

Despite the lack of evidence that competition with any species is negatively affecting lynx, the final rule explained the theory that ski and snowmobile trails and roads that are maintained for winter recreation and forest management create packed snow corridors that give other species, particularly coyotes, access to lynx winter habitat on all land ownerships. This theory has neither been proven or disproven at this time (Roe *et al.* 2000). On the basis of this theory, the LCAS provides that there be no net increase in groomed or designated over-the-snow routes and snowmobile play areas on Federal lands (Ruediger *et al.* 2000). The U.S. Forest Service and BLM are committed to adhering to their Conservation Agreements with the Service and the programmatic biological opinion on Forest and BLM land

management plans that require the U.S. Forest Service and BLM to use the LCAS in determining the effects of actions on lynx (see Factor D). Because no evidence has been provided that packed snowtrails facilitate competition to a level that negatively affects lynx, we do not consider packed snowtrails to be a threat to lynx at this time.

During the public comment period on this remanded decision, we received information that predicted that if snow depths substantially decrease for a long period of time, lynx habitat will no longer exist in the Northeast (Hoving 2001). Hoving's (2001) model predicted that lynx were most likely to occur in areas with deep snow (greater than 268 cm (105 in) of mean annual snowfall). Hoving (2001) modeled possible consequences to the availability of lynx habitat in the Northeast as determined

by snow depth. His predictions were only based on a comparison of average annual snow depths in the 1970s to those of the 1980s, not on models of future climate. Hoving (2001) acknowledged that the 1970s were unusually snowy whereas the 1980s was a period of relatively little snow. If average annual snow depth substantially decreases in the Northeast, as Hoving (2001) theorized could happen as a result of global warming, appropriate lynx habitat would be diminished and could be completely eliminated if appropriate climate conditions did not return. We conclude the potential for long-term reductions in snow depth because of climate change is speculative at this time and is not a threat to lynx.

TABLE 2

	Magnitude of threat			
	Northeast	Great Lakes	Southern Rockies	Northern Rockies/ Cascades
Factor A:				
Timber harvest regimes	Moderate	Low	Low	Low.
Fire suppression	Not a threat	Low	Low	Low.
Factor B:				
Legal lynx-targeted harvest	Not a threat	Not a threat	Not a threat	Not a threat.
Incidental harvest	Low	Low	Low	Low.
Factor C	Not a threat	Not a threat	Not a threat	Not a threat.
Factor D:				
Federal land management plan guidance.	Not a threat	Moderate	Moderate	Moderate.
Factor E:				
International strategy	Low	Low	Low	Low.
High volume traffic/development	Low	Low	Moderate	Low.
Forest roads	Not a threat	Not a threat	Not a threat	Not a threat.
Competition	Not a threat	Not a threat	Not a threat	Not a threat.
Global warming	Not a threat	Not a threat	Not a threat	Not a threat.

Finding

Based on the information provided in the final rule and the analysis provided above about the range of the lynx and the five factors contained in section 4(a)(1) of the ESA, we find that the lynx is not endangered because it is not in danger of extinction throughout a significant portion of its range. The way the lynx is affected varies across the range and there is not any particular activity that poses a threat consistently throughout the range of the species. Activities that may impact the lynx and its habitat are typically localized and even within a local area the impact an activity may have on lynx can vary depending on the quality and quantity of habitat in a local area or the size of the local resident population. In some portions of the range, lynx and its habitat face few or no threats (*e.g.*, in

wilderness areas in the Great Lakes, Southern Rocky Mountains, and Northern Rocky Mountains/Cascades).

Activities addressed in the factors contained in section 4(a)(1) are not of the magnitude or scope to require us to list the species as endangered. We base our finding that lynx is not endangered on the following factors:

(1) Lynx in the contiguous United States are, and historically have been, the southernmost segment of a larger metapopulation whose center is in Canada. Immigration from Canada is, and historically was, vital to sustaining lynx in the contiguous United States.

(2) In the contiguous United States, lynx habitat consists of the southern extensions of the boreal forest in the Northeast, Great Lakes, Southern Rocky Mountains, and Northern Rocky Mountains/Cascades. The overall quantity and extent of boreal forest in

these areas has not substantially changed in the past century because, for the most part, areas where lynx habitat occurs are still managed as forest lands, although there may have been a low level of encroachment in lynx habitat because of human development in some local areas. The quality of the boreal forest varies because it is a naturally dynamic ecosystem. To support lynx, the boreal forest must contain the mosaic of appropriate species composition, forest stand ages, and forest structure that provide snowshoe hare habitat for lynx foraging and lynx denning conditions.

(3) Lynx habitat occurs on lands owned and managed by Federal, Tribal, State, County, and private individuals and entities. Although we do not have information that allows us to accurately quantify how much habitat for lynx exists in the contiguous United States,