

northern lynx populations (Verts and Carraway 1998; K. McKelvey and K. Aubry, Rocky Mountain Research Station, in litt. 2001). We do not consider compilations of anecdotal reports of lynx in Oregon reliable for the reasons described by McKelvey and Aubry (Rocky Mountain Research Station, in litt. 2001). Habitats in Oregon that are potentially suitable for lynx are naturally isolated from occupied habitats in Washington and Idaho. There are no records of lynx reproduction in Oregon. Based on the limited verified records of lynx, lack of evidence of lynx reproduction, frequency of occurrences in atypical habitat, and the correlations of such occurrences with cyclic highs, we believe that lynx occur in Oregon as dispersers that have never maintained resident populations.

Idaho—According to Rust (1946), lynx were not abundant but were distributed throughout northern Idaho in the early 1940s, occurring in 8 of the 10 northern and north-central counties. McKelvey *et al.* (2000b) located a number of lynx specimen records from Idaho collected during the early 1900s. Between 1960 and 1991, 35 verified records exist for Idaho, with 13 of these from 1982 to 1991 (McKelvey *et al.* 2000b). Lynx reports in Idaho have been few in the past 20 years. The Idaho Conservation Data Center (2003) has four reports since 2000, and a lynx was confirmed by DNA evidence on the Boise National Forest (K. McKelvey, in litt. 2003). Because past records of lynx in northern and north-central Idaho are common and boreal forest in Idaho is contiguous with boreal forest in Washington, Montana, and British Columbia, Canada, where resident lynx populations are known to exist, we conclude that lynx continue to be present in northern and north-central Idaho, which have the capacity to support a resident population.

Montana—In Montana, numerous historic and current lynx records exist throughout the Rocky Mountain Conifer Forest in the western part of the State (McKelvey *et al.* 2000b; P. Graham, Montana Department of Fish, Wildlife, and Parks, in litt. 1998). Montana's harvest records since the 1950s reflect cyclic lynx populations (McKelvey *et al.* 2000b). Since Montana started accurately recording lynx harvest in 1977, Montana's largest lynx harvests occurred in both 1979 and 1984 when 62 lynx were taken each season (McKelvey *et al.* 2000b; B. Giddings, Montana Department of Fish, Wildlife, and Parks, in litt. 1994). Harvest records, winter track surveys conducted since 1990/1991, and trapper logbooks,

led Montana Department of Fish, Wildlife, and Parks to conclude that the State's lynx population is distributed throughout what it determined to be "predicted lynx habitat" (P. Graham, Montana Fish, Wildlife and Parks, in litt. 1998). Snow track surveys have documented lynx tracks throughout the range in western Montana (P. Graham, in litt. 1998). Reproduction is documented; 14 dens were located between 1999 and 2001 in a study area in northwestern Montana (Brainerd 1985, Squires and Ruggiero 2001). In some mountain ranges in southwestern Montana, lynx are present but in apparently low numbers, based on recent surveys (Gehman and Robinson 2000, Squires *et al.* 2002). We conclude that a resident population of lynx is distributed throughout suitable habitat in the northern and central mountain ranges in western Montana, whereas in the mountains in southwestern Montana, habitat naturally becomes more marginal (more patchy and drier forest types) and supports dispersers more often than resident populations.

Wyoming—Most historical and recent records of lynx in Wyoming are from the northwestern mountain ranges (Reeve *et al.* 1986; McKelvey *et al.* 2000b; B. Wichers, Wyoming Game and Fish, in litt. 2003). McKelvey *et al.* (2000b) found only 30 verified records Statewide since 1856. Lynx reports from Yellowstone National Park have always been rare; since 2001, lynx survey efforts in the Park have detected one lynx (Murphy *et al.* 2003). In west-central Wyoming, a female lynx with kittens was documented in 1998 (Squires and Laurion 2000). However, the female died of starvation and it is presumed the kittens also died, perhaps indicating inadequate habitat and prey base (Squires *et al.* 2001). A male lynx was radio-tracked moving long distances from its home range in west-central Wyoming and into Yellowstone National Park as recently as 2001 (Squires *et al.* 2001). It is possible, based on recent evidence of reproduction, that in the past a resident lynx population occurred in northwestern Wyoming. However, few lynx have been found during several recent surveys. We believe this is because the habitat is naturally marginal (more patchy and drier forest types) and less capable of supporting snowshoe hares (B. Wichers, in litt. 2003), and is farther from source populations. Therefore, we believe lynx currently in Wyoming are dispersers and that the habitat may not be able to support resident populations.

Utah—There are only 10 verified records of lynx in Utah since 1916 (McKay 1991; McKelvey *et al.* 2000b).

Nearly all the reliable lynx reports are from the Uinta Mountain Range along the Wyoming border (McKay 1991). Four of the records correlate to the cyclic highs of the 1960s and 1970s. Recent DNA results documented the presence of a lynx in Utah (McKelvey in litt. 2003). There is no evidence of lynx reproduction in Utah. We conclude that lynx that occur in Utah are dispersers rather than residents, because most of the few existing records correspond to cyclic population highs, there is no evidence of reproduction, and boreal forest habitat in Utah is remote and far from source lynx populations.

Northern Rocky Mountains/Cascades Summary—In summary, we conclude that the Northern Rocky Mountains/Cascades Region continues to support resident lynx populations in north-central and northeastern Washington, western Montana and likely northern Idaho. We conclude that lynx have always occurred as dispersers in Oregon and Utah. In northern Wyoming it appears habitat is less suitable to support resident populations and, therefore, we conclude animals in this area are most likely dispersers.

Southern Rocky Mountains

This area represents the extreme southern edge of the range of the lynx. The southern boreal forest of Colorado and southeastern Wyoming is isolated from boreal forest in Utah and northwestern Wyoming by the Green River Valley and the Wyoming basin (Findley and Anderson 1956 in McKelvey *et al.* 2000b). These habitats reduce opportunities for emigration from the Northern Rocky Mountains/Cascades Region and Canada, and may isolate lynx in the Southern Rocky Mountains in Colorado and southeastern Wyoming (Halfpenny 1982; Koehler and Aubry 1994). However, the potential still exists for lynx to immigrate to the southern Rocky Mountains, particularly during extreme cyclic population highs.

As in the Northern Rocky Mountains/Cascades region, lynx habitat in the Southern Rocky Mountain region occurs at high elevations and, therefore, is naturally fragmented by topography and drier south- and west-facing slopes into island-like patches rather than expansive, contiguous blocks (Ruediger *et al.* 2000). Accurate estimates of the amount of lynx habitat on all land ownerships in the Southern Rocky Mountain region are not available. The only estimate of lynx habitat on all ownerships was based on coarse maps of vegetation types that contained the majority of lynx occurrences; based on this type of mapping, it was roughly