

Our Wildlife

News from the Wildlife Division

Department of Environment & Conservation
Natural Heritage Branch

New insight on caribou calving

An important aspect of caribou management involves identifying and delineating areas used for calving. This can be achieved through the use of animal collaring technology and geospatial analysis techniques, which were utilized for caribou on the Island of Newfoundland.

On June 3, 2008 - considered the peak of the calving period - female caribou were spread across a large portion of insular Newfoundland. This runs contrary to the commonly held concept that caribou calve only in well-defined areas that are often limited in size.

It is not yet known whether the observed distribution is a result of a change in female calving behavior, or the result of a more representative sample, achieved through the use of a stratified random collar-deployment protocol.

The map (right) indicates a need to redefine what constitutes a calving area or calving ground, as well as development of new management strategies to address the needs of caribou across the landscape as opposed to traditional methods of designating small contiguous calving, wintering or rutting areas for protection.

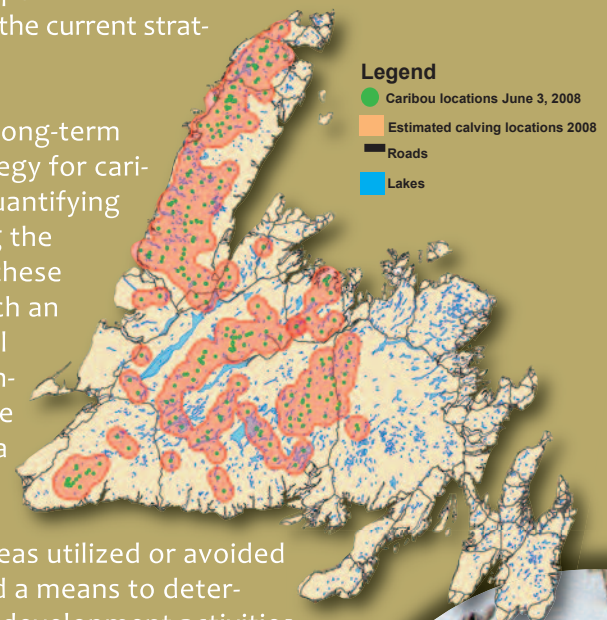
The observed distribution also has implications for the management of various predators that utilize caribou for their survival. These implications become even more important if management were to include attempted removal of predators from caribou "calving areas."

Collared female caribou occupied 30,580 km² during calving in 2008. This only includes caribou from populations being studied under the Caribou Strategy, suggesting the actual area occupied by all calving females on the island would be much larger. These observations indicate caribou have a dynamic relationship with the land, making it difficult to define areas of the island that cannot be considered caribou habitat.

Identifying areas not currently utilized by caribou and the characteristics of those areas is an important component of the current strategy.

Development of a long-term management strategy for caribou depends on quantifying and understanding the characteristics of these avoided areas. Such an understanding will allow for the delineation of available caribou habitat, a comparison of landscape characteristics in areas utilized or avoided by caribou, and a means to determine if future development activities pose a significant threat to caribou in a specific area. In addition, it will provide us with tools that can be used to ensure caribou habitat lost to development in the past can be rehabilitated, and future activities can be managed in such a way that they have a minimum impact on existing caribou populations.

**Caribou Calving Locations
Northern, Southern and Central
Island, June 3, 2008**
(Eastern Newfoundland data not available at time of printing)



Legend

- Caribou locations June 3, 2008
- Estimated calving locations 2008
- Roads
- Lakes

Photos: Darren Barrett; John Neville, Wildlife Division

Protecting Plover

The Wildlife Division has placed signs prohibiting motorized vehicle use on six significant Piping Plover breeding beaches in southwestern Newfoundland from May 1-Aug. 31.

If you use beaches that may be home to the Piping Plover, please follow this code of conduct:



1) Obey any signs restricting use of motorized vehicles on those beaches during the breeding season (May 1-Aug 31). Plovers and their nests are very hard to see in their natural habitat. Riders need to be aware that the loss of one bird or one nest can have a major impact on the entire population.

Signs will now be strategically posted each year around major breeding beaches. It is a finable offense under the *Motorized Snow Vehicles and All-Terrain Vehicles Act* and its associated regulations to pass beyond designated signs on a motorized vehicle.

2) Observe and photograph Piping Plovers from a distance, walk at the water's edge, and conduct all activities away from nesting or feeding areas. When a plover nest is approached, the incubating adult is forced to leave the nest, causing a break in incubation. When this occurs, eggs can become overheated or chilled, which could kill the embryo. Disturbed adults may even abandon the eggs completely. All human activity should be avoided around nesting or feeding areas.

3) Do not remove natural debris such as driftwood. Cleaning beaches can remove important Plover habitat, including driftwood and other natural debris that provides feeding areas and shelter.

4) Remove trash and food scraps. Predation is also an important factor limiting Plover populations. Trash, food scraps and dead fish attract predators, resulting in predation on adult plovers, chicks and eggs. It is important for beach users to not litter, and to consult with Wildlife officials prior to undertaking organized beach clean-ups.

5) Keep pets leashed. All pets, dogs in particular, should be kept on a leash (less than 6 feet) so they do not disturb Plovers or their habitat. It is illegal under Wild Life Regulation 40(3) to allow your dog to chase or harass wild life.

6) Do not pick up Piping Plover eggs or chicks.

Photos: Joe Brazil, Wildlife Division

Plover graphic: Alberta Sustainable Resource Development

The Piping Plover (*Charadrius melodus*) is a small, sparrow-sized shorebird designated as endangered under both federal and provincial endangered species legislation. In the summer of 2008, an estimated 57 adult Piping Plovers were nesting in Newfoundland; most on the sandy/cobble beaches of the southwest coast of the island.

The reproductive success of these birds has been historically limited because of human disturbance and nest predation. One of the primary sources of nest disturbance is the increased use of motorized vehicles (ATVs/dirt bikes) on these beaches. Unfortunately, this type of disturbance can kill adults/chicks, prevent adults from nesting, cause parents to abandon existing nests, or over-expose eggs no longer adequately protected by an incubating parent.

The towns of Stephenville Crossing and Channel-Port aux Basques are in close proximity to significant provincial sites for these endangered birds, and their municipal boundaries include the six beaches where signs prohibiting motorized vehicles use have been placed for the summer of 2009. Beaches in the Channel-Port aux Basques area include Osmond Beach, Short Sand Beach, Big Barachois, Bottle's Barachois, and Second Beach, Grand Bay West. In Stephenville Crossing, beaches include Main Gut and Seal Cove. These beaches were selected based on breeding plovers' historical use, and for the level of motorized vehicle activity that occurs on them.

Education and outreach to the public relating to the plight of the Piping Plover has been ongoing each summer since 2001 via the Beach Guardian Program and the efforts of local enforcement officers. Both the federal and provincial governments cooperate in monitoring/surveying all potential plover beaches on the southwest coast of the Island. Although these efforts continue, a supplementary education campaign is underway to make residents aware of this signage initiative.

Local volunteers Terry Downey and Neil Dollard with the newly minted sign on Stephenville Crossing beach.



Caribou Health Monitoring Program

The Caribou Health Monitoring Program was carried out for the third and final year in 2008. The program, initiated in 2006, was developed to assess whether habitat and food availability was a factor in current Newfoundland woodland caribou population declines.

All caribou hunters were asked to submit samples from their kills. Resident hunters and outfitters submitted more than 330 samples over the three-year program. Samples were analyzed for fat content to provide an assessment of caribou body condition.

If population decline is related to habitat and food availability, the body condition of animals from herds that are declining significantly should be poorer than body condition for herds that are considered stable. Results from the 2008 program confirmed the 2006-2007 findings, that hunted animals were in good to excellent body condition.

Differences in body condition were found in males when pre-rut and post-rut individuals were compared, with pre-rut males having significantly more body fat. Samples of females with calves submitted in previous years had significantly less fat than females without calves. This analysis suggests the methodology is sound and differences in body condition can be detected using fat measurements from hunter-submitted samples.

Hunter participation in this project was integral to the success of this project.

“Collecting samples from hunters is a practical and efficient way to get important data, and to involve hunters in research that will ultimately impact management planning processes,” says Christine Doucet, acting senior manager of research with the Wildlife Division. “Sample submissions were lower in 2008, but so were the hunting quotas.”



Photos: Caryn Smith, Wildlife Division



Participating hunters and outfitters had extra incentive to submit woodland caribou samples to the Wildlife Division.

Each year names were entered into a draw. In 2008, Gordon Thomas of Portugal Cove was the first-place winner of a St. Croix 4pc salmon rod and Okuma salmon reel. Grayson Jenkins of St. John's was the second-place winner of an i-Finder GPS H2o colour with maps, and Randolph Coffin of Paradise claimed the third-place prize, a set of Bushnell Trophy 10x42 binoculars.

The winner of the outfitter prize draw for an i-Finder GPS H2o colour with maps was Snowshoe Lake Hunting and Fishing of Grand Falls-Windsor.



Small-mammal monitoring

Small mammals such as voles, mice and shrews play an essential role in northern ecosystems, leading to both stability and fluctuation in the landscapes they inhabit. As an important food source to both mammalian and avian predators, changes in their numbers and distribution directly relate to the abundance and productivity of their predators. Small mammals are consumers themselves, influencing the numbers of available seed and invertebrates.

Recognizing the importance of small mammals, a number of organizations across the province worked together to establish a network of small mammal monitoring sites in 2007.

The Wildlife Division, along with the provincial Forestry Services Branch and the Institute for Environmental Monitoring and Research, took the lead on this initiative with partner support from Jacques Whitford Stantech Limited, Innu Nation, Labrador Métis Nation, Nunatsiavut Government, Conne River Band, Vale Inco, and the Atlantic Canada Conservation Data Centre.

The primary goals of this project include identifying species and the distribution of species across the province, developing population trend data, tracking changes in species distribution over time, establishing a reference collection of species in the province, disease monitoring and early detection, generating General Status assessment data, tracking invasives, and establishing consistent data collection methodology across the province.

Participating partners established and ran long-term trapping grids in representative habitats across the province. The most northerly monitoring site was in Nain, with other sites extending east to Churchill Falls, down through southern coastal Labrador and across the island from Roddickton to Gambo. While most sites were forested, some were also established in bogs and barrens.

The results from the last two years of data collection indicate that between 2007 and 2008 total captures of small mammals dropped about 43 per cent/site for insular Newfoundland, mainly due to a drop in Masked Shrew numbers. Labrador had a similar decline/site of 42 per cent, with declines seen among a

number of species. In Newfoundland there were a total of 360 captures over 14 sites in 2008. Four species were captured in Newfoundland. Masked Shrews were the most common, followed by Red-backed Voles, Meadow Voles and Deer Mice. Seven species were recorded for Labrador. Red-backed voles dominated Labrador captures, comprising almost 90 per cent of total captures in 2008.

Other small mammals captured in Labrador included Bog Lemmings, Meadow Voles, Heather Voles, Masked Shrews, Deer Mice and Meadow Jumping Mice. In 2008, 368 small mammals were captured over 10 sites in Labrador.

The introduced Red-backed Vole continues to expand its range within insular Newfoundland. The results of 2007 indicated these voles were just north of Main River, east to Bishop's Falls and at least as far south as Stephenville in the west and 25km south along the Bay d'Espoir Highway in Central. Data from 2008 found the voles to have expanded east to Gambo, and all the way down the Bay D'Espoir Highway.

This data indicates annual movements could be up to 90km/year! At this rate the voles will be in Terra Nova National Park by 2009, raising interesting questions about the response of predators within the Park. The voles will likely reach more northerly network sites within 2-3 years.



Vole capture photos: Shelley Garland & Bruce Rodrigues, Wildlife Division

What's New at Wildlife

Upcoming Events

June 12-14:
Becoming an
Outdoors Woman
Burry Heights,
Salmonier Line
Contact:
brendapike@gov.nl.ca

June 20:
Newfoundland
Sportsman
Annual Trap Shoot
St. John's Rod & Gun Club.
Contact:
jasonfoster@gov.nl.ca

August 21-23:
2009 Firearm
Safety/Hunter
Education Instructor
Conference
Sir Wilfred Grenfell College,
Corner Brook
Contact:
jasonfoster@gov.nl.ca

July (TBD):
Atlantic Provinces Youth
Hunting and Fishing
event. Contact:
jasonfoster@gov.nl.ca

*Wildlife Division Photos:
Black Bear, Joe Brazil;
Owl, Michael Blackwood;
Forest Fair, Gerry Yetman;
Heritage Day, Nathan Spence*

"How to Hunt Black Bears" Workshops

Conservation Services is offering "How to Hunt Black Bears" workshops in June, August & September 2009. Contact nathanspence@gov.nl.ca or call 637-2006 for dates and locations.

Salmonier Nature Park Visiting Hours

Salmonier Nature Park is open for the summer. Visit us on Salmonier Line (Route 90), 12 km south of the TCH on the Avalon Peninsula.

Visiting hours:

June 1- Sept. 7 (Labour Day)

10 a.m. - 6 p.m., seven days a week. Gates close at 5 p.m.

Sept. 8-Oct. 12 (Thanksgiving Day): 10 a.m. - 4 p.m.

Gates close at 3 p.m.

Young Hunters Heritage Day

Young hunters from Lewisporte participated in Young Hunters Heritage Day May 30. Twenty-eight participants ranging in age from 9 – 18 and their parents/guardians gathered at the Notre Dame Rod and Gun Club for an introduction to shooting sports, and to learn about the hunter's role in conservation. They also learned about the importance of supporting local organizations like Rod and Gun Clubs and Ducks Unlimited Canada.

Participants spent the day learning about firearm safety, waterfowl calling, waterfowl identification, and rifle and shotgun shooting. Ducks Unlimited Canada gave a presentation on the organization's work in Newfoundland and Labrador.

Sponsors included the Wildlife Division, Blue Ridge Inc., Notre Dame Rod and Gun Club, and Ducks Unlimited Canada. All youth participants received lots of goodies from the sponsors including caps and waterfowl calls. Draws were made for door prizes, which included gift certificates, backpacks and compasses.

Forest Fair 2009



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