

in the Northeast nearly all lynx habitat occurs on private lands. In the Great Lakes, Southern Rocky Mountains, and Northern Rocky Mountains/Cascades, lynx habitat occurs primarily on Federal lands, although a portion does occur on State, Tribal, or private lands. Based on coarse vegetation maps, potential lynx habitat was roughly estimated to be 65,337 km² (25,227 mi²) in the Northeast; 96,247 km² (37,161 mi²) in the Great Lakes; 26,673 km² (10,298 mi²) in the Southern Rocky Mountains; and 155,893 km² (60,191 mi²) in the Northern Rocky Mountains/Cascades (U.S. Forest Service and Bureau of Land Management 1999).

(4) The current range of the lynx includes portions of Colorado, Idaho, Maine, Michigan, Minnesota, Montana, New Hampshire, New York, Oregon, Utah, Vermont, Washington, Wisconsin, and Wyoming. The historic range of the lynx included these same States. The range of the lynx has not been dramatically reduced. We believe all historic habitat is still available to dispersing lynx except for very local areas where development has encroached on the boreal forest. A resident population does not exist in New York. We do not know if New York or the Southern Rockies ever supported resident lynx populations, but efforts at reintroduction of lynx in New York were unsuccessful and it would be premature to judge ongoing reintroduction efforts in Colorado (although reproduction has recently been documented).

(5) In the contiguous United States, the quality and quantity of the available habitat and its proximity to source populations influenced whether lynx historically were able to establish resident populations or occurred primarily as dispersers. The best scientific information suggests that historically only a few areas in the contiguous United States had lynx habitat of high enough quality and quantity to support resident populations and these are areas where resident populations currently continue to persist—northern Maine, northeastern Minnesota, western Montana, and north-central and northeastern Washington. Evidence of the continuing high quality habitat of these areas is indicated by the fact that currently there are many more lynx in these areas where resident populations exist (particularly in Maine and northeastern Minnesota) than we knew at the time we listed the species in 2000. Northern New Hampshire and northern Idaho currently have habitat conditions presumed capable of supporting lynx and are directly adjacent to resident

populations; therefore we expect lynx occupy these areas.

The areas where resident populations occur are where habitat for lynx has consistently been of sufficient quality and quantity to support abundant snowshoe hare populations so that lynx are able to successfully produce kittens that are then recruited into the population. These habitats are of sufficient quality and quantity such that snowshoe hare populations at cyclic lows are still able to support a minimal number of lynx in the area, although we do not expect that lynx successfully reproduce when hare populations are low. Additionally, the habitat quality and quantity can support immigrants from Canada that colonize new areas or contribute to existing populations. In reality, in each region these areas are an artifact of the international border between Canada and the United States that artificially splits them into two pieces of a whole that exists primarily in Canada. This is most evident in Minnesota and Ontario—it appears sometimes the Ontario lynx population expands and occupies Minnesota and sometimes it contracts and lynx recede from Minnesota.

Historically, both Colorado and New York may have supported small resident lynx populations that may have been extirpated, although we are uncertain because historic records in these areas also may have been of dispersers that arrived during extremely high population cycles. In both Colorado and New York the last verified record of lynx was in 1973, a time that corresponds to an extreme cyclic population high. In both States there have been recent efforts to establish lynx populations. The attempt to establish a lynx population in New York in 1989–1991 was unsuccessful. The State of Colorado has undertaken an intensive effort to restore lynx in Colorado. Lynx have been released over the past 4 years into Colorado and reproduction was recently documented, but it is too early to determine if a population will be successfully established.

(6) In the remainder of the lynx range where some boreal forest exists in smaller patches, is of marginal quality, or is relatively isolated from source lynx populations, lynx occur as dispersers. We include boreal forest that supports only dispersers within the range of the lynx because of the possibility lynx could establish a local population and contribute to the persistence of the metapopulation. However, evidence of this is minimal. We consider these areas that only support dispersers within the range of the lynx—portions of Michigan,

Oregon, Utah, Vermont, Wisconsin, and Wyoming.

(7) Areas that are outside of boreal forest types and that do not have cold winters with deep snow where dispersing lynx have sporadically been documented are not considered a part of the range of lynx because they do not contain the ecological conditions capable of supporting lynx. These areas include—Connecticut, Indiana, Iowa, Massachusetts, Nebraska, Nevada, North Dakota, Ohio, Pennsylvania, South Dakota, and Virginia.

(8) We conclude that large portions of range of the lynx in the Great Lakes, Southern Rocky Mountains, and Northern Rocky Mountains/Cascades are managed as non-developmental, such as designated wilderness areas, which is beneficial to lynx because it is managed to let natural ecological processes dominate. While there is some risk to lynx in these areas, these risks do not threaten lynx.

(9) We conclude there is a low threat to the contiguous United States lynx population because of the lack of a cohesive international strategy to maintain connectivity between habitats in Canada and the United States.

(10) We conclude there is a threat to the contiguous United States lynx population because of current effects of timber harvest and thinning and fire suppression on both non-Federal and Federal lands in the Northern Rocky Mountains/Cascades and Southern Rocky Mountains. We conclude that this threat is low. Although a majority of lynx habitat in these regions is on National Forest and BLM lands that are managed to conserve lynx, timber harvest regimes and fire suppression that may be locally detrimental to lynx and snowshoe hare habitat likely occurs on the limited amount of non-Federal lands that support lynx habitat in both the Northern Rocky Mountains/Cascades and Southern Rocky Mountains.

(11) We conclude that lynx habitat may be impacted because of changing timber harvest regimes on non-Federal lands in the Northeast. We conclude the threat of these activities is moderate, although there is the potential for more severe impacts if a natural mosaic of vegetation ages and forest structure that can support snowshoe hares and lynx is not maintained.

(12) We conclude that lynx may be impacted because of timber harvest and fire suppression on non-Federal and Federal lands in the Great Lakes. However, the impact of these activities is low because a majority of lynx habitat in this region is on National Forest lands, which are managed to conserve