
White-winged Crossbill

Loxia leucoptera

Aves — Passeriformes — Fringillidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide:	Secure (G5)
Statewide:	Critically imperiled (S1)
ESA:	No status
USFS:	Region 1: No status; Region 4: No status
BLM:	No status
IDFG:	Protected nongame

BASIS FOR INCLUSION

Regional threats and declining population trends.

TAXONOMY

Three subspecies have been recognized: *L. l. leucoptera* (northern North America); *L. l. megalopa* (mountains of Hispaniola); and *L. l. bifasciata* (Palearctic from northern Scandinavia east across northern Russia to northern Siberia and south to Lake Baikal and Transbaicalia) (Benkman 1992).

DISTRIBUTION AND ABUNDANCE

In North America, the white-winged crossbill occupies boreal coniferous forests from Alaska to Newfoundland and south into the Washington Cascades, the central Rocky Mountains (including northern and extreme eastern Idaho), and the northeastern states (Benkman 1992). This species can breed nearly year-round and so winter range largely coincides with breeding range. Within its range, occurrence of the white-winged crossbill is highly irregular. In western North America, breeding extends south of the closed boreal forest, although it remains sporadic with small populations. Here, the crossbill's range extends from the Cascades south to central Oregon, and in the Rockies south to western Wyoming, northern Utah, and even southern Colorado and northern New Mexico (Benkman 1992). Breeding is essentially possible anywhere throughout this range where appropriate conifer species are abundant and producing good cone crops.

POPULATION TREND

Trend information for the white-winged crossbill is highly variable depending on the geographic location in question, due in part to the nomadic nature and flocking behavior of this species. While Breeding Bird Survey (BBS) data reveal a strong increase in numbers across the country (11.8% per year for the long-term period 1966–2004), trends in the west indicate more stable numbers over the same period (1.2% per year) (Sauer et al. 2005). For the more recent and relatively short-term period of 1980–2004, increases were evident at the level of the U.S. (6.9% per year) while populations declined in the west (-8.6% per year); none of these trends were statistically significant (Sauer et al. 2005). No trend information is available specifically for Idaho.

HABITAT AND ECOLOGY

The white-winged crossbill breeds in conifer forests of the following tree species: white spruce, black spruce, red spruce, Sitka spruce, Engelmann spruce, and tamarack. The critical factor influencing crossbill breeding is conifer seed availability (Benkman 1990), not detailed characteristics of habitat. This species wanders nomadically across boreal forests in search of cone crops with up to 10,000 individuals moving through an area in a single day (Weir 1985).

ISSUES

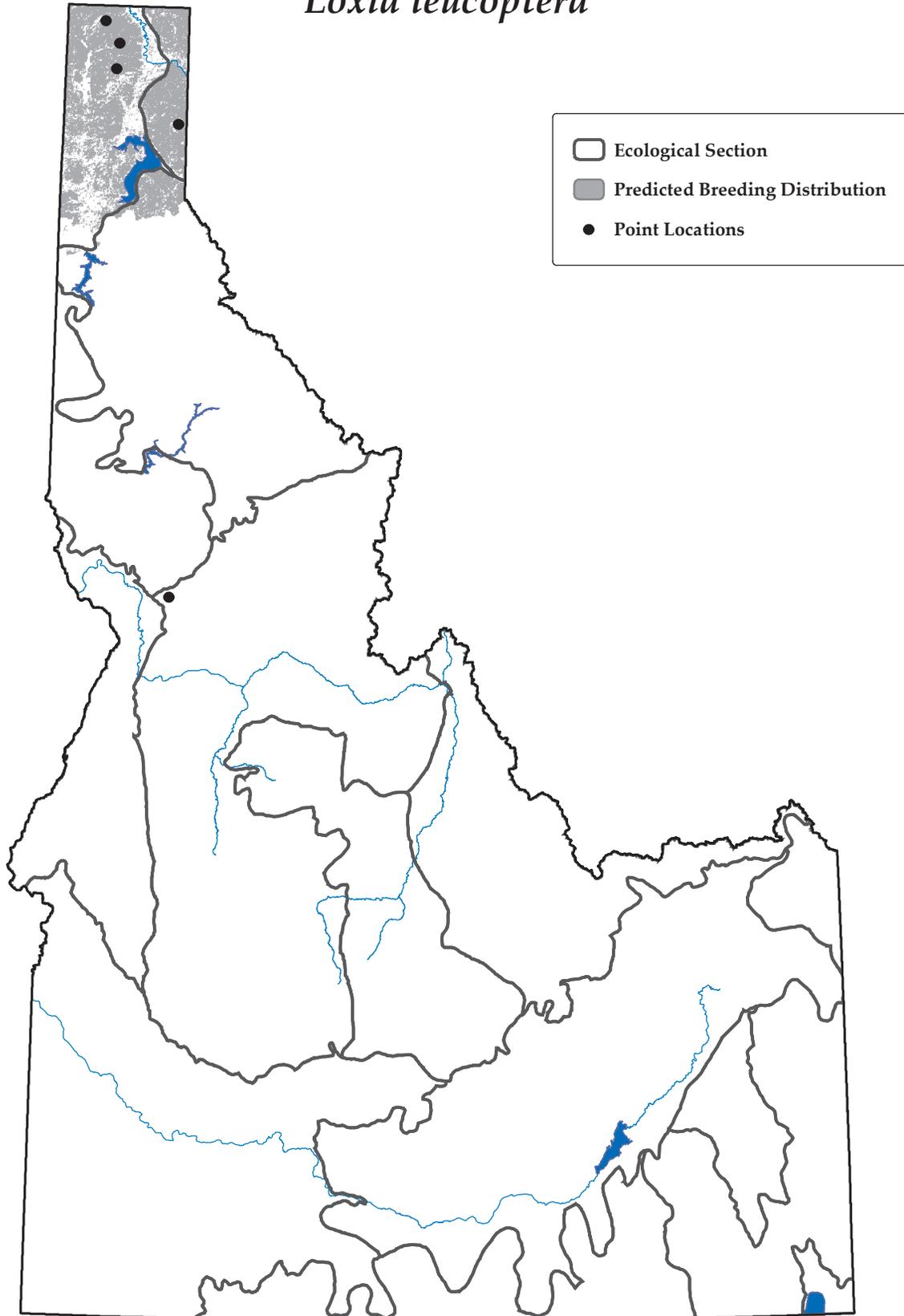
Current forestry practices may be detrimental to this species because construction and maintenance of roads eliminates habitat, and because with shorter logging rotations, forests become shorter lived and therefore less productive for crossbills (Benkman 1992). Most conifer species do not begin producing many cones until they are approximately 30 years old, and maximum cone production does not occur until they are over 60 years old (Fowells 1965). Even in the absence of logging, spruce forests are predicted to decline in area over the next few hundred years as a result of global warming (Overpeck et al. 1991).

RECOMMENDED ACTIONS

Primary conservation actions should be to gather better documentation of current breeding and wintering status in Idaho. In addition, efforts to protect more forested habitat from logging, as well as increase the rotation age in areas where logging occurs, would likely benefit the white-winged crossbill (Benkman 1992). Where possible, maintain large tracts of mature forest, especially in northern Idaho where this species occurs more frequently, to allow for maximum cone production, at least in some areas. Benkman (1992) also recommends that less salt be used on roads in winter where crossbills are known to occur due to the number of birds that are likely killed by traffic as they feed on the mineral deposits.

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Map created on September 22, 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).

