

# SHARING THE SPACE: SPECIES AT RISK HABITAT CONSERVATION IN NOVA SCOTIA



FINAL REPORT TO  
NOVA SCOTIA HABITAT CONSERVATION FUND  
*JUNE 2013*



## THE PROJECT

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In Nova Scotia, a high proportion of COSEWIC-listed species at risk occur on, in some cases exclusively, private land. Private land conservation, improved land stewardship by private landowners, and the education of landowners and the general public are needed to save these species from extinction. This project directly protected habitat for species at risk, and engaged landowners and the public in species at risk conservation.

Activities included land securement at three separate sites of species at risk habitat, landowner outreach, public education about species at risk and their habitat, four public events, two sessions of volunteer training, communication with the media, social networking, and a major fundraising and awareness building campaign. The project addressed threats to SAR by permanently protecting critical habitat, increasing awareness of the need for habitat conservation, and engaging the public in SAR recovery, which are all key Recovery Plan priorities.

## PROJECT GOALS

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The goal of this project is two-fold:

- a) to promote habitat conservation on properties with SAR habitat by increasing Nova Scotians' knowledge about SAR and private land conservation. We will do this by working with community organizations and others who work directly with – or are – private landowners; and
- b) to build upon previous prioritization work of critical, unique, or high value SAR habitat that are potential for conservation through purchase or easement. We seek to have a robust, up-to-date, science-based, and informed by landowner outreach system of prioritization for properties with SAR habitat. We require this for existing NSNT focus species as well as potential new ones.

Through this project, we will be working with experts, partner organizations, landowners, and the general public to promote the concept of sharing the space – with nature and each other.

## PROJECT OBJECTIVES

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The objectives of the project are to:

- raise awareness of Nova Scotia's at risk and rare habitats and wildlife through public events, distribution of interpretive materials, and other media. In some cases we may be able to partner with other organizations on these activities, as a result of relationships built and information shared at the aforementioned information sessions;
- encourage community engagement and volunteerism by training and supporting new ACPF volunteer monitors. The Nature Trust has worked with MTRI and Parks Canada to redevelop the ACPF Volunteer Monitoring Program from previous years to increase collaboration, utilize existing resources and reduce overlap, and respond to the needs of the Recovery Team. Volunteers will require concerted resources for training in 2012 (MTRI and Parks Canada will provide in-kind support for the project towards implementation);

- build upon results provided by a GIS contractor hired in an earlier year for a GIS-based prioritization “Greenprint” of important properties for Blanding’s turtle and Eastern ribbonsnake conservation. These results require analysis and scrutiny and are the first step in a larger reorganization of our prioritization protocol; and
- undertake extensive prioritization work for potential properties for securement, building upon the “Greenprint” and utilizing all available resources, including SAR Recovery Teams and other experts, conservation partners (such as the Mersey Tobeatic Research Institute, Bird Studies Canada, and Acadia University), GIS data, historical records, etc. This work is needed to enhance the SAR project’s protocol for our process of prioritization, particularly as we plan to, when appropriate, expand into SAR we have not previously focused on (e.g. wood turtle, piping plover, boreal felt lichen).

## PROJECT ACTIVITIES AND ACCOMPLISHMENTS

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### *Activity 1 - Hold two free, guided walks with a SAR educational focus (e.g. a guided walk along a shoreline with SARA listed SAR present).*

The year was an extraordinary one. In 2012, the Nature Trust protected nine new sites conserving unique and sensitive features across the province, including over 200 acres of habitat for endangered species in southwest Nova Scotia. It was also a banner year in terms of Nature Trust outreach and education events. Your support made this possible.

We held several guided walks to/in SAR habitat, to promote SAR conservation and stewardship. We held a training session for our ACPF volunteer monitoring program (including ACPF identification) on a site with SAR habitat. Participants were recruited to our three field-based volunteer programs (we recently launched a new, bird focused program). Brochures and publications about land conservation were distributed. We launched a major fundraising campaign to support the protection of the McGowan Lake Blanding's turtle site, which attracted over 300 individual donors and considerable media attention. We also promoted our project through social media (we have over 1,000 followers on Facebook) and our website.

One of our most successful events was a two-day “south shore adventure” in southwest Nova Scotia.



On August 11th we led a guided hike of the Jack and Darlene Stone Conservation Land, along the Tusket River. The first day was a wet one, but we donned our rain gear and splashed along. We passed by old foundations from the property’s previous life as a homestead and farm and treaded through an old plantation of white pine to the water’s edge, where we were treated to the last of the summer’s very early blossoms of several endangered flowers, including the Plymouth gentian and pink coreopsis. We also visited a newly discovered Maleberry shrub (the only documented location in Canada), which towered ten feet above us, and visited a newly discovered population of endangered water penny-wort. This is only the third known population of penny-wort in all of Canada!





On Sunday August 12, we led 20 intrepid adventurers, many from the surrounding area, into the Baccaro bog to see the endangered plant, the thread-leaved sundew. In the afternoon, staff and volunteers from Bird Studies Canada met up with us at the Crow Neck Beach Conservation Lands, a conservation site we protected in 2011. A few more participants also joined our large group, and we led a shorebird walk along the beach where we saw an adult and juvenile endangered piping plover – a first for many of us to see – and other migratory shorebirds. As you likely know, Crow Neck Beach provides critical habitat for the nationally endangered piping plover. Bird Studies Canada has described this area as one of the most important breeding grounds for piping plovers in the province, as it supports 14% of 50 breeding pairs. We believe the event was a success – participants learned from experts and from each other about the biodiversity of the area, about the work of partner organizations and individuals in protecting it, and about the benefits of conservation. We made some valuable connections with people from the community that we will continue to foster. We also introduced our several volunteer programs, and had some volunteers present at the event to provide their perspective, to recruit new volunteers.



We also partnered with the Nova Scotia Wildflora Society for a guided walk on the Jack and Darlene Stone Lands on August 10, to see the ACPF and Maleberry, followed by a visit to nearby property owned by the Tusket River Environmental Protection Association on Gillfillan Lake.



*Activity 2 - Coordinate new and existing Atlantic coastal plain flora volunteer monitors for high priority at risk ACPF sites. In cooperation with MTRI and Parks Canada (Keji), the program has been developed from previous years and will require all volunteers be trained in the new protocol. There will be at least one ACPF identification training session held during the summer. Staff will accompany each volunteer monitor to their assigned site once.*

The 2012 season brought together nature enthusiasts in a united effort to monitor ACPF in southwest Nova for a successful year of the ACPF volunteer monitoring program. Staff from NSNT, MTRI, and Parks Canada (Keji) led two volunteer training sessions, on Ponhook and Wilsons Lake, where volunteers learned to identify at-risk and other unique ACPF species and to assess the quality of their habitats.

Volunteers were assigned to one or more sites known to have ACPF. Permission was received from landowners for monitors to work on their properties. Between July and September, volunteers estimated the abundance of particular at risk or rare ACPF along the shoreline or in the wetland. Volunteers completed data sheets and submitted them to the Nova Scotia Nature Trust.

Sixteen volunteers worked individually or in teams to monitor at risk ACPF along the shorelines of lakes, rivers and in wetlands in southwest Nova Scotia and contributed over 100 hours of volunteer time. Sixteen ACPF sites were monitored. These sites occurred on the Medway River and the following lakes: Ponhook, Molega, Cameron, Gillfillan, Fancy, Snare, and Moody.

Data were recorded on the following species: Redroot, Goldencrest, Buttonbush, Northeastern bladderwort, Long's bulrush, Brookside alder, Purple bladderwort, Virginia marsh St. John's wort, Southern bog clubmoss, Yellow eyed grass, Pipewort, Grassleaf rush, Swamp milkweed, Blunt manna grass,



Golden pert, Screwstem, Virginia meadow beauty, Phragmites and Coastal plain joe pye weed. Data were recorded on the following activities (or occurrences) potentially affecting habitat quality: all terrain vehicle (tracks and drivers), animal grazing and increased algae and grass.



*Activity 3 - Reconsider and restructure the prioritization protocol to more effectively use the resources available, including SAR Recovery Team and other expert input, GIS data, historical records, landowner contact outcomes, etc. into one data base. Apply this database to GIS. Through past efforts we built a basic GIS planning and prioritization tool, but further work is needed to integrate this approach into our outreach efforts, to secure expert input on modeling results, and field test the model.*

We synthesized all of our resources to identify priority levels to our priority properties, entered all priority properties into a property database and are able to apply the database to GIS. These efforts have improved our organizational capacity and effectiveness in targeting landowners for securement, in tracking history of contact, and in otherwise meeting the needs of our securement process.

In addition, an improved science-based prioritization continues to be a priority for the NSNT. Experts were consulted on GIS-based prioritization, and the model continues to be refined. The NSNT continues to work with recovery teams and experts on each species to identify high priority sites for protection and building this information into the GIS-based conservation planning tool, particularly as information about species and landowners evolves.

### ***In Addition: Property Securement and Protection***

This was a very successful year for land securement, with three properties protected!

We purchased a 66-acre site on McGowan Lake, providing critical habitat for the Eastern ribbonsnake and nesting habitat for the Blanding's turtle.

We received a donation of an 85-acre site providing critical habitat for the Eastern ribbonsnake as well as several species of at risk ACPF, including redroot, and the only population of northeastern bladderwort on the lake. Other SAR have been seen such as Blanding's turtles and snapping turtles. This property is next to

an existing NSNT protected property on Cameron Lake, as well as part of the Ponhook Lake Nature Reserve.

We purchased an additional 23-acre property along Gillfillan Lake which provides habitat for the Plymouth gentian, adding onto existing NSNT conservation lands, and creating a larger network of protected areas with partners such as the NCC, TREPA, and the government of NS.



Reduction of human-caused threats and protection of local habitat is critical for the preservation of the ecological integrity and biodiversity of the region's natural heritage. Engaging local community in a variety of ways is an essential component to ensuring this natural heritage is protected. Funding from the NS Habitat Conservation Fund was instrumental in engaging members of the public, volunteers, and conservation land owners, in actively working to save these imperiled species.

We are deeply grateful for your support of this work, and look forward to partnering with you on future conservation projects.