



Forests at Risk

When we think of national parks in Canada we usually think of pristine forests. In both Terra Nova and Gros Morne National Parks, however, the forests are not healthy.

Saplings are gone from the understory, the natural diversity of native plants and animals is decreasing, and the process of forest re-growth is breaking down. Long-term research and monitoring has shown that intense moose browsing over decades has severely interrupted the normal process of forest regeneration. Parks Canada as a world leader in forest restoration is taking action.

ago. With lots of food, few predators, and little disease, their numbers increased spectacularly. Although the forest ecology of Terra Nova and Gros Morne is slightly different, both national parks must now manage the effects of such abnormally high numbers of moose.

Plan that will guide the moose reduction by qualified harvesters starting in the autumn of 2011.

The moose population reduction will be managed in co-operation with the Wildlife Division of the Government of Newfoundland and Labrador, using the provincial big-game licensing system. Other strategies will be used to speed forest recovery, such as invasive weed control and tree planting.



Stunted balsam fir are often referred to as "candlesticks".



Bull Moose in Terra Nova National Park.

Moose, a Non-native Species

Moose were introduced to the Island of Newfoundland just over a century

Moose Population Management

Parks Canada is faced with a very difficult choice. If something is not done about moose, there will be very little forest left. Research, local consultation, and examination of other agencies around the world that have faced similar problems have led to a consensus- the moose population must be reduced. Parks Canada has a Hyperabundant Species Management

How the Forest Normally Functions

Boreal forest covers both national parks. As older trees die or are killed by insects or windstorms, they are usually replaced by saplings that have grown slowly in their shade, and by seedlings stimulated by sunlight hitting the forest floor. In this way the forest re-grows generation after generation. But moose have now broken that cycle in Terra Nova and Gros Morne National Parks.



What is happening to the forest in Terra Nova National Park?

Established in 1957, Terra Nova National Park protects 402km² of landscape, 69% of which is forested. Moose have always been protected within the park and in the mid to late 90's, their population peaked at 650 individuals. Currently, the park moose population is estimated at 200, still well beyond what the forest can sustain. In summer, moose eat fast-growing leafy green vegetation; but it is in winter when they depend on the slow-growing twigs of woody plants that they have the greatest effect on balsam fir. Each moose can eat 20 kilograms of vegetation per day.

The Forest is Disappearing

To date, a staggering 73km² of forested land (balsam fir and mixed hardwoods) in Terra Nova National Park have been negatively impacted by moose browsing. Of this impacted forest, 13km² have been completely transformed into open fields where there are not enough trees to regenerate the forest. This is equivalent to 8231 hockey rinks! In balsam fir forest, research has shown that moose can remove as much as 98% of



Balsam fir trees browsed to the trunk.

the saplings. In areas of mixed hardwood forest, moose consume an average of 82% of the available browse. Moose are also reducing the abundance of understory shrubs such as wild raisin, chuckley pear, mountain holly, red elderberry, Canada yew and wild raspberry.



A forest stand converted to moose-meadow by browsing.

Species Diversity is Decreasing

Moose are impacting more than just trees and shrubs. The forests of Terra Nova National Park are home to many species, including threatened and endangered wildlife and vegetation. Moose are removing their habitat and decreasing the diversity of plants and animals in the park. Without action, we will continue to lose the ecosystem that Terra Nova National Park was created to preserve and protect.

For Further Information:

Gros Morne National Park
(709) 458-2417

Terra Nova National Park
(709) 533-2801

Website:
www.pc.gc.ca/foresthealth