

United States Department of the Interior

National Park Service

Midwest Region 601 Riverfront Drive Omaha, Nebraska 68102-4226



Midwest Regional Office, National Park Service

Request for Statements of Research Interest (RSOI) Deadline for responding with your letter of interest is <u>July 16, 2018</u>

Seeking Research Partners to Investigate Ecological Relationships and Processes Following Wolf Introduction in Isle Royale National Park

Funding is <u>not available</u> through this Request, but Park housing, logistical support, and other in-kind resources may be available to facilitate investigations that address park information needs.

The National Park Service relies upon sound science to assist management decision-making in support of our Mission to preserve "unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations." By facilitating research in parks, we obtain this needed information and also advance scientific understanding and education across disciplines. Working with university and other research partners and students allows us to train the next generation of stewards in the process of learning.

<u>Isle Royale National Park</u> is a unique example of a wilderness that offers a "living laboratory" to better understand ecological dynamics. The National Park Service has recently completed an <u>Environmental</u> <u>Impact Statement to Address the Presence of Wolves at Isle Royale National Park</u>. The current wolf population at Isle Royale National Park is <u>two animals</u>. The phased introduction of wolves, expected to begin between fall 2018 and winter 2019, is likely to have strong ecosystem impacts due to the potential effect of wolves on herbivorous prey species such as moose and beaver. Wolf introduction presents a rare opportunity to explore ecological hypotheses relating to trophic relationships and species interactions, especially predator-prey relationships and the influence of top-down drivers on herbivory and plant communities. Additionally, with the introduction of several individual wolves, the "founding" population will be known, and with whole genome sequencing, the success of re-establishing the population can be tracked overtime with respect to genetic health. There are numerous lines of research that could be explored given this unique opportunity and we are willing to consider many different research interests. *We are accepting research ideas pertaining to any ecological topic related to wolf introduction.*

In addition to broad ecological studies, we have identified several park information needs. These include: 1) Review of moose survey methodology; 2) Genetic studies of wolves, including genetic vs. ecological fitness, 3) Genetic and/or health studies of moose; and 4) Beaver herbivory and predation on beaver. For more information on park management information needs, please contact <u>Mark Romanski</u>.

Request for Statements of Interest

We are seeking statements of interest from researchers with existing or likely research projects that will advance scientific understanding of ecological processes and/or ecosystem changes related to wolf introduction at Isle Royale National Park. Although *research funding is not available*, the Park is able to provide the selected partner(s) with in-kind resources which may include park housing and logistical support to facilitate the work. Submissions will be evaluated based on the following selection considerations:

- 1) **Scientific merit**, the likelihood of the proposed hypotheses to advance scientific understanding of ecological concepts and theories;
- 2) **Technical strength**, the strength of the relationships between proposed research and stated hypotheses;
- 3) **Management application**, the value of the anticipated information for informing management decisions;
- 4) **Technological applications**, the appropriate use or development of innovative technological approaches for data collection or processing;
- 5) **Researcher qualifications**, the qualifications and demonstrated history of the researcher(s) in completing the work; and
- 6) **Educational value**, the expected contribution towards the education of students and/or the public;
- 7) **Feasibility**, the likelihood that sufficient resources will be available to complete the project.
- 8) **Wilderness ethic,** the proposed research demonstrates sensitivity to Isle Royale National Park being federally designated wilderness.

The NPS anticipates that this project will begin in Fall 2018 or Winter 2019.

Submission Instructions

Statements of Interest (SOI) are needed by July 16, 2018 and should be sent to Mark Romanski (<u>Mark_Romanski@nps.gov</u>). Responses to this RSOI should address the eight selection criteria listed above. Responses to this RSOI should also list examples of relevant past work that demonstrates capabilities in the proposed area of research. <u>Please limit your response to 5 pages</u>, though supporting information such as figures or publication lists will not be counted in the page limit. Please include:

- 1) Statement of Interest as described above (5 pages);
- 2) CV of Principal Investigator(s)

After review of the RSOI responses, a preliminary suite of SOIs will be selected and notified to develop final study plans within 30 days for approval and implementation.

<u>Contact</u>

Questions, and well as responses of interest, should be directed by midnight on <u>July 16, 2018</u> to Mark Romanski, ISRO Division Chief – Natural Resources (<u>Mark_Romanski@nps.gov</u>).