

of the species in its genetic characteristics.

Lynx canadensis has an extensive distribution in North America, existing in the boreal forest from Alaska throughout Canada from the Yukon and Northwest Territories south across the United States border and east to the Maritime Provinces and the Island of Newfoundland. Of the entire North American range of the lynx, only a small portion extends into the contiguous United States. Individually, the Northeast, Great Lakes, Southern Rocky Mountains, and Northern Rocky Mountains/Cascades account for an extremely small fraction of the entire range of the taxon, the loss of which would not result in a significant gap in the range of the taxon. Within all four regions of the contiguous United States the distribution of lynx is associated with the southern extensions of the boreal forest, where the predominant vegetation in each region is spruce and fir types, although the individual species of vegetation varies. As is true throughout the range of *Lynx canadensis*, within these boreal forests in each region within the contiguous United States, the important element for lynx is forest structure that provides food and cover for snowshoe hares. Lynx cannot sustain breeding populations without an adequate snowshoe hare population. Additionally, the forest must provide cover for lynx dens. Such habitat conditions occur in each of the four regions. As a result, we determined that none of the regions individually constitute significantly unique or unusual ecological settings. The only genetic analysis of lynx populations shows that there is a high level of gene flow between lynx populations in Alaska, western Canada and the western contiguous United States (Schwartz *et al.* 2002). Genetic analysis comparing lynx populations within the contiguous United States has not been done. Finally, lynx in the different regions of the contiguous United States clearly are not the only surviving natural occurrence of lynx. Therefore, the individual regions do not fulfill the significance criteria under our DPS policy and, as a result, do not constitute separate DPSs. The DPS policy allows us to use the international boundary with Canada to delineate a discrete DPS in the contiguous United States. As described in the final rule, lynx in the contiguous United States may be considered ecologically significant because lynx habitat in the contiguous United States is a transitional type of southern boreal forest rather than the

classic boreal forest of northern latitudes in Canada and Alaska, which is the center of lynx range. Within this transitional boreal forest within the contiguous United States there are core areas in Maine, Minnesota, Montana, Washington and likely Idaho that support resident, breeding lynx populations, the loss of which would result in a significant gap in the range of lynx. Therefore, we once again conclude the listable entity is the contiguous United States DPS of the lynx, consisting of the Northeast, Great Lakes, Southern Rocky Mountains, and Northern Rocky Mountains/Cascades.

Issue 5: Several commenters raised concerns about threats that were beyond the control of Federal land management practices, particularly in the Northeast where much of the forested lynx habitat is primarily in private ownership.

Response: We recognize that lynx habitat occurs on non-Federal lands, particularly in the Northeast. We do not have specific information on the amount of lynx habitat on non-Federal lands nor precise information on the type of activities that occur on such lands. Non-Federal landowners are under no obligation to identify lynx habitat on their lands nor do they have to supply any information to the Service regarding these lands. We solicited information about non-Federal lands during the reopened comment period. To the extent possible, we attempted to better understand and assess the activities on non-Federal lands that could affect lynx. Our analysis is described in the "Summary of Factors Affecting the Species" section.

Issue 6: Several other comments noted the reduced threat on Federal lands, particularly National Forest lands, resulting from lynx habitat management plans.

Response: We agree that threats to lynx as a result of a lack of Federal land management plan guidance to conserve lynx, as identified in the final rule, have been somewhat alleviated. As described in "Factor D," Conservation Agreements the U.S. Forest Service and BLM have with the Service, and the biological opinion on National Forest and BLM land management plans committed the U.S. Forest Service and BLM to use the Lynx Conservation Assessment and Strategy (LCAS) in determining the effects of actions on lynx. The U.S. Forest Service further committed to deferring any actions that both would adversely affect lynx and do not involve third parties until such time as the Forest Plans are amended to adequately conserve lynx. The ongoing adherence to the Conservation Agreements and programmatic biological opinion and

use of the LCAS in assessing the impacts of Federal actions has been effective in removing most threats to the species on these Federal lands. However, amendment or revision of National Forest and BLM land management plans to conserve lynx is still the strongest mechanism needed to ensure lynx and lynx habitat are conserved on National Forest and BLM lands for the long term (see Factor D).

Issue 7: Several commenters suggested that habitat features (such as snow depth, forest composition, prey abundance, elevation, connectivity with lynx populations in Canada) that vary among regions and affect habitat quality may not exist in peripheral areas. Other commenters suggested that generalizations about western lynx populations cannot be applied to the East. Other commenters made recommendations as to how lynx habitat should or should not be defined according to certain vegetation types or descriptions.

Response: Our understanding of lynx habitat requirements is continually refined with ongoing research. We have a better understanding of the habitat conditions based on information from areas where there have been numerous records of lynx over many years and, especially, where resident, breeding populations of lynx have existed over time. Based on the best available information, the key to the presence of lynx populations is adequate snowshoe hare populations. Therefore, habitat conditions and vegetation types that support adequate densities and distribution of snowshoe hares and deep snows are what we consider to be lynx habitat. In general, lynx and snowshoe hare habitats are described as moist boreal forest types that receive deep snow and cold winters (Bittner and Rongstad 1982; McCord and Cardoza 1982; Quinn and Parker 1987; Elliot-Fisk 1988; Agee 2000; Aubry *et al.* 2000; McKelvey *et al.* 2000b; Ruediger *et al.* 2000). It is well established that lynx are highly mobile and are frequently found in marginal forest types or completely unsuitable habitats that cannot sustain lynx. The fact that individual lynx have been found in such areas does not mean that those areas can support a lynx population or should be considered or managed as "lynx habitat" (J. Claar *et al.*, in litt. 2001). To be considered lynx habitat, an area must have the potential to sustain a lynx population over a period of time, which includes supporting the appropriate vegetation composition and structure to support adequate snowshoe hare densities and deep snow where lynx are at a competitive advantage. We recognize