
Northern Bog Lemming

Synaptomys borealis

Mammalia — Rodentia — Muridae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Apparently secure (G4)
Statewide: Critically imperiled (S1)
ESA: No status
USFS: Region 1: Sensitive; Region 4: No status
BLM: Peripheral (Type 4)
IDFG: Unprotected wildlife

BASIS FOR INCLUSION

Lack of essential information pertaining to status in Idaho.

TAXONOMY

The subspecies occurring in Idaho is *S. borealis chapmani*.

DISTRIBUTION AND ABUNDANCE

The northern bog lemming is generally boreal in distribution, occurring in North America across Alaska and Canada and south to Washington, Idaho, Montana, Minnesota, and New England. In Idaho the species occurs in scattered localities in the extreme northwestern part of the state (Groves 1994, Boggs and Woods 2004).

POPULATION TREND

Population trend is not known.

HABITAT AND ECOLOGY

Most populations of northern bog lemmings in Idaho, Montana, and Washington have been found on peatlands (Boggs and Woods 2004), particularly sphagnum moss bogs (Reichel and Beckstrom 1994). Other records have been documented in wet meadows, mesic coniferous forests, alpine sedge meadows, krummholz spruce-fir forests with dense herbaceous and mossy understory and mossy streamsides (Groves et al. 1997a). In Idaho, this species has been found in sphagnum bogs near stands of Engelmann spruce, lodgepole pine, and subalpine fir (Groves and Yensen 1989), and occurs most frequently in second-growth stands and sometimes in old-growth forest (Groves 1994).

The species is herbivorous, feeding on grasses and other herbaceous vegetation. Individuals occupy surface runways and burrow systems up to 30 cm deep. Individuals are active throughout the year.

ISSUES

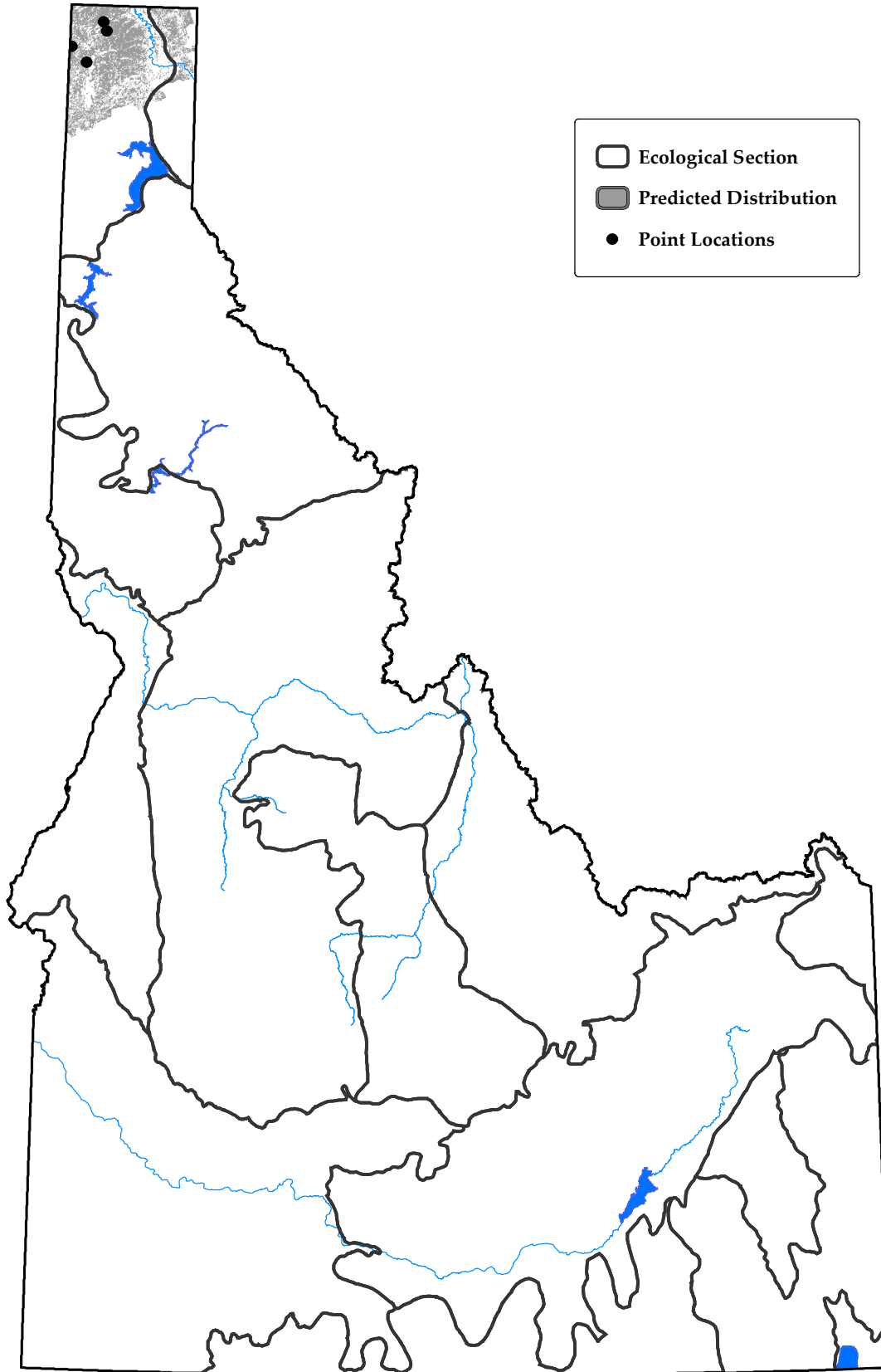
Loss of sphagnum or other bog mats and corridors for inter-patch movement might affect population viability. Habitat disturbance may be caused by timber harvest, livestock grazing, road-construction, or snowmobiling.

RECOMMENDED ACTIONS

The northern bog lemming is poorly studied throughout its range. Basic information on the distribution and status of populations and habitat associations is needed. Protection of bogs and fens where this species occurs is also important for the conservation of this species.

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Map created on September 21, 2005
and prepared by Idaho Conservation Data Center.
Sources: Point data are from Idaho Conservation Data Center,
Idaho Department of Fish and Game (2005). Predicted distribution
is from the Wildlife Habitat Relationships Models (WHR),
A Gap Analysis of Idaho: Final Report. Idaho Cooperative Fish
and Wildlife Research Unit, Moscow, ID (Scott et al. 2002).
Predicted distribution is approximate (for more information, go to
http://www.wildlife.uidaho.edu/idgap/idgap_report.asp).

