# **NL Species at Risk Stewardship**

## Stewards & Educators Working Together to Conserve Species at Risk

## Fall 2010

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## **Funding Opportunities**

## -Habitat Stewardship Program & Aboriginal Funds for Species at Risk-

### HSP

As part of the National Strategy for the Protection of Species at Risk, the federal government established the Habitat Stewardship Program (HSP) for Species at Risk. The HSP became operational in 2000-2001 and allocates up to \$10 million per year to projects that conserve and protect species at risk and their habitats.

The overall goal of the HSP is to "contribute to the recovery of endangered, threatened, and other species at risk, and to prevent other species from becoming a conservation concern, by engaging Canadians from all walks of life in conservation actions to benefit wildlife."

The HSP provides funding to "stewards" for implementing activities that protect or conserve habitats for species designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as nationally "at risk" (endangered, threatened or of special concern). These activities must take place on private lands, provincial Crown lands, Aboriginal lands, or in aquatic and marine areas across Canada. The program also fosters partnerships among organizations interested in the recovery of species at risk. As such, it supports many organizations and individuals in their efforts to meet the requirements of the National Recovery Program and the new Species at Risk Act.

### AFSAR

The Aboriginal Funds for Species at Risk were established in 2004 as an important element of the implementation of the Species at Risk Act (SARA). The protection of species at risk in Canada depends upon a meaningful collaboration with Aboriginal people and organizations in the implementation of programs under the Species at Risk Act. The Act recognizes the role that Aboriginal people play in wildlife conservation and requires that Aboriginal traditional knowledge be taken into account when assessments of which species are at risk are carried out and when protection and recovery measures are developed and implemented. Two funds are part of the Aboriginal Funds for Species at Risk: the Aboriginal Capacity Building Fund (ACBF) and the Aboriginal Critical Habitat Protection Fund (ACHPF).

### **Reminder**

The tentative HSP & AFSAR application deadline for 2011-2012 proposals is:

### November 19th, 2010

Pre-proposal deadline is expected to be announced in the near future.

Stay tuned to:

http://www.recovery.gc.ca/HSP-PIH/index.cfm

http://www.recovery.gc.ca/AFSAR-FAEP/index.cfm? fuseaction=home.main&lang=E

### Federally listed SAR found in NL

(HSP/AFSAR funds only the species listed as endangered or threatened)

- American Eel—Special Concern
- American Marten (NL pop.)—Threatened
- Banded Killifish (NL pop.)—Special Concern
- Barrens Willow—Endangered
- Barrow's Goldeneye—Special Concern
- Boreal Felt Lichen (Boreal pop.)—Special Concern
- Chimney Swift—Threatened
- Common Nighthawk—Threatened
- Eskimo Curlew—Endangered
- Fernald's Braya—Threatened
- Fernald's milk-vetch—Special Concern
- Harlequin Duck (Eastern pop.)—Special Concern
- Ivory Gull—Endangered
- Long's Braya—Endangered
- Mountain Holly Fern—Threatened
- Olive-Sided Flycatcher—Threatened
- Peregrine Falcon (*anatum/tundrius*)—Special Concern
- Piping Plover (melodus)—Endangered
- Polar Bear—Special Concern
- Porsild's Bryum—Threatened
- Red Crossbill (NL pop.)—Endangered
- Red Knot (rufa)—Endangered
- Rusty Blackbird—Special Concern
- Short-Eared Owl—Special Concern
- Wolverine (Eastern pop.)—Endangered
- Woodland Caribou (Boreal pop.)—Threatened

<sup>&</sup>amp;

## The Endangered Species Act of Newfoundland & Labrador -Three Newly Listed Species-



Photo: Nathalie Djan-Chekar

#### Mackenzie's Sweetvetch

**Scientific Name:** Hedysarum boreale subsp. mackenzii

Status: Endangered

Habitat/Range: In the province of NL, Mackenzie's Sweetvetch is only found at two sites separated by about 7 km on the west coast of the Port au Port Peninsula. It is restricted to open limestone barrens.

**Population Trends:** A total of approximately 300 to 1000 individuals is estimated to occur at the two sites; the trends in these populations is unknown.

**Limiting Factors and Threats:** Distribution is restricted and population numbers are low. Habitat loss and degradation results from vehicle traffic on the limestone barrens.

### Northern Bog Aster

**Scientific Name:** *Symphyotrichum boreale* 

#### Status: Endangered

Habitat/Range: The only known location for this species in the province of NL is a fen at Wild Cove, near Corner Brook.

**Population Trends:** The population is estimated to be between several hundred and several thousand individuals. Trends in the population are unknown but the population has possibly declined during some development in the area.

**Limiting Factors and Threats:** Distribution is very restricted and population numbers are low. The habitat is within a municipal boundary and is surrounded by gravel pits and other development.

#### Rattlesnake Root

Scientific Name: Prenanthes racemosa

Status: Endangered

Habitat/Range: The only known location in the province of NL is a fen at Wild Cove, near Corner Brook.

**Population Trends:** The total population is estimated at several hundred to several thousand individuals. Trends in the population are unknown but the population has possibly declined during some development in the area.

Limiting Factors and Threats: Distribution is very restricted and population numbers are low. The habitat is within a municipal boundary and is surrounded by gravel pits and other development.

### NL Species at Risk

- American Eel—Vulnerable
- American Marten—Threatened
- Banded Killifish—Vulnerable
- Barrens Willow—Endangered
- Barrow's Goldeneye—Vulnerable
- Boreal Felt Lichen—Vulnerable
- Chimney Swift—Threatened
- Common Nighthawk—Threatened
- Crowded Wormseed Mustard– Endangered
- Eskimo Curlew—Endangered
- Fernald's Braya—Threatened
- Fernald's milk-vetch—Vulnerable
- Gray-Cheeked Thrush—Vulnerable
- Harlequin Duck—Vulnerable
- Ivory Gull—Endangered
- Long's Braya—Endangered
- Low Northern Rockcress—Endangered
- Mackenzies Sweetvetch— Endangered
- Mountain Fern—Vulnerable
- Northern Bog Aster—Endangered
- Olive-Sided Flycatcher—Threatened
- Peregrine Falcon—Vulnerable
- Piping Plover—Endangered
- Polar Bear—Vulnerable
- Porsild's Bryum—Threatened
- Rattlesnake Root—Endangered
- Red Crossbill—Endangered
- Red Knot—Endangered
- Rusty Blackbird—Vulnerable
- Short-Eared Owl—Vulnerable
- Wolverine—Endangered

## The Limestone Barrens

## -Restoration Project—Sandy Cove Provisional Ecological Reserve-



Sandy Cove—Before restoration

Long's braya habitat at Sandy Cove Provisional Ecological Reserve (SCPER) is being transformed to its natural beauty.

The Limestone Barrens Habitat Stewardship Program (LBHSP) in conjunction with the NL Department of Environment and Conservation (Wildlife and Parks and Natural Areas Divisions) and the Conservation Corps NL local Green Teams have been conducting small-scale restoration at SCPER for the past three years.

Home to the endangered Long's braya plant this unique site is one of only two pristine Long's braya sites in the world. Together they total 15 hectares and are both found within the SCPER.



Participants worked together to move the disturbed limestone back into the test pits.

Prior to the designation of Long's braya as an endangered species in July 2002 and the habitat being protected as the SCPER in April 2007 the area had been tested for quarrying of limestone. This site was determined to be unsuitable for quarrying but the testing pits and piles of disturbed limestone were left behind. Restoration of damages done by quarrying were addressed in an effort to avoid further soil erosion and hydrology changes within Long's braya habitat thereby allowing for the species to grow in all areas of the site as naturally as possible.

The restoration activity involved participants working together, side-by-side, moving the disturbed limestone back into the test pits. Gratifying to participants was seeing the removal of rock give way to a beautiful vista of natural beauty.

## It's Our Responsibility!



Sandy Cove—After restoration

The 'hands on approach' of involving partners of the LBHSP and locals together in stewardship initiatives is contributing to protection measures as outlined in the recovery plan for Long's braya. Opportunities of this sort build strong connections between locals and their natural heritage. In turn these actions contribute to greater awareness of species at risk and encourage good stewardship, which is vital to ensure long-term sustainability of rare species.

Together with concerted efforts we are making a difference for present and future generations. The responsibility of caring for the limestone barrens and its species at risk can be summed up as quoted by students at Straits Elementary School, Flower's Cove, and "It's Our Responsibility."

- Dulcie House

## The Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA) -Aquatic Species at Risk Monitoring-

The Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA) has been active in the conservation and recovery of many marine and aquatic species at risk. Since the summer of 2006 MAMKA has been actively documenting the dispersal of Banded Killifish (*Fundulus diaphanus*) in insular Newfoundland. MAMKA has also been active in documenting the migration of adult American Eel (*Anguilla rostrata*) out of freshwater and estuarine systems. Recently MAMKA has begun documenting the historic distribution of Leatherback Turtle (*Dermochelys coriacea*) along the northeast coast of the island. 28 Leatherback sightings were documented since 1955, with 23 of the sightings occurring since 2000.



American Eel (Anguilla rostrata)



Banded Killifish (Fundulus diaphanus)

For the 2010-2011 fiscal year MAMKA plans to continue its species at risk work on the Banded Killifish, American Eel, and Leatherback Turtle. A majority of the Banded Killifish and American Eel work has been conducted on the west and south coasts of the island. For this field season MAMKA plans to expand Killifish and Eel work into central and the northeastern Newfoundland. MAMKA will also continue to document sightings of Leatherback Turtle and conduct at-sea surveys to document the Leatherback. MAMKA will also work with local communities to document the presence of shark in western Newfoundland. During the field season MAMKA staff will try to film shark in western Newfoundland waters. The material gathered will be used for educational purposes. For more information on MAMKA species at risk activities project visit our website and other MAMKA (www.mamka.ca).

### ABOUT MAMKA

The Mi'kmaq Alsumk Mowimsikik Kogoey Association (MAMKA) is an Aboriginal Aquatic Resource and Oceans Management (AAROM) organization formed by the Federation of Newfoundland Indians (FNI) and Miawpukek First Nation (MFN). MAMKA is funded through the AAROM program of Fisheries and Oceans Canada (DFO). The purpose of MAMKA is to represent the Mi'kmaq people and communities of the FNI and the MFN in aquatic resource and oceans management.



## Positively Impacting Species at Risk in NL Through Municipal Habitat Stewardship

The past twelve months have been a very successful year for the Stewardship Section of the province's Wildlife Division. Six municipalities all over Newfoundland and Labrador have signed Stewardship Agreements with the province and each of these towns contains species at risk habitat that is essential for the survival of the species.

#### Port au Choix

On September 22<sup>nd</sup> 2009, St. Theresa's Elementary School and the Town of Port au Choix entered into a Municipal Stewardship Agreement that designates areas of the Limestone Barrens habitat for conservation. Wallace Young, MHA for St. Barbe, signed the agreement on behalf of Environment and Conservation Minister Charlene Johnson. Other signatories included Dulcie House, Limestone Barrens Habitat Stewardship Program Manager; Beverly Plowman, Principal of St. Theresa's Elementary School; and Carolyn

Lavers, Town of Port au Choix. Gerry Byrne, MP for Humber-St. Barbe-Baie Verte, also attended and addressed the students.



Photos: Darryl Frost

Stewardship agreement signatories and attendees enjoyed a short performance by the students of St. Theresa's Elementary.



Fernald's braya, Wooly Arnica, and Wild Chives.

The Limestone Barrens comprise only a tiny portion of the island of Newfoundland's surface area, but support a very high percentage of its rare plants. Of the 298 vascular plants considered rare on the island of Newfoundland, 104 of them occur on these barrens and 22 of these species are found only on the Great Northern Peninsula. The Town of Port au Choix in particular has been identified by the Limestone Barrens Species at Risk Recovery Team as having the most vulnerable population of the threatened Fernald's braya (*Braya fernaldii*) plant population in the world. Besides Fernald's braya, Wild Chives (*Allium scoenopra*-

sum) and Wooly Arnica (Arnica tomenteuse) are both rare Limestone Barrens plant species that are found in parts of Port au Choix. In signing the Stewardship Agreements, St. Theresa's students and the Town of Port au Choix committed to actions that will help ensure the sustainability of these Limestone Barrens' unique plant species.

#### St. Peter's Bay

On November 9<sup>th</sup>, 2009, the Towns of St. Lewis, Mary's Harbour and Red Bay entered into Coastal Stewardship Agreements with the province to pledge their commitment to the protection of sea sucks and coastal habitat in St. Peter's Bay. John Hickey, Minister of Labrador Affairs signed the agreement on behalf of Charlene Johnson, Minister of Environment and Conservation. Other signatories included MHA Ed Buckingham, Mary's Harbour Mayor Ford Rumbolt, St. Lewis Mayor Annie Rumbolt, and Red Bay Deputy Mayor Darrell Hillyard. Opposition leader Yvonne Jones was also in attendance.

The Canadian Wildlife Service considers St. Peter's Bay to be the only primary molting area for Common Eiders along the southern Labrador coast south of Table Bay, with estimates of up to 3000 molting eiders congregating there during the months of July and August. Many other species of waterfowl frequent St. Peter's Bay including the vulnerable Harlequin Duck (Histrionicus histrionicus). Through the signing of these Coastal Stewardship Agreements, each Town has agreed to support the development and promotion of best stewardship practices for the coastal area of St. Peter's Bay. The residents of each community will be encouraged to become caring stewards of the area, particularly those areas that have been identified by



residents, EHJV biologists and others as being critical habitat for waterfowl.



Common Eider

Harlequin Duck



Representatives from the Towns of St. Lewis, Mary's Harbour, and Red Bay, and members of the provincial government, the official Opposition and the Wildlife Division met at the town hall in Mary's Harbour to sign Coastal Stewardship Agreements.

### Table Bay

On July 13<sup>th</sup>, 2010 the Town of Cartwright entered into a Coastal Stewardship Agreement with the province to pledge their commitment to the protection of sea ducks and coastal habitat in Table Bay. John Hickey, Minister of Labrador Affairs signed the agreement on behalf of Charlene Johnson, Minister of Environment and Conservation. Other signatories included Mayor Rosetta Holwell, Deputy Mayor Melody Pardy, and Wildlife Biologist Heather Chaffey.



Minister of Labrador Affairs, John Hickey met with representatives from the Town of Cartwright to sign a Coastal Stewardship Agreement.

NL SAR Stewardship

The Canadian Wildlife Service considers Table Bay to have the most significant concentration of Common Eiders in the province of Newfoundland and Labrador, estimating that Table Bay plays host to over 30% of Labrador's Eider population during breeding season. Many other species of birds frequent the area including the

vulnerable Harlequin Duck and the vulnerable Peregrine Falcon (*Falco peregrines*). The Gannet Islands Ecological Reserve is located just 40 km northeast of Cartwright and is the best known location for Harlequin Ducks during the molting period of late June through August. In 2008, there were approximately 260 Harlequin Ducks in the re-



Peregrine Falcon

serve. Peregrines are found during the nesting period of May to July along the Labrador sea coast and a number of major rivers that offer suitable habitat ranging from Table Bay to Cape Chidley as far south as the northern tree line. Also, there are 4 known nest sites found along the adjacent coastal islands within 40 km of Cartwright. With the signing of a Stewardship Agreement, the community agreed to recognize a Stewardship Zone comprised of the wildlife habitat within Table Bay, the conservation of which will be supported by the Coastal Habitat Stewardship Program and is complementary to the purposes for which the Gannett Islands Seabird Ecological Reserve was established.

#### Burgeo

On July 28<sup>th</sup>, 2010 the Town of Burgeo on the southwest coast of Newfoundland entered into a Coastal Stewardship Agreement with the province pledging their commitment to the protection of the Common Eider and the endangered Piping Plover. MHA and parliamentary secretary to Minister of Environment and Conservation, Mr. Ed Buckingham signed the agreement on behalf of Charlene Johnson. Other signatories included Mayor Gerald MacDonald, Town Clerk Blaine Marks, and NL EHJV Program Manager Jonathan Sharpe.



Burgeo Mayor Gerald MacDonald and MHA Ed Buckingham

Burgeo and its surrounding coastal area represents one of the premier habitats for Common Eider in Newfoundland which utilize the beaches, rocky cliffs, shoals and offshore islands at various times throughout the year for breeding, nesting, molting, staging and overwintering. The Town of Burgeo is also a very significant site provincially for the endangered Piping Plover. The Burgeo area includes a total of 11 beaches that have been deemed suitable Piping Plover habitat. These sandy beaches contain dunes with some cobble that make them ideal nesting areas for Piping Plover. 10% of the Southwest Newfoundland Piping Plovers are found breeding on these beaches. Through the signing of the Coastal Stewardship Agreement the Town agreed to participate in the promotion of "wise use practices" to posi-

tively influence activity within the Stewardship Zone which includes not only Common Eider nesting islands but also Piping Plover beaches.

- Cathy Regular



**Piping Plover** 

## Predictive Mapping of *Erioderma Pedicellatum* -A Preliminary Model-

*Erioderma pedicellatum*, or boreal felt lichen, is critically endangered worldwide. A species that was once found in Atlantic Canada, on the Island of Newfoundland, and in Scandinavia, it now only occurs in select sites in Nova Scotia and Newfoundland.

In Newfoundland, the species has been readily found in two hyper-densely populated regions of Lockyer's Waters on the Avalon Peninsula, and in the Bay d'Espoir region, and is listed as a species of concern by the Province of Newfoundland and Labrador. An ongoing question (and one that is relevant to its status listing) is whether it is equally hyper-abundant in other, as yet un-surveyed, parts of the island. Given the limitations of survey personnel trained in lichen identification, and the challenges of geography and access, it is possible that boreal felt lichen is more widely-distributed across the island. If this is the case, then it may be necessary to re-visit its listing as a species-at-risk.

Determining the distribution of the boreal felt lichen on the island to date has relied on intensive, yet opportunistic sampling protocols developed over the past 10 years of surveying in the two hyper-populated regions, where the boreal felt lichen have been primarily found on middle-aged balsam fir. Although much has been learned about its distribution within these two areas, much of its biology, ecology and habitat requirements are not well known.



Erioderma Pedicellatum

Challenges of geography, topography and access come into play in trying to determine the overall distribution of boreal felt lichen, as many parts of the island are difficult to access. As the provincial government looks beyond the Lockyer's Waters and Bay d'Espoir regions for further survey efforts, decisions have to be made to best use surveying time and resources to focus in areas that have a higher likelihood of being suitable boreal felt lichen habitat.

Three years ago, researchers in the Landscape Ecology and Spatial Analysis lab (LESA) at Memorial University of Newfoundland and Labrador, with funding and support from the Department of Environment and Conservation's Wildlife Division, began research on developing a predictive habitat map for boreal felt lichen for the island of Newfoundland. At that time, the Nova Scotia provincial government had developed a predictive model for boreal felt lichen in that province; however, theirs was a heuristic, and not a statistical model.

Dr. Wiersma's research deals with statistical approach to distribution modeling for a range of species. With the wealth of raw point and area count data compiled by several branches of provincial, federal and aboriginal governments in Newfoundland over the last decade, we set out to develop and test a statistical model for predicting occurrence of boreal felt lichen across the island. The model was developed by sampling known locations of *Erioderma* in a Geographic Information System (GIS) and using statistical tools to predict which areas of the island which have not yet been surveyed might have a high probability of occurrence of boreal felt lichen, based on similarities in environment and habitat to known locations.

The challenge was daunting: not much is known about boreal felt lichen biology and ecology. This predictive distribution map is the first for the boreal felt lichen in Newfoundland, and will be use a precursor for more detailed distribution modeling in the future. After sifting through data, and informal discussions with survey leaders, we decided upon four main predictors for the initial model. Surface and air-borne moisture are hypothesized to play an integral part of boreal felt lichen life history, and the Lockyers' Waters and Bay d'Espoir regions are some of the wettest in the province. Distribution is hypothesized to be limited within a set distance from the coastline, likely due to relationships to the surface and air moisture gradient. Aspect, or the facing on which boreal felt lichen were most frequently found is also hypothesized to play a role in distribution (i.e., whether trees on any given hill or sloping terrain had boreal felt lichen thalli facing a specific direction (e.g., north) more often than any other directions.

The grain of the spatial data used in the model was ~80m, so we filtered the data to make sure there was only one data point per 80 m<sup>2</sup> grid cell to avoid spatial bias in the model. In order to develop a statistical presence-absence model, we required absence data (that is, locations which were surveyed but where *Erioderma* was *not* found). Unfortunately (as is the case for many of these modelling exercises), absence data were often not recorded. This may be due to time constraints on survey efforts, and the opportunistic nature of survey protocols which warranted little or no time to record such data. We generated a random distribution of points within all balsam fir stands across the island that were within 20 km from the coastline. These were then sampled in a GIS to represent "pseudo-absence" points in the statistical model. This approach is commonly used to model cryptic, rare species when "true absence" data are lacking.

The model used digital elevation models (GIS maps showing average elevation in 80 m grid cells) to calculate aspect, and to develop topographical moisture models to emulate surface moisture. As well, the straight-line distance from each data point (*Erioderma* location, or pseudo absence point) was measured in the GIS. Tree species composition at the stand level was taken from the provincial Forest Resource Inventory (FRI). After statistically analyzing all four predictors, we found that the surface moisture was insignificant, and was thus omitted from the final model.

We reserved 10% of the data for model validation. Statistically, the initial model fared well in determining regions across the island that are unsuitable for boreal felt lichen habitat, but fared poorly in accurately predicting prime boreal felt lichen habitat in yet-un-surveyed areas. This is an initial model, future analysis will examine other parameters, such as the spatial pattern of balsam fir stands of different age classes, and the arrangement of balsam fir stands and forest gaps (which some have hypothesized are important features for spore dispersal).

One limitation of our model may be in the determination of surface and air moisture. Further studies that use humidity/moisture data collected in the field instead of topographically-based moisture models may improve the predictive power of the model. There may be additional important predictors missing that describe the complex relationship boreal felt lichen has with its habitat on the island of Newfoundland, or it may simply be that not all prime habitat is currently occupied by boreal felt lichen. As this may have to do with issues in population reproductive distribution, more insight on boreal felt lichen biology and ecology may be required.

Nonetheless, as the first predictive distribution model for the boreal felt lichen, we have successfully identified factors that are (and are not) statistically correlated with occurrence of boreal felt lichen. More importantly, we have helped to identity areas of the island which do not currently appear suitable habitat for boreal felt lichen, and thus, where surveyors need not spend time looking for the species. The final map (see excerpt in Figure 1) that we have developed suggests some priority areas for future survey work, because of their statistical likelihood of being suitable boreal felt lichen habitat. Future survey work should focus in these areas to determine if this species is currently more widespread than the two known hotspots in Lockyer's Waters and the Bay d'Espoir.

- Randy Skinner and Dr. Yolanda Wiersma

Landscape Ecology and Spatial Analysis Lab Department of Biology, Memorial University



**Figure 1.** Habitat suitability map for Boreal Felt Lichen (based on a predictive statistical model) for the Avalon Peninsula. Known occurrences of Boreal felt lichen are shown by the green dots.

## Working Together for Species at Risk Recovery in Atlantic Canada

In February 2010, approximately 120 people from across Atlantic Canada met in Wolfville, Nova Scotia to learn from one another and share experiences about stewardship and recovery of species at risk.

The Government of Canada's Habitat Stewardship Program for Species at Risk (HSP), Bluenose Coastal Action Foundation (BCAF), and various government and non-government partners organized the workshop, which addressed themes of enhancing collaboration, volunteer stewardship, and the Habitat Stewardship Program for Species at Risk.

Throughout the three day workshop, the value of building and nurturing relationships arose several times, as well as the importance of recognizing volunteers. The challenge of measuring educational outcomes from stewardship activities was identified as an area where training and sharing of successful approaches would be helpful in future workshops.



Mersey Tobeatic Research Institute's organizational display.



Workshop participants share success stories and best practices.

### MARK YOUR CALENDARS!!!

The tentative date for the next <u>Newfoundland and Labrador</u> Species at Risk Stewardship & Education

Workshop is:

APRIL 20th & 21st, 2011

In Corner Brook

(More info coming soon)

## Rare Bird Sightings in Labrador

### Red Knot

### (Calidris canutus rufa)

On Sunday, July 18<sup>th</sup>, 2010, at 5:00p.m., I made my third visit of the day to one of my favorite birding sites: Sandy Point, at the south end of Wabush Lake, between Labrador City and Wabush in Western Labrador. As my vehicle slowly approached the tip, I spotted a Ruddy Turnstone (*Arenaria interpres*) and then what I thought initially to be a Dowitcher turned out to be the endangered Red Knot (*Calidris canutus rufa*).

While snapping a few photos I noticed some red/orange coloring on the leg of the Knot. Switching to my binoculars, I realized that the leg was banded with an orange flag and an orange band on one leg, and an aluminum band on the other. As the birds continued to feed, I moved closer and was able to read the lettering on the flag: H4U. After about 30 minutes, I slowly withdrew and left them feeding. I returned early the next morning and twice more during the day, without another sighting.

An e-mail to our birding group prompted a response from Brian Dalzell of New Brunswick, who provided a site in relation to banding colors and also a contact person, Cheri Gratto-Trevor. Cheri forwarded the information to Leslie-Anne Howes who was able to determine that the banding was Argentinean and then proceeded to contact Patricia

Gonzalez of San Antonio Oeste, Rio Negro, Argentina, who confirmed that this Knot had been banded at San Antonio Oeste on March 26<sup>th</sup>, 2008, as an adult, and that this could be it's third annual migration to the Arctic Islands and return (30,000+ km). She said that from 2006 to 2010 they banded 1600 Knots in two sites in Argentina - San Antonio Oeste and Rio Grande in Tierra del Fuego, the tip of the Continent. At the time we contacted her, Patricia was on a field trip to the Mingan Islands, in the St. Lawrence River, to the east of Seven Islands, to study the Knots. She advised that after stopping over to feed on their return flight some of them had built up enough weight to fly 8000 km non-stop (just over half of one way). Patricia is now traveling back home but as she said-not as fast as the Knots.

The Ruddy Turnstone, which would normally attract a lot of attention, was overshadowed by the endangered Knot. This Red Knot, with its history, is in our records and technology has allowed us to bridge the distance from the far North and to contact birders in the far South.

Many thanks to Brian, Cheri, Leslie and Patricia and also to all who supported our efforts.

- Lorne Slaney



Photo: Lorne Slaney

### ABOUT THE RED KNOT

- Status: Endangered
- Habitat/Range: breeds in central Canadian Arctic and winters in Tierra del Fuego in South America. During their fall migration they use coastal mudflats, salt marshes, sandy estuaries, and sand flats within NL.
- **Population Trends:** There has been a 70% decline in their abundance in the past 15 years.
- **Limiting Factors:** Primarily habitat degradation and disturbance on the wintering grounds and the spring migration stopovers.

### Black Tern (Chlidonias niger)

Early on the morning of August 17th, 2010, while observing a couple of Common Tern families feeding in the area of the Labrador City float-plane dock, I noticed a slightly smaller and dark grey Tern feeding among the others. This dark grey Tern was being harassed by the others. I snapped a few pictures, on-the-wing, before calling Gordon Parsons who soon arrived with binoculars and Sibley's. While I continued shooting, Mr. Parsons confirmed my thinking that it was indeed a Black Tern. This was later reconfirmed by Mr. Paul Linegar, who then declared the sighting as the first recorded sighting of a Black Tern in Inland Labrador.

- Lorne Slaney



## NunatuKavut Community Council Inc. (HSP)

### -Increasing Awareness About the Plight of Woodland Caribou and Wolverine-

The NunatuKavut Community Council Inc. was formally known as the Labrador Metis Nation (LMN). Their HSP project currently focuses on two species: Woodland caribou (Boreal population, which includes Labrador) and Wolverine (Eastern population, which includes Labrador). Our involvement with these two species has been ongoing since 2003. The main objectives of our work are to increase community awareness of the plight of these animals and to promote their recovery.

Woodland Caribou are classified as threatened under both the federal *Species at Risk Act (SARA)* and the *Endangered Species Act of Newfoundland and Labrador*. The eastern population of Wolverine is classified as endangered under both these *Acts*. In fact, the last confirmed sighting of a Wolverine in Labrador was in the 1950s! Without our help, and conservation efforts at the local level, the future for both of these animals in Labrador is uncertain.

It is especially important for the public to realize that: as part of the Labrador Woodland Caribou Recovery Team (LWCRT), the LMN is working towards the goal that one day our Woodland caribou will recover to the point that they will no longer need protection. Someday we will once again be able to hunt Labrador Woodland caribou, without endangering their survival or the repopulation of their historical range.

Our participation in the LWCRT helps to ensure that the LMN is able to voice its concerns over any decisions being made, and enables us the ability to communicate up-to-date information back to our membership.

### Other current HSP initiatives:

- Promoting the conservation and recovery of Woodland Caribou and Wolverine in Labrador
- The recording of Woodland Caribou and Wolverine sightings in Labrador, both past and present, using our Species at Risk Communications Forms.
- Yearly monitoring of Wolverine hair snare posts in an attempt to confirm the presence of Wolverine in Labrador.
- Public and school presentations on Woodland Caribou and Wolverine in Labrador.
- A yearly SAR newsletter educating the public on our species-at-risk initiatives.
- Attendance and participation in the Labrador Woodland Caribou Recovery Team and other SAR associated meetings.
- One-to-one discussions with local hunters, trappers, and land-users.

- Wayne Russell



Close-up of Wolverine post.

#### ABOUT THE LABRADOR METIS NATION

More than 6,000 descendents of European and Inuit cultures make up the Labrador Métis Nation, represented within the communities on the southern coastal and interior waterways of Labrador. Happy Valley-Goose Bay supports a large Inuit-Métis population, along with the smaller communities of Mud Lake, North West River, Cartwright, Paradise River, Black Tickle, Norman Bay, Charlottetown, Pinsent's Arm, Williams Harbour, Port Hope Simpson, St. Lewis, Mary's Harbour and Lodge Bay. For more than a decade, the LMN has been working to ensure Labrador's natural resources are managed with conservation as a priority.

The LMN takes an active role in conservation, environmental protection, and species at risk recovery in its traditional territory through stewardship and education projects, and as a member of both the Labrador Wolverine Working Group and the Labrador Woodland Caribou Recovery Team.



Teacher Thompson Flynn and students from DC Young School after LMN SAR presentation.

## NunatuKavut Community Council Inc. (AFSAR) -Using Acoustic Telemetry to Gather SAR Data-

The NunatuKavut Community Council, formally known as the Labrador Metis Nation, first began research in the Gilbert Bay Marine Protected Area (MPA) during the summer of 2008, with funds received from the Aboriginal Funds for Species at Risk program (AFSAR). This research is a collaborative effort between the LMN and the Department of Fisheries and Oceans (DFO).

Our research in Gilbert Bay primarily focuses on using acoustic telemetry (sonic tags in conjunction with a network of underwater hydrophones) to gather baseline data on the spillover of Gilbert Bay cod from the MPA.

This past season, however, we have also included Arctic char in our research. From our research on Char we can determine such things as: where the Char are spending their time while at sea, how long they are spending at sea before returning to freshwater, how long it takes them to return to freshwater, where they are spending their winters, at what time they are returning to the ocean in the spring, etc.



Various sonic tag models

The sonic tags that help make this research possible are shown in the picture. These tags help us to track the movement of both Atlantic Cod and Arctic Char as they move throughout the outside the MPA into nearby coastal areas. In fact, our current receiver coverage extends throughout most of the MPA, as well as along southern Labrador's coastline, from Spear Point in the south to Ship Harbour in the North.

In order to assist us in our research, it is very important that anyone who captures an Atlantic Cod or Arctic Char with a sonic tag implanted in them, return the tag to us ASAP. As long as the tag is not too old, we can implant it again in another fish. Sonic tags are implanted in the stomach cavity of cod and char, and will usually fall out along with the fish's guts during cleaning. However, as some of the sonic tags are quite small, care must be taken to avoid accidentally discarding them. External Floy T-bar or "spaghetti" tags, as they are often called, can be returned to MPA Coordinator, Marilyn Parr-Penny.

On a final note, while the LMN Natural Resource Department is highly interested in any observations or comments you might have on our AFSAR and HSP projects, we are also interested in any other observations you might have noticed while on the land or at sea such as:

 when the capelin arrive and/or land in your area

- Wayne Russell

- Polar Bear sightings
- Killer Whale sightings
- Beluga sightings
- Rare bird sightings, etc



Local fisherman Clifford Russell and his F.V *Northern Swan* assisting the research team with the retrieval of offshore receivers.

If you have any comments or questions about the Labrador Metis Nation's HSP or AFSAR projects, or to report any sightings, contact the LMN at:

> LMN Head Office P.O. Box 460, Station C Happy Valley—Goose Bay, NL AOP 1C0 Phone: 709-896-0592(ext:241) Fax: 709-896-0592 Email: rkemuksigak@labradormetis.ca

## **The Piping Plover**

### -From the Bahamas to Burgeo's Big Barasway-

A Piping Plover banded in the Bahamas was sighted this summer at Big Barasway Wildlife Reserve near Burgeo. The Plover was banded in January 2010 at Island Seas Beach, Grand Bahama Island, the Bahamas. The banded Plover was female and was part of a pair that fledged one chick on a beautiful sandy section of the outer beach at Big Barasway Beach this summer. It is unknown what caused the loss of the other three chicks though mink and/or gull predation is most likely. After the chicks are hatched, parents will continue to care for young by offering shelter and protecting the chicks from predators as best they can.

The life of young Plovers is tough. Just a few hours after hatching, chicks leave the nest to find their first meal. Depending on where they live, they may face hungry mink, gulls, crows, foxes, dogs or cats during their early life. They are also at risk of being crushed by ATVs, dirt bikes, or even accidentally stepped on by people, especially because Plover chicks are very well camouflaged. The Big Barasway Wildlife Reserve provides some protection from these risks because of its relatively remote location, a ban on ATV use on the beach, and limited beach use by local residents. The Atlantic population of Piping Plovers breeds in the Atlantic Provinces, along the eastern seaboard of the U.S. and on the islands of St. Pierre and Miquelon. They have recently returned to breed on the shores of Lake Huron in Ontario.

Piping Plovers are found in breeding areas from late April to late August, and nest on sandy beaches, often in areas with gravel, shells, wrack and sticks that help hide their nests from predators and provide shelter from the wind. Wintering Plovers are found along the Atlantic and Gulf coasts of the U.S., Cuba, the Bahamas, along the Gulf coast of Mexico and some islands of the Caribbean.

This past winter, Canadian Wildlife Service biologists traveled to the Bahamas and worked with the Bahamas National Trust to tag Plovers with unique band combinations so individuals could be identified once they reached the breeding grounds. The purpose of this effort is to learn more about where Plovers from the Bahamas are stopping over during migration and where they are breeding. Of the 57 Plovers banded in January 2010, 37 have been spotted in areas as diverse as North Carolina, Massachusetts, Cape Breton, and Newfoundland. Knowing the locations Plovers use for breeding, migration and wintering will help Canada work with other jurisdictions to effectively protect Plovers throughout their entire life cycle.

The recent oil spill in the Gulf of Mexico may have a strong negative impact on the Atlantic population of Piping Plovers. Many Plovers migrate through or over-winter in areas affected by the spill. Because Plovers feed on small crustaceans found at the water's edge, they may ingest oil or become oiled themselves.

The United States Fish and Wildlife Service is planning to band Piping Plovers and take blood samples of populations breeding in Maryland and Virginia. This will allow them to track survival rates of Plovers and monitor for exposure to toxins. The oil spill is expected to most strongly impact the prairie population of Plovers, which migrate through areas currently showing highest oil concentrations.

- Emily Herdman



The banded Piping Plover sighted at Big Barasway



Big Barasway Beach-Burgeo, NL



The banded Piping Plover sighted at Big Barasway

## Intervale

### -Engaging People in Stewardship-

What can people do to help with the recovery of Atlantic Cod in Newfoundland and Labrador waters? The staff of Intervale chose to begin the dialogue at the dinner table.

Working with scientists at DFO and at Memorial University's Community-University Research for Recovery Alliance, along with fish harvesters and a local artist from Labrador, Intervale developed a placemat about Atlantic Cod and printed 125,000 copies. They distributed about 100,000 of them among 35 popular family restaurants (e.g., Irving/Circle K, Ches's Fish and Chips, and family-run establishments) from Labrador to the Avalon Peninsula. Another 15,000 went to community dinners and seafood festivals on the Northern Peninsula and Labrador. The placemat conveys important messages relative to cod recruitment, nursery habitat, and migration studies. It portrays the engagement of a broad spectrum of stakeholder groups working together for recovery.

In a sample of 30 restaurant patrons at six restaurants, 70% reported having read the placemat and 55% claimed an increase in knowledge, particularly about cod growth and reproductive capacity. One-half of those dining in groups reported some discussion. Meanwhile, restaurant demand for additional placemats exceeded the supply. Living memory of large cod and of overall abundance is vital to the creation of a community vision for cod recovery.

"Tourists would read the placemat and then go down to the wharf to talk to fishermen about what they read. I know, because I'm the daughter of a fisherman and my father tells me so." Based on the results of the Atlantic Cod placemat, Intervale is working with other conservation groups in NL on the creation of new designs that will address other species at risk, namely leatherback turtle, Labrador woodland caribou, and plants of the Limestone Barrens. For more information, contact <u>info@intervale.ca</u>.

Funding for this project came from the Government of Canada Habitat Stewardship Program for Species at Risk and from several other sources. -Kathleen Blanchard

### ABOUT INTERVALE

Intervale Associates Inc. is a nonprofit conservation organization, incorporated in the province of Newfoundland and Labrador on April 21, 2004.

The mission of Intervale is to conserve biodiversity, interpret heritage, and protect the integrity of rural livelihoods. The Articles of Incorporation include, "to provide stewardship programming for fish harvesters" and "to assist in the recovery of endangered species".

Recent conservation projects in NL include stewardship of Wolfish, Atlantic Cod and education relating to Piping Plover.

Staff and interns at the NL Intervale office work with communities and resource users, and collaborate with industry, government, university and other partners to develop strategies for sustained stewardship



Diners at family restaurants across the Province are talking about stewardship of Atlantic cod. A meal of pan-fried, locally caught cod is served on a stewardship placemat at a restaurant in Port au Choix.



## Intervale

## -Evaluating Stewardship's Impact-



Evaluation report by Intervale. Photos depict stewardship work by nonprofit, governmental, and Aboriginal organizations in eastern Canada; several species at risk; and the habitats where they may be found. Photo credits: Long's Braya, ©Dulcie House; Piping Plover, ©2005 Sidney Maddock; Scott Gillingwater with spiny softshell turtle, ©Teresa Piraino. All other photos by Kathleen Blanchard. Cover Design by Cynthia Colosimo.

Stewardship is a powerful and effective approach for 4. Recovery Teams need to place stewardship up-front species recovery. Programs have made substantial progress towards achieving their goals. Stewardship's efficacy and recognition can be expected to increase with improved performance measurement.

These are the conclusions of a study by Intervale, with generous assistance from many conservation organizations and active stewards in the Atlantic, Quebec, and Ontario regions. Stewardship programs for Labrador species at risk, the Limestone Barrens, Piping Plover, and Newfoundland Marten were among the 20 programs that the study team examined.

The team interviewed practitioners, resource experts, and stakeholder groups including fish harvesters, trappers, and municipal leaders in order to address three questions: 1) Are the projects achieving their goals? 2) How and to what degree are stakeholders engaged? 3) How effective is stewardship? Recommendations from the study are as follows:

1. Stewardship's power, efficiency, and recognition will increase with improved performance measurement. Standards for planning, implementation, and evaluation of stewardship projects need to be developed with the active involvement of project managers.

2. Conservation practitioners, researchers, stakeholders, government workers, and funders should come together at the regional level, on some regular basis, to create learning communities dedicated to the advancement of the knowledge and practice of stewardship.

3. Species recovery needs to reflect a more community-focused vision. It requires incorporating community values into stewardship project goals. By building a sense of local ownership, stewardship is a radical alternative to the conventional perception of recovery work as government-driven.

on their agendas, so as to make strategic use of stewardship's capacity for trust-building, attention to the socio-cultural context, and absence of authoritative control.

5. Managers need to assert the more joyful and authentic meaning of stewardship, one that focuses on positive relationship among people, species, and Stewardship concerns the fundamental habitats. values of care, free will actions, trust, two-way learning, and respect for differences. To describe stewardship merely as a channel for behavior change is to sell it short.

6. The conservation and stewardship community must gain competence at every level over the meaning of outcomes - not just outputs - and how to design projects for short, intermediate, and long-term outcomes relative to recovery.

7. Stewardship is well served by a variety of local and regional organizations that are based in rural areas within the target region of the stewardship initiative. This should be factored into decision-making and uses of funds.

8. Project managers need to design an evaluation of some component of their project or to gather human dimensions information that can form a baseline from which later comparisons can be made.

Funding for this work came from the Government of Canada's Habitat Stewardship Program for Species at Risk, with a contribution from the Newfoundland and Labrador Department of Environment and Conservation, Wildlife Division. For further information, or to obtain a copy of the summary report, please contact Kathleen Blanchard or Russell Wall at Intervale, info@intervale.ca.

## -Additional Info-

## nInature.com

Welcome to Newfoundland and Labrador's nature!

Have you seen an interesting plant or animal?

Would you like to know where to look for wildlife in Newfoundland & Labrador?

### Visit www.nlnature.com

Enter your information on the website to keep a record of your sighting, or to see what other people have found.



### What is nlnature.com?

**nInature.com** is an interactive website where members of the public can post information about

sightings of any plant or animal in the Province of Newfoundland & Labrador.



You can visit the site to report an

unusual bird sighting, or to query the online community about the identity of an interesting plant you may have found.

You can post without becoming a member, but membership is free, and it takes less than 5 minutes to join.

Join **nInature.com** today to share your interests in Newfoundland & Labrador's plants and animals!



Acknowledgements: Memorial University of Newfoundland and Labrador Department of Environment and Conservation, Wildlife Division GEOIDE Network

Photos: Caribou and coyote, Nikita Laita. Gannet colony, Yolanda Wiersma.

### Updated Recovery Plan



Recovery Plan American marten (Martes americana atrata) in Newfoundland

An updated recovery plan which identifies habitat and actions that are critical to the survival of the Newfoundland population of American Marten (*Martes Americana atrata*) has been released by the Provincial Government.

This updated recovery plan can be found at:

www.gov.nl.ca/env/wildlife/endangeredspecies/ mammals.html#p2

Don't Forget: The tentative date for the next <u>Newfoundland and Labrador</u>

Species at Risk Stewardship & Education Workshop is:

APRIL 20th & 21st, 2011

In Corner Brook