LONG RANGE BIODIVERSITY

Protecting the biodiversity of the Long Range region

Newsletter
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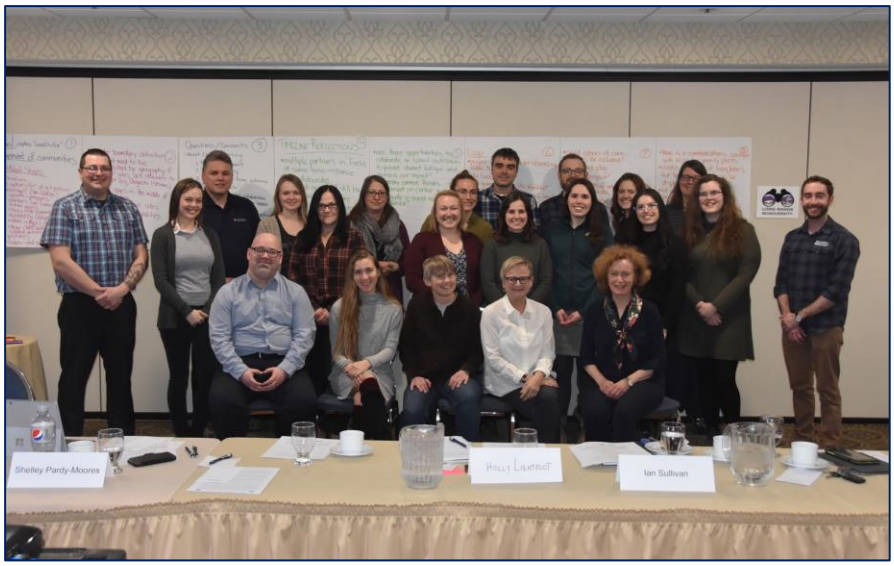
Long Range Biodiversity is a new project that aims to protect and aid in the recovery of **species at risk and their habitats in Western Newfoundland**—the most biodiverse region of the Province. With leadership funding from Environment and Climate Change Canada (ECCC), over the course of 4 years (2019-2023), project partners will:

- Improve conservation prospects for 19 federally listed or COSEWIC assessed **species at risk** and 34 benefitting species.
- Improve prospects for protection and/or restoration of important **habitats** for species at risk.
- Strengthen and improve coordinated multi-partner action.
- Engage local communities and citizens, including members of First Nations.

Planning Workshop Paves the Way for *Recovery Action for Species at Risk in Western Newfoundland*

Researchers, project managers, and stewardship coordinators gathered in Corner Brook on March 4th at a planning workshop for the Recovery Action for Species at Risk in Western Newfoundland project. Led by the non-profit organization, Intervale, the workshop brought together core and supporting partners to build a roadmap for the protection and recovery of species at risk (SAR) and key ecosystems throughout Western Newfoundland.

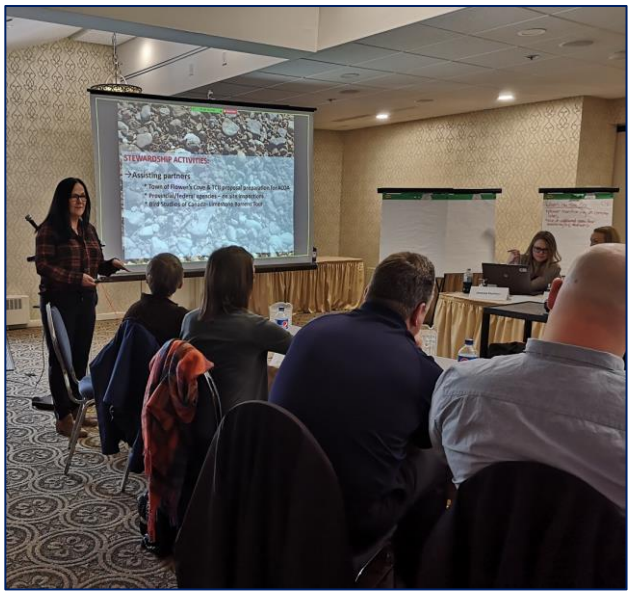


Partners came together at the March 4th planning workshop.

The project engages municipalities, Indigenous organizations, businesses, and individuals in on-the-ground action to improve outcomes for SAR, habitats, and communities. The workshop highlighted the central role that collaboration plays in the work of species recovery.

Staff from core partner organizations Qalipu First Nation, Nature Conservancy of Canada, and Memorial University of Newfoundland, along with Intervale, presented on activities as diverse as bat monitoring, Piping Plover nest protection, and limestone barrens habitat restoration. The afternoon was packed with presentations

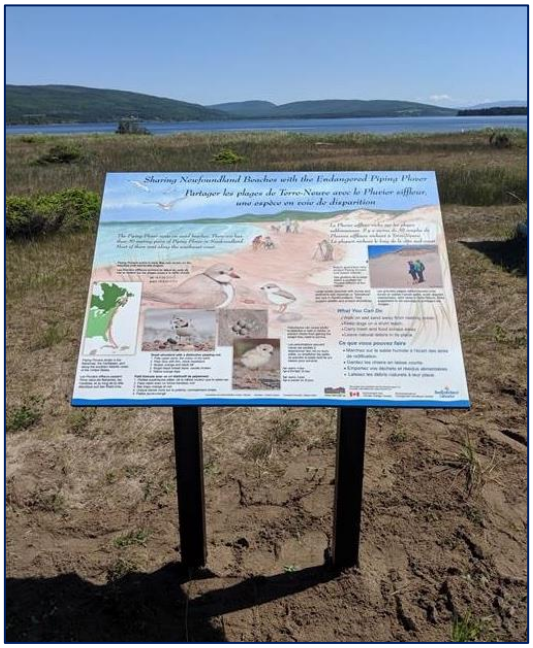
and remarks from supporting partner organizations, including the NL Dept. of Fisheries and Land Resources; Dept. of Tourism, Culture, Industry, and Innovation; Parks Canada; and Environment and Climate Change Canada. Together, participants identified key threats and action strategies for species utilizing forested areas, beaches, and barrens of western Newfoundland. Overall, participants found the workshop productive and thought-provoking, as they left feeling energized for the work ahead. A sincere thank-you to all who attended!



Dulcie House described recent activities to promote protection of the limestone barrens.

Intervale and Qalipu Take Piping Plovers Under Their Wing

From late April to mid-August, the beaches of Newfoundland's southwest coast are home to the Piping Plover, a small migratory shorebird listed as endangered by both Canada and Newfoundland and Labrador. The shores from Port aux Basques to the Codroy Valley in particular are critically important habitat for plovers nesting and raising their young. Throughout their breeding range in Newfoundland, Piping Plovers face numerous threats, including human disturbance and predation, but with the help of non-profit organizations, provincial park staff, and enforcement officers, these nesting areas are being monitored and protected. Interested citizens also play a role as beach guardians, helping to identify threats and keeping watch that plovers remain undisturbed.



One of the interpretive panels installed at three provincial parks to encourage best practices by beach users to protect nesting Piping Plover.

What Was Accomplished

April 2019 - March 2020

17
Piping plover breeding pairs monitored

55
Terrestrial mammal and bird species at risk presentations

851
Students receiving species at risk presentations

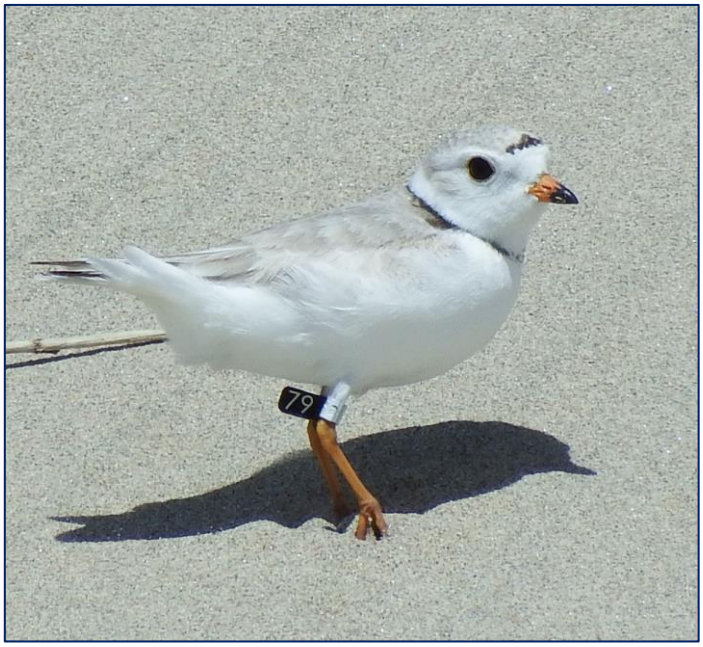
55
Volunteers for bat and marten monitoring

110
Vegetated plots established on restored limestone barrens

900
Braya longii seeds planted

472
Worn-out nest shelters removed to improve habitat

Since 2013, Intervale has been monitoring plover nests on several key Piping Plover beaches and documenting threats with each beach visit. Led by Coordinator Russell Wall, in 2019 Intervale staff and interns were able to complete 116 beach survey forms and report on the most important threats facing beaches of southwest Newfoundland. Meanwhile, in the Bay St. George area, valuable monitoring data were collected that same season by technicians from Qalipu, including 40 surveys completed for Sandy Point and Stephenville Crossing. One of the main threats to breeding Piping Plovers and chicks that the teams identified is disturbance caused by ATVs. Other threats include accidental nest disturbance by walkers or by dogs off leash.



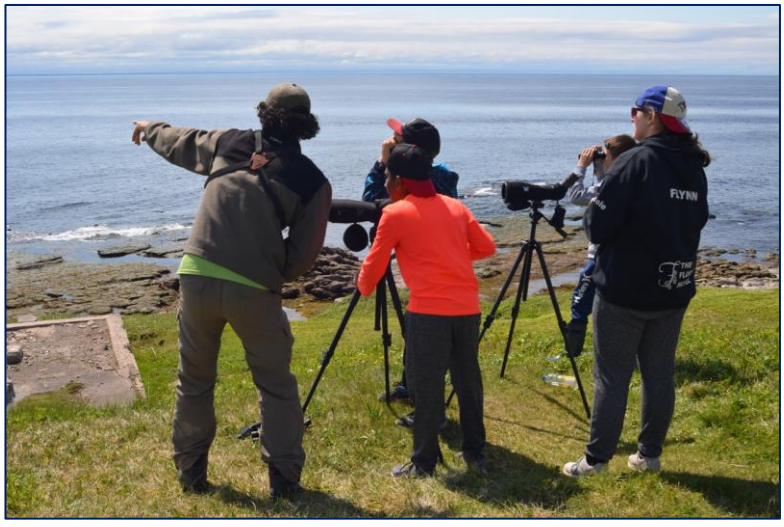
Piping Plover #79 was banded in 2017. It nested on Big Barachois Beach in 2018 and J.T. Cheeseman Provincial Park in 2019.

Provincial and federal departments are continuing to support a range of protection, outreach, and research measures. Working with the NL Department of Tourism, Culture, Industry and Innovation, Intervale created interpretive panels that are being installed in three provincial parks. A banding and re-sighting program coordinated by biologists with Environment and Climate Change Canada has revealed important information on the migratory routes and wintering areas of Piping Plover, with the intention of gaining a better understanding of the threats faced by plovers outside of their breeding range. It is hoped that such information will help solve the mystery of why fewer Piping Plover have been returning to Newfoundland during the past ten years as compared with the previous decade.

Citizens can play an important role in Piping Plover protection and recovery by following best practices when visiting areas where Piping Plover breed: walk on wet sand, keep dogs on a leash where they are allowed, and do not leave garbage that can attract predators.

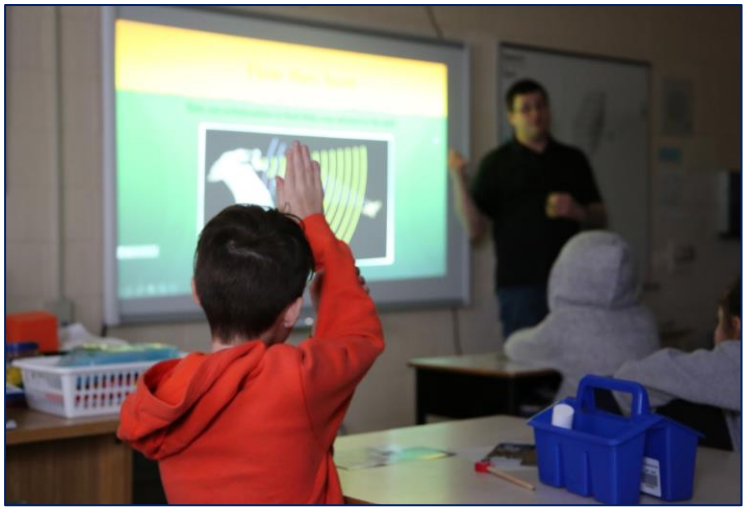
Environmental Stewardship for Students of Newfoundland and Labrador

Between June 2019 and March 2020, more than 850 youth from Port aux Basques to southern Labrador received instruction in species at risk conservation, as Intervale staff and four interns from the Quebec-Labrador Foundation gave a total of 55 presentations to schools and youth groups.



Birding instructor Thierry Grandmont (QLF) taught youth at Point Amour light station skills in monitoring seabirds.

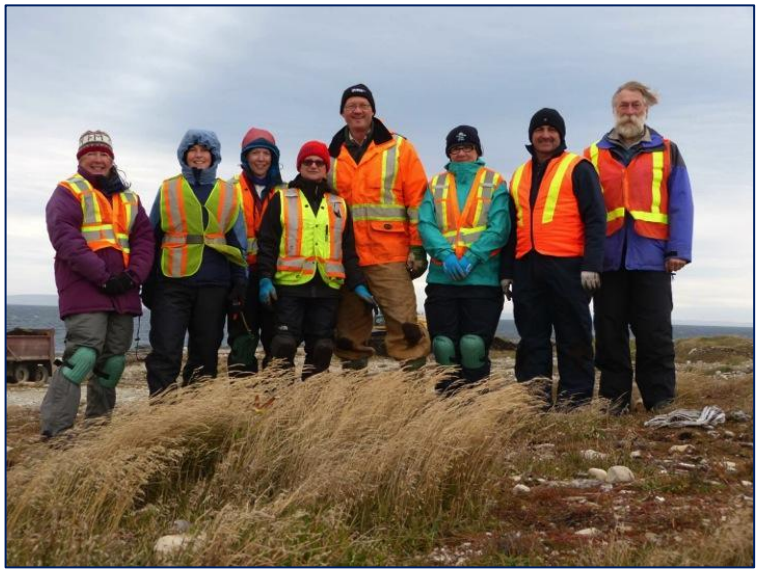
At the spectacular Point Amour light station, which overlooks the Strait of Belle Isle, 38 youth developed skills in seabird and shorebird identification and learned about threats affecting many bird species that migrate past their shores. In schools from the Great Northern Peninsula to the Codroy Valley, students learned about actions they can take to help endangered Piping Plover, forest birds, bats, and the Newfoundland marten. In this rural region of the province, youth are familiar with their hunting and trapping heritage. They are passionate to learn about the wildlife that inhabit the beaches, forests, or barrens of their local area. The conservation of many species will depend on their actions and decision-making in the future.



Eric Bennett (Intervale) gave many school presentations on bats, marten, and forest birds.

Restoring the Limestone Barrens

The Limestone Barrens Species at Risk Recovery Team and partners have been busy at work restoring an abandoned quarry site on the Great Northern Peninsula, near Flower's Cove. The area, once littered with an old rock crusher, hummocks of churned earth, and even fishing nets and old snowmobiles, is now on the road to recovery thanks to the tireless efforts of team



The Limestone Barrens Recovery Program Restoration Team at the Sandy Cove restoration site.

members like Dulcie House, program manager of the Limestone Barrens Recovery Program, and Dr. Luise Hermanutz, a retired biology professor at Memorial University of Newfoundland.

The Northern Limestone Barrens are a globally threatened ecosystem and are crucial habitat for species at risk such as Long's Braya, Fernald's Braya, and Barrens Willow. These and many other rare plants are only found on the limestone substrates of the Northern Peninsula, which has long been threatened by human activities such as ATV use, quarrying, and development. The unique limestone barrens, which contain plants found nowhere else in the world, make restoration projects like this particularly important to the plants' survival. Protected areas such as Sandy Cove, Watts Point, and Burnt Cape Ecological Reserves are also important in a long-term strategy for the protection of rare plant habitat.

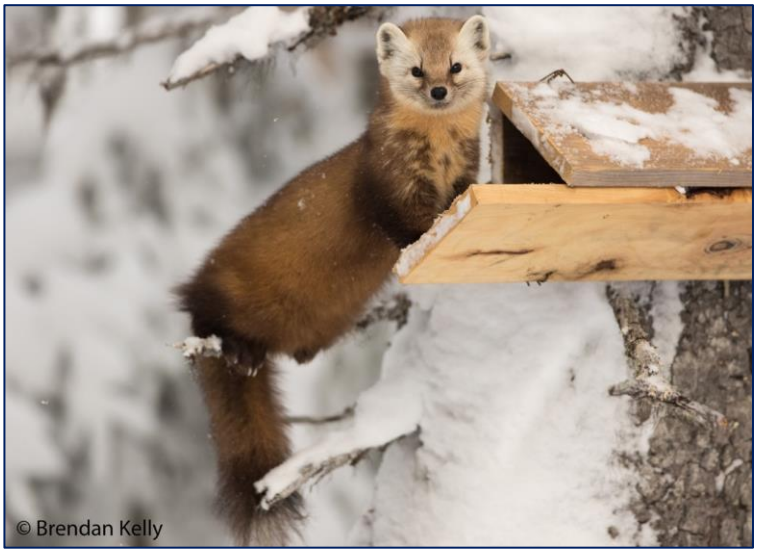
Along with the help of many graduate and undergraduate students, community members, volunteers, and youth, the team now has a solid understanding of the "do's and don'ts" of

limestone barrens restoration. A former graduate student and now restoration expert on the project, Corrina Copp, experimentally figured out which type of substrate would be best to re-introduce Braya plants. By examining old aerial photographs, she reconstructed what the landscape looked like before quarrying. From that work there emerged a depiction of how the landscape should look after it was restored. With the help of local school students, plants were rescued prior to re-landscaping the quarry floor, and then transplanted back onto the site after physical landscaping was complete. After five years the landscape is beginning to resemble the natural limestone barrens before the quarry churned the land. The team is continuing to monitor the plants, keeping track of how well they establish, and tracking possible threats to the health of the limestone barrens' very special Braya plants, such as pests and pathogens that may hinder their survival and reproduction.

The next step for the team is to identify additional sites for restoration. Armed with knowledge from the quarry restoration, they are working to create a priority list for future restoration projects on the Northern Peninsula in partnership with the local communities. This work will continue to help the province and communities protect and care for this incredibly unique and rare ecosystem.

Engaging Citizen Scientists in Bat and Marten Monitoring

Trappers, youth, and other volunteers in western Newfoundland are contributing first-hand to the recovery of the Newfoundland marten by participating in a monitoring program that relies upon a non-invasive technique to capture samples of marten hair.



Newfoundland marten at a hair snag device.

Under the guidance of Intervale's Eric Bennett, volunteers collect samples from constructed hair snag platforms mounted onto trees. The samples are sent to the Dept. of Fisheries and Land Resources in Corner Brook and then to a lab for DNA analysis.

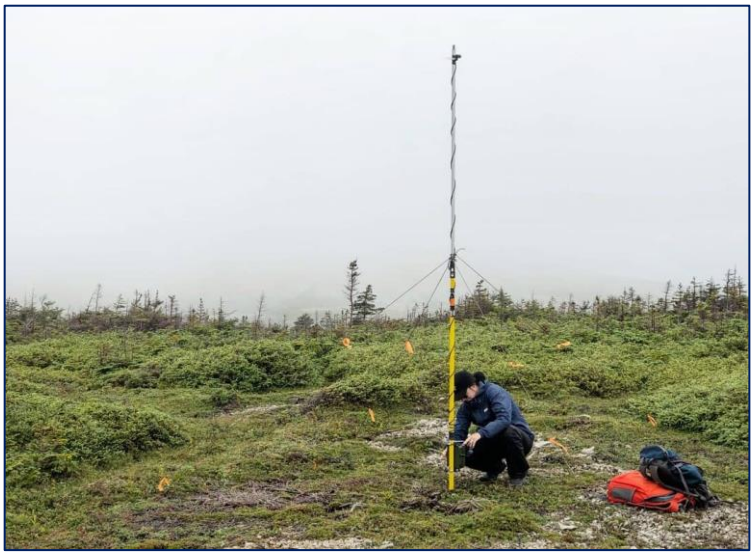
In 2020, 55 volunteers from Port au Port to Main Brook are participating in the program. Along with these volunteers, staff of Qalipu First Nation are collecting samples from 24 hair snags set in forests of the Lewis Hills and Goose Arm areas. Meanwhile, trappers are making an important contribution to marten recovery by following best practices for the use of water-based mink box traps that prevent accidental catch of marten.

The hair snag program has been instrumental in providing essential data to biologists who can now confirm that this threatened population of marten is returning to parts of its historic range in Newfoundland. Thanks to many people participating in this project, the Newfoundland marten has been gaining ground!

A similar approach is being taken to monitor bat species in Newfoundland—through existing volunteer networks and outreach to new partners,

citizens are helping record bat sightings. Eric Bennett has been conducting conversations with cabin owners about Little Brown Myotis, Northern Long-eared Bat, and Hoary Bat. These mammals are often misunderstood and feared by some people due to persistent myths that are associated with bats. However, fear of bats eases when people learn that bats eat insects, thereby helping to protect crops and reduce mosquitos. These conversations help identify important roosting sites and give insight into the spread of white-nose syndrome throughout the island.

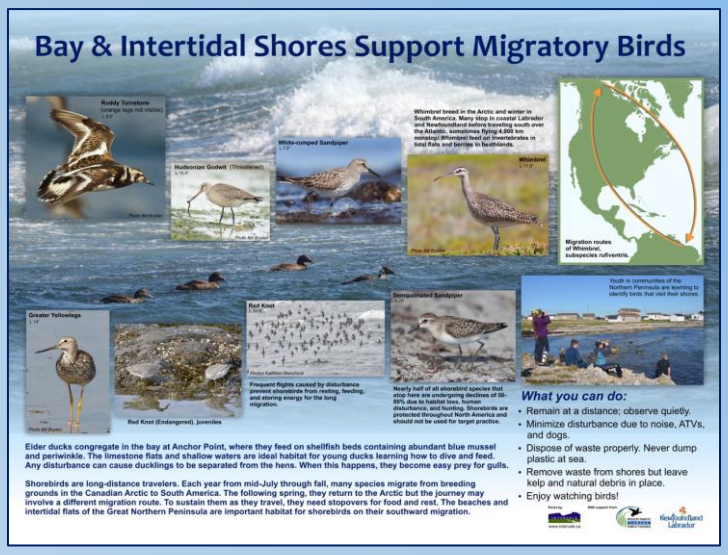
Staff of Qalipu First Nation have been conducting stationary and mobile surveys of bats, following more formal monitoring protocols and using devices that detect the presence of bats. Conservation efforts such as these, involving both volunteer networks and strict monitoring procedures, are helping both martens and bats throughout the province.

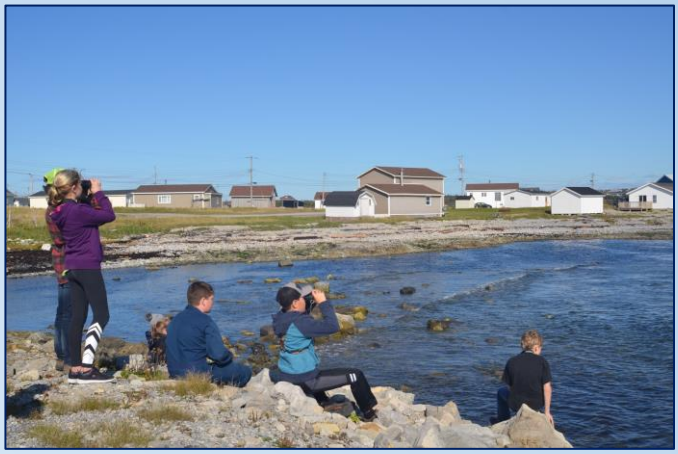


Alyssa Hunter (Qalipu First Nation) installed a bat monitoring site to record sonar emitted from bats.

Shorebirds Need Stopovers

Intervale and the Stewardship Association of Municipalities are working with the Town of Anchor Point on the Northern Peninsula to create awareness about the importance of integrating industrial, recreational, and conservation planning for the working waterfront. An interpretive panel will be installed, which highlights the intertidal beaches as stopover habitat for more than a dozen shorebird species during fall migration.





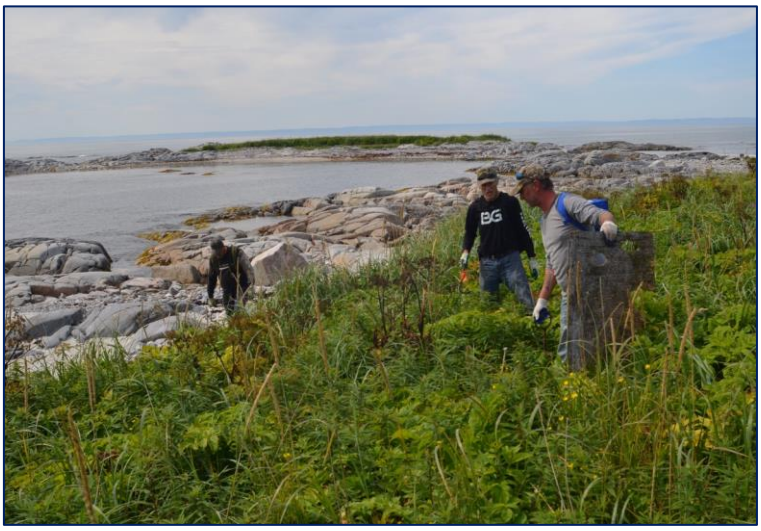
Whimbrel, Ruddy Turnstone, and White-rumped Sandpiper are common on migration, while Red Knot, Pectoral Sandpiper, and Hudsonian Godwit are rarer. Each year, eider ducks congregate by the hundreds on the limestone flats and inshore waters to feed on shellfish. Local youth are learning to identify birds and to appreciate that shorebirds need food and rest on long migrations.

Hunting Guides Restore Eider Duck Nesting Sites

For over 25 years, community groups have been working to restore local breeding populations of Common Eider, a large and beautiful sea duck. One strategy that has proven very popular is the installation of artificial nest shelters, which help prevent egg loss due to predation during the critical incubation period. During the past four decades, over one thousand nest shelters were installed on the Grey Islands and the islands of Hare Bay on the Great Northern Peninsula. Although proven effective, particularly in the early years of implementation, many of these shelters have since fallen into disrepair, causing barriers to the habitat. Biologists from Canadian Wildlife Service and Ducks Unlimited Canada (DUC), determined to take action, approached Intervale to implement a plan for assessment and removal.

Common Eider nest on low, grassy islands off the Northern Peninsula.

In August of 2019, with additional funding from the Newfoundland and Labrador Department of Fisheries and Land Resources and Wildlife Habitat Canada, Intervale organized a team of hunting guides affiliated with supporting partner Tuckamore Lodge on the Northern Peninsula. Building on work conducted in Hare Bay the previous year, the guides travelled to three islands in the Grey Islands group, where they assessed and removed a total of 472 nest shelters. It was a laborious task requiring careful destruction of mounds of debris to prevent the debris from being washed into the sea.



Hunting guides from partner Tuckamore Lodge removed dilapidated nest shelters from Ile aux Cannes in the Grey Islands group.

Similar work is planned for other nesting islands with nest shelters in 2020. Team members will encounter many hazards, but the experience and dedication they bring to their work will contribute substantially to the restoration of eider nesting habitat. This, in turn, will improve the prospect of population recovery for eiders.

The Long Range Biodiversity project is following the provincial Special Measures Order stemming from the COVID-19 pandemic as we strive to meet project objectives within the fiscal year. Do not hesitate to contact us by email or telephone. The well-being of everyone is of utmost importance. Thank you.

We are grateful to the many organizations and individuals who provided financial or in-kind support, including:

This project was undertaken with the financial support of the Government of Canada.
Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.
Canada

Newfoundland Labrador

NATURE CONSERVANCY CANADA

MEMORIAL UNIVERSITY

Qalipu FIRST NATION

And the following:

Birds Canada, Ducks Unlimited Canada, Parks Canada, Quebec-Labrador Foundation, Stewardship Association of Municipalities, Tuckamore Lodge, Wildlife Habitat Canada, and many additional organizations, departments, businesses, forest user groups, and individuals.

Leadership funding is provided by Environment and Climate Change Canada under the Community Nominated Priority Places program.

Photos by (in order of appearance): P.1 Clarence Goodyear; p. 2 Kathleen Blanchard, Russell Wall; p.3 Russell Wall, Kathleen Blanchard; p. 4 Quinn Parker, Luise Hermanutz; p.5 Brendan Kelly; p.6 Jonathan Strickland, Kathleen Blanchard; p.7 Clarence Goodyear, Kathleen Blanchard

Quinn Parker (editor) with Kathleen Blanchard, Eric Bennett, Russell Wall, Luise Hermanutz, and Dulcie House

Intervale is a non-profit organization, incorporated in Newfoundland and Labrador, with a mission to conserve biodiversity, interpret heritage, and promote the integrity of rural livelihoods. For more information, please contact Intervale at info@intervale.ca or visit www.intervale.ca.

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