

Deforestation Webquest

A web research project on Newfoundland marten

Activity Information

Grade Level:	Intermediate/ High
Subject Area:	Science, Geography, Social Studies, Language Arts, Art, Technology.
Duration:	50 – 80 minutes (plus essay)
Group Size:	Individual or Small groups
Purpose:	To use the internet as a research tool for discovering the effects of habitat destruction on the Newfoundland marten and to learn more about this indigenous species.

Teacher's Notes: *The threatened Newfoundland marten is widely considered a subspecies of the American marten, and is one of only 14 living land mammals that are native to the island of Newfoundland. While marten populations are considered stable in many parts of North America, including Labrador, they have suffered a decline on the island portion of the province.*

This exercise will encourage students to become aware of the effects of industry on our indigenous species. Students will have the opportunity to form an opinion as to if the Newfoundland marten should be considered a subspecies of the mainland marten. They will also investigate a success story for endangered species, and see how research and conservation can help species turn back from the verge of extinction.

MATERIALS REQUIRED:

- Writing materials
- Access to Internet
- Marten Research Guide (1 BLM per student)

LEARNING OUTCOMES:

At the end of this lesson, students will be able to:

- Define habitat
- Identify four essential requirements for a healthy habitat
- Distinguish between threatened and endangered species
- Illustrate the effects of habitat destruction on the Newfoundland marten
- Propose ways to prevent habitat destruction

PROCEDURE:

Part I (Discussion) 15 minutes:

Begin with a class discussion of an organism's home (**habitat**), and the kinds of things that are necessary for an organism to survive (food, water, shelter and space). Talk about the Newfoundland marten and its

habitat – the old growth forests of Newfoundland. You may wish to use the information poster in the “A Special Place” lesson plan to offer more facts about the marten. How is the Newfoundland marten able to meet its basic needs? What other species make up the boreal old-growth forest natural communities?

As of the last estimates made in 2006, the population was only about 450 individuals. This is up from 300 individuals in 1995, however even with these slow increases, the marten still needs close monitoring. The core of the marten population is on the west coast near Grand Lake.

There are three main factors that have contributed to the decline of the marten population:

- 1) Over-trapping was a problem until 1934 at which time the marten population was placed on the protected species list, and trapping was banned.
- 2) Loss of habitat due to increased forest harvesting puts a lot of pressure on the marten and results in decreased populations.
- 3) Accidental snaring during the fall rabbit season is a major factor affecting marten populations. When numbers are already quite low, every loss is significant.

In recent years there has been a lot of focus on protecting the Newfoundland marten. Some of the things that are being done:

- Reserves have been established on the west coast of the island to try to protect the marten. The Little Grand Lake ecological reserve, for example, is home to the largest population of Newfoundland marten.
- Marten from Little Grand Lake have been successfully reintroduced to suitable forests in Terra Nova National Park.
- The provincial Wildlife Division, in cooperation with the **Western Newfoundland Model Forest (WNMF)** and Memorial University researchers continue to study the effects of logging on marten and use computer programs to predict changes in future populations and habitat.



• Research has been conducted on different ways to snare rabbits. The modified snare, for example, consists of a five-coil spiral and a lighter gauge snare wire. The coil device responds to the animal's behaviour when snared, permitting the capture of snowshoe hare and other small game while allowing the marten to escape.

• The **Newfoundland Marten Recovery Team** was established in 1990 to develop and implement a plan to restore the marten population.

Part II (Research) 20 – 30 minutes: Use the Marten Research Guide as a worksheet to learn more about the marten and its current status.

Individually or in small groups, have students go to the computer centre and log on to the website addresses provided. Allow students sufficient time to fill in the worksheet and find out additional information about the marten.

The following sites will provide useful information about the Newfoundland marten.
www.speciesatrisk.gc.ca
www.vmunix.com/~lmayo
www.newfoundlandmarten.com

Ask students to write a two or four-page report or create a natural heritage display on the Newfoundland marten using the Marten Research Guide as a guideline for what information should be in the project. Use maps, charts and graphs to better show your findings. Use quotes, footnotes and a proper bibliography.

Part III (Follow-up) 15 minutes:

When students have completed their research guides or full reports, hold a class discussion. The Newfoundland marten was on the brink of extinction. With numbers rising again would you consider this to be a success story or is it still too early to tell? Consider what we can do as individuals to prevent other plants and animals from coming so close to extinction.

Extension Activities:

1. Take the Marten Quiz from the Deforestation Dance lesson plan.
2. Using the Marten Wanted poster from the “A Special Place” lesson plan create a poster for another indigenous Newfoundland and Labrador species to educate students in your school. Use the Salmonier Nature Park and the Species at Risk pages to help you.

www.env.gov.nl.ca/snp/
www.speciesatrisk.gc.ca

