate(s) for full proposal development.

The LOI should describe your research interest in the project, similar past studies you have participated in, your proposed approach for conducting the research, and any additional relevant experience. Please include your name, affiliated institution, and contact information. Page limit is four pages, and curriculum vitae/resumes for key personnel can be submitted as attachments.

The deadline for responding to this request is September 30, 2024.

Evaluation for Letters of Interest

Based on a review of the LOI's received, investigators will be invited to prepare a full study proposal, schedule, and detailed budget. Letters will be evaluated based on the following criteria and scoring:

- 1. Soundness and validity of the proposed approach for meeting project objectives (15 points maximum)
- 2. Demonstrated experience studying coastal habitats and T&E species (10 points maximum)
- 3. Knowledge of NPS or other federal/state land management policies (5 points maximum)

Contact

Responses to this request for LOI's should be directed before the closing date to Kurt Foote (kurt_foote@nps.gov). Additional questions may be answered by contacting Kurt Foote, Natural Resource Management Specialist, Fort Matanzas National Monument at 904-663-2614.