

DESCRIPTION OF RESIDENCE FOR AMERICAN MARTEN, NEWFOUNDLAND POPULATION (*Martes americana atrata*) IN CANADA

Section 33 of the *Species at Risk Act* (SARA) prohibits damaging or destroying the residence of a listed threatened, endangered, or extirpated species. SARA defines residence as: “a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating” [s.2(1)].

The prohibition comes into effect in different ways depending on the jurisdiction responsible for the species. Because the American marten, Newfoundland population is not protected under pre-existing federal jurisdiction, such as the *Migratory Birds Convention Act* or the *Fisheries Act*, the residence prohibition is only automatically in effect on federal lands on which the species occurs. SARA also contains a provision to prohibit the damage or destruction of non-federal species’ residences on non federal lands (provincial, territorial, and private lands) by way of an Order by the Governor in Council (GIC), if the Minister of Environment recommends it necessary to do so [s.34(2), 35(2)]. Unless such an Order is made, responsibility for protecting this species’ residences remains with provinces and territories in which the species occurs.

The following is a description of residence for the American marten, Newfoundland population (*Martes americana atrata*), created for the purposes of increasing public awareness and aiding enforcement of the above SARA prohibitions. American marten, Newfoundland population are known to have one type of residence – a den.

The American marten, Newfoundland population is listed provincially as an endangered species for insular Newfoundland, and is protected under the *Newfoundland and Labrador Endangered Species Act* [s.16], and the *Newfoundland and Labrador Wild Life Regulations* [s.14, 17] under the *Wild Life Act*.

Species Information:

Common name - American marten, Newfoundland population

Scientific Name - *Martes Americana (atrata* subspecies)

Current COSEWIC Status & Year of Designation - Threatened (2007)

Occurrence in Canada - Insular Newfoundland

Rationale for Designation - Marten in Newfoundland have declined substantially over the last century. The current population consists of 300-600 mature marten in 5 subpopulations. It is still at risk because of snaring and trapping outside of protected areas and because of forest harvesting. A small decrease in population size would likely result in consideration for Endangered status. The marten is one of few land mammals native to Newfoundland and the sub-species is endemic to Canada.

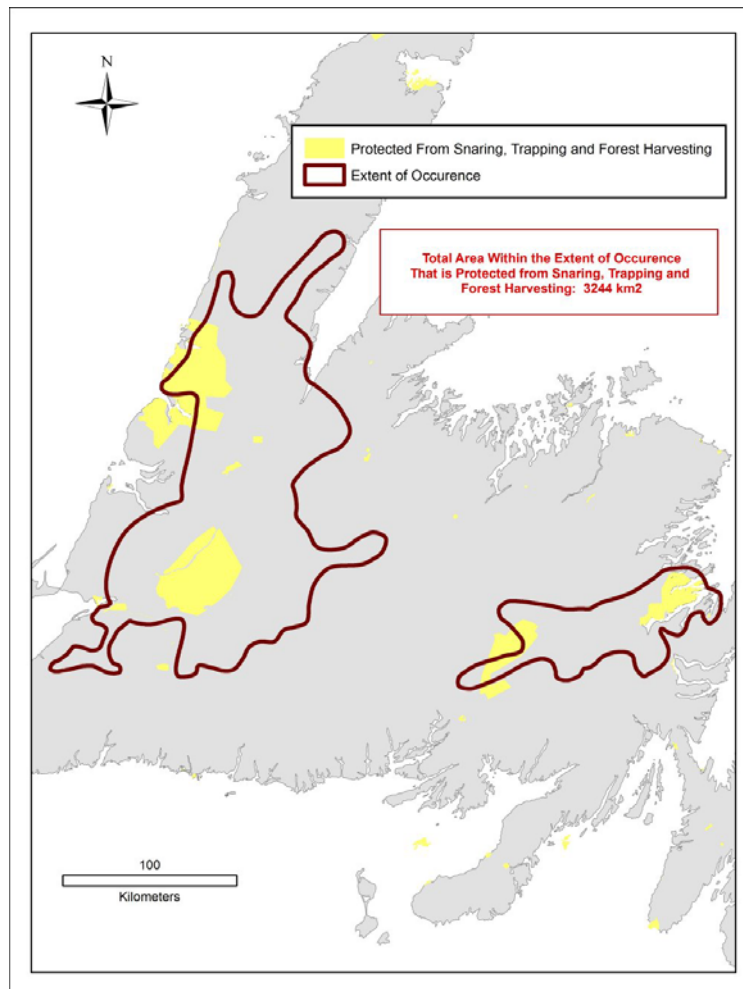


Figure 1 - Extent of occurrence (distribution) of the American marten, Newfoundland population.* Extent of occurrence is approximate and not intended for legal use.

* Prepared by the Wildlife Division, Department of Environment and Conservation, Newfoundland and Labrador, 2007. The data comes from unpublished information and published reports kept by the Wildlife Division and the Atlantic Canada Conservation Data Centre.

The Den

The residence of an American marten, Newfoundland population (hereafter referred to as Newfoundland marten) is defined as both natal and maternal den sites. Newfoundland marten have a habitat preference for mature and over-mature conifer and mixed-wood forests, in addition to mid-successional and young regenerating softwoods¹. Marten are known to utilize rock piles, squirrel middens (Figure 2), and openings at the bases of trees for their den sites⁶ (Figure 3). Vertical structure dens, such as woodpecker holes, may also be used in appropriate habitat (Figure 3). Active dens can often be confirmed with the presence of latrine sites and prey remains, in addition to signs of fresh excavations, or the auditory (or visual) observation of kits⁶.



Figure 2. Occupied den site of Newfoundland marten under windthrow in an abandoned squirrel midden. Top photo is den entrance – bottom photo is general habitat ⁷.



A.

B.



C.



Figure 3. Newfoundland marten den sites: a) a free standing snag; b) entrance to a den through a snow hole; and c) within a rock/log crevice ⁸.

Sizes of dens are variable. Dimensions of natal den sites for Newfoundland marten are not known, however, American marten dens in Wyoming were measured at 53.0 ± 15.7 (SD) cm in diameter for 17 natal dens found in logs, 66.0 ± 24.6 (SD) cm diameter for three natal dens in snags, and 55.0 ± 13.0 (SD) for 26 maternal dens found in snags⁶.

Natal dens are parturition sites (i.e. the actual site where the young are born), however Newfoundland marten may occupy several den sites throughout the birthing and rearing time period – known as maternal dens. Marten may move young from the natal den to these secondary maternal dens regularly during the kit development period⁶. Determining the natal den can be difficult. As a result of this known movement among dens, the Newfoundland marten residence is defined as a natal den site in addition to the maternal den sites that are used to raise young marten to the weaning age. Spacing between natal and maternal dens is not known, however radio-telemetry data during the initial month of kit rearing would indicate that the female stayed within a 1 km² area (J. Gosse, pers. comm.). As the kits develop, this area may increase (J. Gosse, pers. comm.).

Home-range fidelity for American marten has been reported at 65% for consecutive seasons and 55% for consecutive years⁴. Resting sites may also be reused by American marten - of 652 resting sites, 20% were used on more than one occasion⁵. However, den fidelity is not known for Newfoundland marten, and it is believed that appropriate den site locations are not a limiting factor (J. Gosse, pers. comm.).

Function

Natal den sites for Newfoundland marten are parturition sites. How long natal dens are used before young may be moved to maternal dens is not clear. The function of the den residence is to provide concealment from predators and to protect the offspring from inclement weather during the whelping and care-giving period until the young are weaned.

Damage and Destruction of the Residence

Federal Policy defines damage or destruction of a residence as:

*Any alteration to the topography, geology, soil conditions, vegetation, chemical composition of air/water, surface or groundwater hydrology, micro-climate, or sound environment which either temporarily or permanently impairs the function(s) of the residence of one of more individuals.*²

Physical damage to the residence could occur from a range of sources including domestic and commercial timber harvest operations, road construction, all-terrain vehicle use, snowmobile use, and site excavation. Sites could also be disturbed by domestic animals or by other directed human activity.

Period and Frequency of Occupancy

Marten young, or kits, are born blind, deaf, and without fur, however, they mature relatively quickly. The development time of Newfoundland marten kits is not known however American marten kits are weaned at approximately 42 days of age. Adult size is reached at approximately 3.5 months after birth.

The natal den site and occupied maternal dens should be protected as a residence during the period they are active. Exact parturition dates for Newfoundland marten (outside of captivity) are

not known, but are suspected to fall throughout April to mid-May³ (M. Pitcher pers. comm.). The growth and development of the young to weaning is approximately six weeks. Outside of this window, the natal den site would likely have less functional importance to female marten and offspring.

As a result, natal and maternal dens should be protected as residences from the time of occupation by a pregnant female to the time the young are weaned, approximately from 1 April to 30 June - for a total time frame of approximately 90 days.

Additional Information

For more information on the Newfoundland marten, go to:

www.speciesatrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=134

For more information on SARA, go to:

www.sararegistry.gc.ca/

Recommended Citation

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References

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2. Government of Canada. 2004. Species at Risk Act Policy: Policy on Residence. Draft (June 18, 2004). Unpubl. Paper. 17 pp. www.sararegistry.gc.ca/policies/showDocument_e.cfm?id=274
3. Mayo, L., and Greene, B. 1985. Pine marten denning/natality behaviour and resting sites at Little Grand Lake, Newfoundland. Newfoundland and Labrador Wildlife Division, internal report.
4. Payer, D., D. Harrison and D. Phillips. 1997. Territoriality and home range fidelity of martens in relation to timber harvesting and trapping. Pages 99-114. In D.J. Harrison, A.K. Fuller and G. Proulx (editors) *Martens and Fishers (Martes) in Human-altered Environments: An International Perspective*. 279 pp.
5. Raphael, M.G. and L.L.C. Jones. 1997. Characteristics of resting and denning sites of American marten in central Oregon and western Washington. Pages 146-165 In G. Proulx, H.N. Bryant and P.M. Woodard (editors) *Martes: Taxonomy, Ecology, Techniques and Management*. Provincial Museum of Alberta. Edmonton, Alberta, Canada. 474 pp.
6. Ruggiero, L.F., D.E. Pearson and S.E. Henry. 1998. Characteristics of American marten den sites in Wyoming. *J. Wildl. Manage.* 62(2): 663-673

Photos

7. Gosse, John. Occupied den site of Newfoundland marten – taken in Terra Nova National Park, Newfoundland, Canada.
8. Mayo, Lem. Newfoundland marten den sites – taken in western Newfoundland.