

AN INCIDENTAL TAKE PLAN FOR CANADA LYNX AND MINNESOTA'S TRAPPING PROGRAM

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SUMMARY

A Habitat Conservation Plan (HCP) has been developed in association with an application from the Minnesota Department of Natural Resources (MNDNR) to the U. S. Fish and Wildlife Service (USFWS) for a Section 10 Incidental Take Permit (ITP) under the Endangered Species Act (ESA) of 1973 to absolve the Department and its employees from liability in the event of incidental take of Canada lynx (*Lynx canadensis*) in Minnesota that result from otherwise lawful activities. The MNDNR agreed to file an ITP application with the USFWS as part of a joint stipulation in U. S. District Court, District of Minnesota, to settle a legal complaint. Incidental take permitted within the scope of a Section 10 permit issued to the MNDNR would include primarily direct injury or mortality of Canada lynx as the result of being captured during the legal trapping season in Minnesota and under the terms and limitations of a trapping license issued by Minnesota. Additionally, this Section 10 permit would also cover incidental take of Canada lynx resulting from trapping activities conducted by MNDNR employees as part of their position duties authorized by Minnesota Statutes and MNDNR permits. Some of these terms and limitations are designed to minimize the probability of taking endangered or threatened species. The MNDNR is seeking full, statewide coverage of all aspects of "take" related to trapping under the terms and limitations of the Department's licenses. The permit requested is for incidental take of Canada lynx and not for other listed species or species that may be listed in the future. The Department is seeking a Section 10 permit through 2028 or 20 years from the date of acceptance of the application for an ITP.

The ESA, administered by the Department of Interior's USFWS, is considered by many to be one of the most comprehensive wildlife conservation laws worldwide. Its purpose is to conserve "the ecosystems upon which endangered and threatened species depend" and to recover populations of listed species (U. S. Congress 1988). As amended, Section 9 of the ESA prohibits "take" of any fish or wildlife species listed under the ESA as endangered. Under Federal regulation, take of fish or wildlife species listed as threatened is also prohibited unless specifically authorized by regulation. According to the ESA, "take" includes "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." In 1982 Congress revised Section 10 via amendments to the ESA that allows for "incidental take" of endangered and threatened species of wildlife by non-federal entities. The ESA defines incidental take as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." Prior to 1982, such activities by non-federal entities risked violating the Section 9 prohibition, but no legal recourse for exemption was available. Only take associated with scientific research or other conservation activities could be authorized under the ESA. The ITP process was established under Section 10(a)(2)(B) of the ESA to provide a legal recourse when activities occurred outside this realm. Section 10(a)(2)(A) of the ESA requires an applicant for an ITP to submit a "conservation plan" (also known as a habitat conservation plan) "...that specifies, among other things, the impacts that are likely to result from the taking and the measures the permit applicant will undertake to minimize and mitigate such impacts" (Maine Department of Inland Fisheries and Wildlife 2007).

The complete HCP describes in some detail Minnesota's environmental setting and biological resources, including geographic location, area, vegetative ecological composition (e.g., Laurentian Mixed Forest and Prairie Parkland provinces), diverse natural resources (e.g., cover types), climate, topography and geology, hydrology, wildlife, and land use. The document discusses the distribution, habitat (Figures 1 and 2), natural history, and ecology of Canada lynx from North American, regional (i.e., northern Great Lakes), and Minnesota perspectives, and in-so-doing, it highlights the more relevant findings of past and current research of the lynx within Minnesota and elsewhere (Mech 1973, 1977, 1980; Moen et al. 2004a,b, 2006a,b). The full HCP also addresses: forest management and limiting factors relative to lynx survival and persistence in Minnesota; the state's trapping zones and program (Figure 3); furbearer harvests and how they relate to lynx; documented takes of lynx since 2001 (Tables 1 and 2); goals and objectives of the MNDNR's Plan (see below); proposed measures to minimize incidental take by trapping; future anticipated and projected incidental take of lynx; and an adaptive management strategy.

Section 10 Permit Goals:

To ensure that Minnesota's trapping program does not pose a threat to lynx, the MNDNR proposes the following goals for its plan:

- Limit the incidental take of lynx associated with *legal* trapping activities during the State's furbearer trapping seasons to the greatest extent possible, while maintaining recreational trapping opportunities;
- Minimize injuries and mortalities to the greatest extent that is practical, where incidental takes occur; and
- Employ an adaptive management strategy, which includes implementation of new trapping regulations and enhanced educational and communication tactics/strategies; monitoring the success of these efforts through investigation of incidental takings; evaluation of minimization activities/strategies; and if necessary, implementation of new, additional tactics/strategies to decrease the incidental take of lynx by *legal* trapping activities.

Section 10 Permit Objectives:

- Limit incidental captures of lynx by licensed trappers associated with *legal* trapping activities to no more than 4 per year, averaged over a 5-year period (i.e., running average);
- Limit lynx mortalities directly related to *legal* trapping to 1 over any 5-year period;
- Limit serious injuries directly related to *legal* trapping to 1 in any 5-year period; and
- Provide appropriate veterinary care for lynx incurring a debilitating injury associated with incidental trapping.

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Table 1. Incidents of Canada lynx takings in Minnesota recorded by the U. S. Forest Service and U. S. Fish and Wildlife Service, 2001 to 2007. Takings include captures by trapping where there was no apparent injury to the animal.

Year	Number incidentally trapped ^{a,b}	Trapping mortality ^{a,b}	Vehicle mortality	Train mortality	Poaching ^c	Unknown
2001	0	0	0	1	0	0
2002	2	0	0	0	0	0
2003	4	2	2	0	1	1
2004	4	2	2	0	0	0
2005	3	1	1	1	2	7
2006	0	0	0	0	0	3
2007	0	0	0	0	0	0

^aOne female and 1 male lynx were incidentally trapped and died in snares set for fox in Koochiching and Clearwater counties in 2003. Also in 2003, a radiocollared male lynx was incidentally trapped in St. Louis County and released alive; another released alive after being caught in a leghold set (for bobcat) in Cook County, sex unknown, was uncollared. In 2004, a radiocollared female was incidentally trapped by a leghold trap set for a fox and died in Cook County, and an uncollared male died in a snare set for a fox in Lake County. Two lynx, a radiocollared male and an uncollared female, were accidentally caught in snare (set for fox/coyote) and body-gripping trap (intended for fisher) sets, respectively, in St. Louis County, but both were released alive. In 2005, in St. Louis County, 1 radiocollared male lynx died in a snare, another was released alive, and a third lynx (uncollared, unknown sex) was released alive from a body-gripping #120 trap after getting its leg caught.

^b3 of these incidental takes were associated with violations of MNDNR trapping regulations; 2 of these resulted in the death of the lynx.

^cLynx poached included 1 of unknown sex shot and buried, exact date unknown; 1 male and 1 female were shot during the firearm season (2005) for white-tailed deer, both in St. Louis County.

Table 2. Categorization of incidentally trapped lynx by trap type in northern Minnesota, 2001 to 2007 (USFWS 2007 lynx incidental take database).

Trap type	Number incidentally caught		
	Release	Killed	Total (%)
Snare	3	4	7 (53.8)
Foothold	3	1	4 (30.8)
Body gripping trap (#120 & #200)	2	0	2 (15.4)
Total	8	5	13 (100.0)

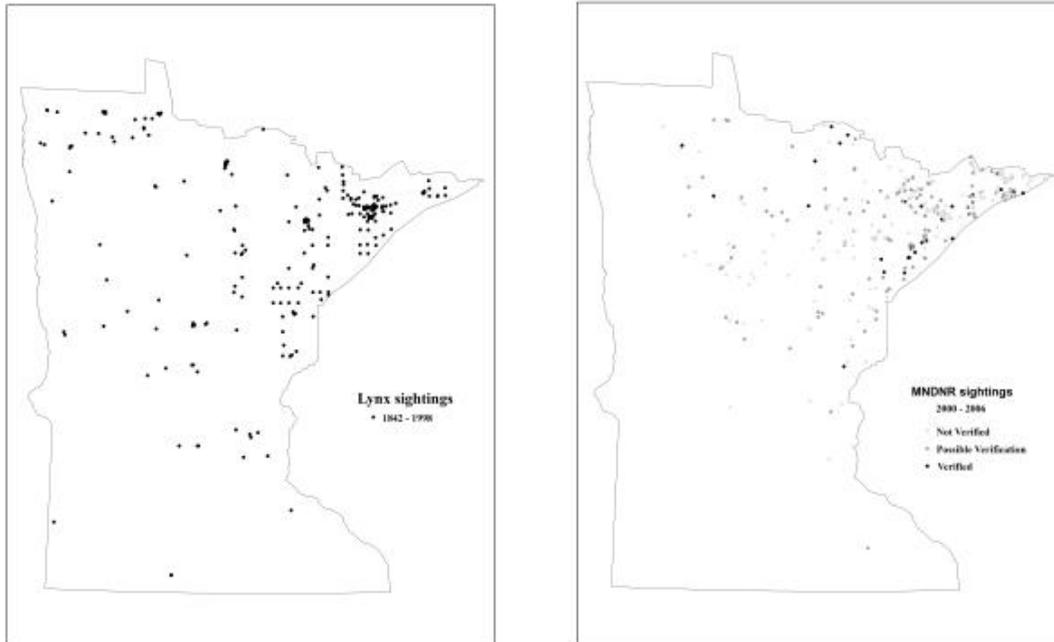


Figure 1. Historic (1842-1988) and current (2000-2006) distribution of Canada lynx in Minnesota. Current lynx primary ("core") range is based on lynx sightings, snowtrack surveys, and locations of radiocollared lynx (McKelvey et al. 2000; Moen et al. 2006a,b; MNDNR 2006 *lynx sightings database*); historic range is based on records compiled by Henderson (1978, as cited in McKelvey et al. 2000).

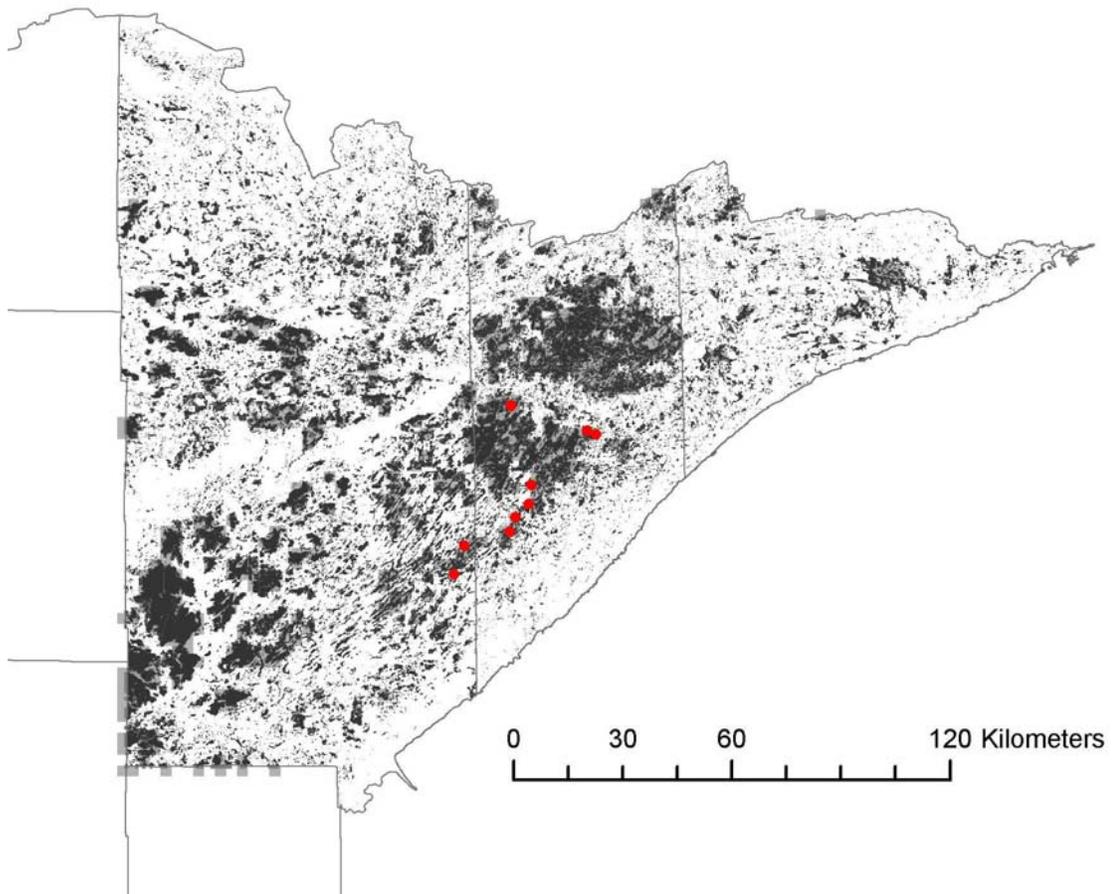


Figure 2. Refinement of critical habitat based on predicted suitable Canada lynx denning habitat in northeastern Minnesota. Darker colors indicate higher quality denning habitat, based on the assumption that females currently selecting den sites are selecting among the suitable habitats that are available (from Moen et al. 2007).

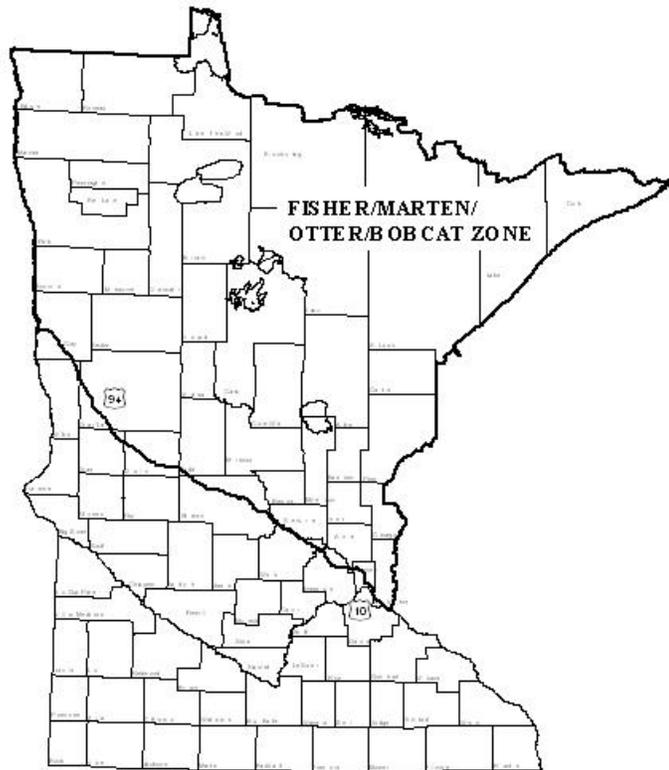


Figure 3. Minnesota's 2006 furbearer trapping zones. Other furbearers are trapped statewide.