

Lynx Ecology in Western Montana

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The listing of Canada lynx as a “threatened” species by the U. S. Fish and Wildlife Service require federal agencies to consider the species’ needs when implementing management actions. However, the limited information concerning lynx ecology in the contiguous U. S. provides little guidance to land managers. In 1998, the Rocky Mountain Research Station, in cooperation with state, federal and private entities, began ongoing studies of lynx distribution, demography, dispersal, food habits, and seasonal habitat-use patterns at multiple spatial scales. To date, we capture 67 lynx (41 males, 26 females) since initiating the study near Seeley Lake, Montana, and we are currently monitoring 27 individuals (9 females, 18 males). Preliminary data suggest that lynx at Seeley Lake produce small litters, averaging about 1.5 kittens per denning attempt; 71% of kittens survive to independence. Thus, the fecundity of lynx in Montana is similar to northern populations during cyclic lows. The Montana population is vulnerable to decline given the low fecundity of females. Documenting changes in lynx distribution is an important conservation need. Survey data suggest lynx are more limited in distribution than currently believed. To date, we have located 26 dens (18 natal, 8 maternal) from 11 females. Forest stands with high woody debris are preferred as den habitat, but there is some latitude in den-site selection. We also conducted extensive back-tracking to study winter habitat selection and we will discuss these results relative to land management. The fine-scale understandings of habitat use are necessary for managing lynx, but they are not sufficient by themselves. We also need understand how broadscale movements and habitat connectivity facilitate interchange among lynx populations. Currently, we are investigating lynx movements relative to landscape factors, including transportation corridors. In addition, we are documenting the movements of kittens from known natal sites to when they disperse and become reproductive adults.