## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Yellowstone Trumpeter Swan Conservation Assessment Discipline: Natural Resources Type of Project: Education Funding Agency: National Park Service Other Partners/Cooperators: Montana State University Effective Dates: 8/31/2007 - 12/31/2009 Funding Amount: \$37,400

## Investigators and Agency Representative:

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Project Abstract: The National Park Service, Yellowstone Center for Resources, will partner with Montana State University, Big Sky Institute to carry out a data analysis and expert workshop on conservation of Trumpeter Swans in the Greater Yellowstone Ecosystem. A 74-year data set exists on trumpeter swan productivity (1931-2004) and a 19-year data set exists on weekly winter survey transects on relocations of resident swans, productivity, survival, and mortality (1986-2004). Combined with existing spatially explicit wetland distribution and long-term weather data, these are the most extensive long-term Trumpeter Swan population and habitat ecology data in existence. We propose to conduct a comprehensive quantitative assessment of these data and produce estimates of the probability of near-term local extirpation (see details below). Additionally, we will conduct a Conservation Assessment workshop that brings together a group of managers and biologists to discuss the state-of-the art understanding of the ecology of the Yellowstone trumpeter swan and conduct a modified Delphi analysis to identify threats to the persistence of the Yellowstone trumpeter swan. We will convene the workshop at the Youth Conservation Corps dormitory and meeting hall at the park's Mammoth HQ. The workshop will include selected presentations by collaborating researchers and park staff on the history of this population and recent advances in our understanding of population and habitat ecology; group discussions, a field trip to key swan nesting locations, and a summary closing. The workshop will be facilitated to ensure an interactive environment and allow all participants to share fully their perspectives and experiences. A steering committee will produce a Final Report of the workshop that will be published in a full-color paperback format by the Yellowstone Center for Resources.

The Final Report will include a summary suite of recommendations for scientific investigation and a Conservation Action Plan for the park and its partners. This report will include mitigation strategies that could prevent local extirpation of trumpeter swans in Yellowstone.

Outcomes with Completion Dates: A detailed set of products and budget will be developed by the end of CY2007. The data analysis and expert workshop will be completed by the end of 2009.

**Keywords:** Trumpeter swan, expert workshop, conservation assessment, Yellowstone National Park, Montana State University

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