

**Final Report to
NS Department of Natural Resources
Species at Risk Conservation Fund**

Prepared by Sue Abbott, Bird Studies Canada
15 August 2010

Project Title: Informing management planning of critical habitat for endangered Piping Plovers in Nova Scotia.

Project Goal:

To inform management planning for all beaches in Nova Scotia that will be designated critical habitat for endangered Piping Plovers in the proposed Recovery Strategy for Piping Plovers (*Charadrius melodus melodus*) in Canada.

Project Objectives:

1. Understand DNR Parks and Recreation management planning process for beaches in Nova Scotia and the types of data (and other information) needed to inform this process in a meaningful way.
2. Engage appropriate members of DNR, the NS Piping Plover Working Group and other Piping Plover recovery experts in developing a prioritization scheme for critical habitat sites in Nova Scotia.
3. Identify priority breeding sites for endangered Piping Plovers for habitat managers and park planners in Nova Scotia using best science and current knowledge.

Work Completed:

Objective 1:

- Presented the outline of the habitat prioritization scheme to DNR Parks and Recreation management planning staff to discuss this project and to better understand their planning needs.
- Incorporated feedback and made plans to follow-up on integrating new information into future iterations of the prioritization scheme (see next steps).

Objective 2:

We successfully engaged the following experts and potential users in the development of the prioritization scheme:

- DNR's Beach Ecologist, four Park planning staff, and Species at Risk biologist.
- NS Piping Plover Working Group members (including provincial and federal enforcement officers and species at risk biologists).
- Environment Canada's CWS biologists, including a National Wildlife Areas planner, seabird biologist, and three species at risk biologists.

We also shared an outline of the prioritization scheme with over 50 NS DNR biologists and technicians.

Objective 3:

- We gathered all available data to assess 52 critical habitat sites.
- We assessed each site's history of Piping Plover use; productivity (fledglings produced); amount of available habitat; threats and other issues that may impact habitat quality.
- We developed a matrix toward prioritizing critical habitats that can be adapted to include new data as it comes available.

Achievements and Lessons Learned:

The funds that we received from NS DNR Species at Risk Conservation Fund allowed us to initiate this important project that will help inform future conservation planning of 52 critical habitat sites for Piping Plovers in Nova Scotia. Each critical habitat site has unique attributes that are influenced by physical, biological and anthropogenic factors. We have successfully integrated current knowledge in the prioritization scheme, but we recognize that there are gaps in data for all 52 sites. The end result of this project is an excellent first step towards prioritizing sites, but the process is not complete. The prioritization scheme is a living tool that can incorporate new data as it becomes available. We recognize that there are next steps to be completed. There are excellent opportunities to display this information visually through maps. We hope to explore mapping possibilities in the near future.

Next Steps:

- Meet with Natural Resources Canada geomorphologist, Bob Taylor, and NS DNR beach ecologist to discuss next steps toward improving metrics that are good indicators of habitat potential.
- Complete next iteration of prioritization scheme that integrates geomorphological characteristics of beaches.
- Explore funding opportunities for mapping of critical habitat sites based on prioritization.
- Work with Environment Canada's CWS to explore their beach habitat matrix.
- Share prioritization scheme with habitat managers for further feedback.