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# Pygmy Nuthatch

## *Sitta pygmaea*

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Aves — Passeriformes — Sittidae

### CONSERVATION STATUS / CLASSIFICATION

Rangewide: Secure (G5)  
Statewide: Critically imperiled (S1)  
ESA: No status  
USFS: Region 1: Sensitive; Region 4: No status  
BLM: Watch list (Type 5)  
IDFG: Protected nongame

### BASIS FOR INCLUSION

Declining population trends and habitat threats in Idaho.

### TAXONOMY

Six or 7 subspecies have been described. Those occurring north of Mexico are distinct and well-characterized; the taxonomy of those races in central Mexico remains unsettled (Kingery and Ghalambor 2001). Differentiation among subspecies is based on subtle differences in size and proportions, coloration, and some plumage pattern. The subspecies present in Idaho, *S. p. melanotis*, occurs from southern British Columbia south into the Cascades, Sierra Nevada, throughout the Rocky Mountains, Black Hills, and desert ranges of the Great Basin and southwestern U.S., south into Mexico to northwestern Zacatecas, northern Jalisco, and northern Coahuila (Kingery and Ghalambor 2001).

### DISTRIBUTION AND ABUNDANCE

The pygmy nuthatch is a year-round resident in ponderosa pine and similar pines from south-central British Columbia and mountains of the western U.S. to central Mexico. Throughout this range, the patchy distribution of pines dictates the patchy distribution of the nuthatch (Kingery and Ghalambor 2001). In northern Idaho, they occur locally as a common resident (Burleigh 1972). Less common in the west-central mountains and rare in the eastern and southern regions of the state (Groves et al. 1997a). There are estimated to be approximately 5300 individuals on a year-round basis in Idaho (Rosenberg 2004).

### POPULATION TREND

Breeding Bird Survey (BBS) data indicate statistically significant population declines for the pygmy nuthatch in Idaho during both the long-term period 1966–2004 (-41.1% per year) and the more recent short-term period 1980–2004 (-48.3% per year). Across this species' broader range, both throughout the western BBS region and the U.S. as a whole, populations appear to have remained more stable (Sauer et al. 2005).

## **HABITAT AND ECOLOGY**

In Idaho, the pygmy nuthatch is limited in its distribution to the southern slopes of mountains at elevations of 2,000–3,500 feet (607–1,067 m) where it occupies suitable habitat on a year-round basis (Burleigh 1972). Primarily associated with ponderosa pine forests and woodlands, this species may also inhabit other dry forest habitat types, such as Douglas-fir (Kingery and Ghalambor 2001). Since the nuthatch nests in dead pines and live trees with dead sections, it prefers old-growth, mature, undisturbed forests (Szaro and Balda 1982). Unlogged forests host significantly more pygmy nuthatches than logged forests (Sydeman et al. 1988), and numbers correlate significantly with volume of ponderosa-pine foliage (O'Brien 1990). Studies suggest that this species needs heterogeneous stands with a mixture of well-spaced, old pines and vigorous trees of intermediate age (Balda et al. 1983).

## **ISSUES**

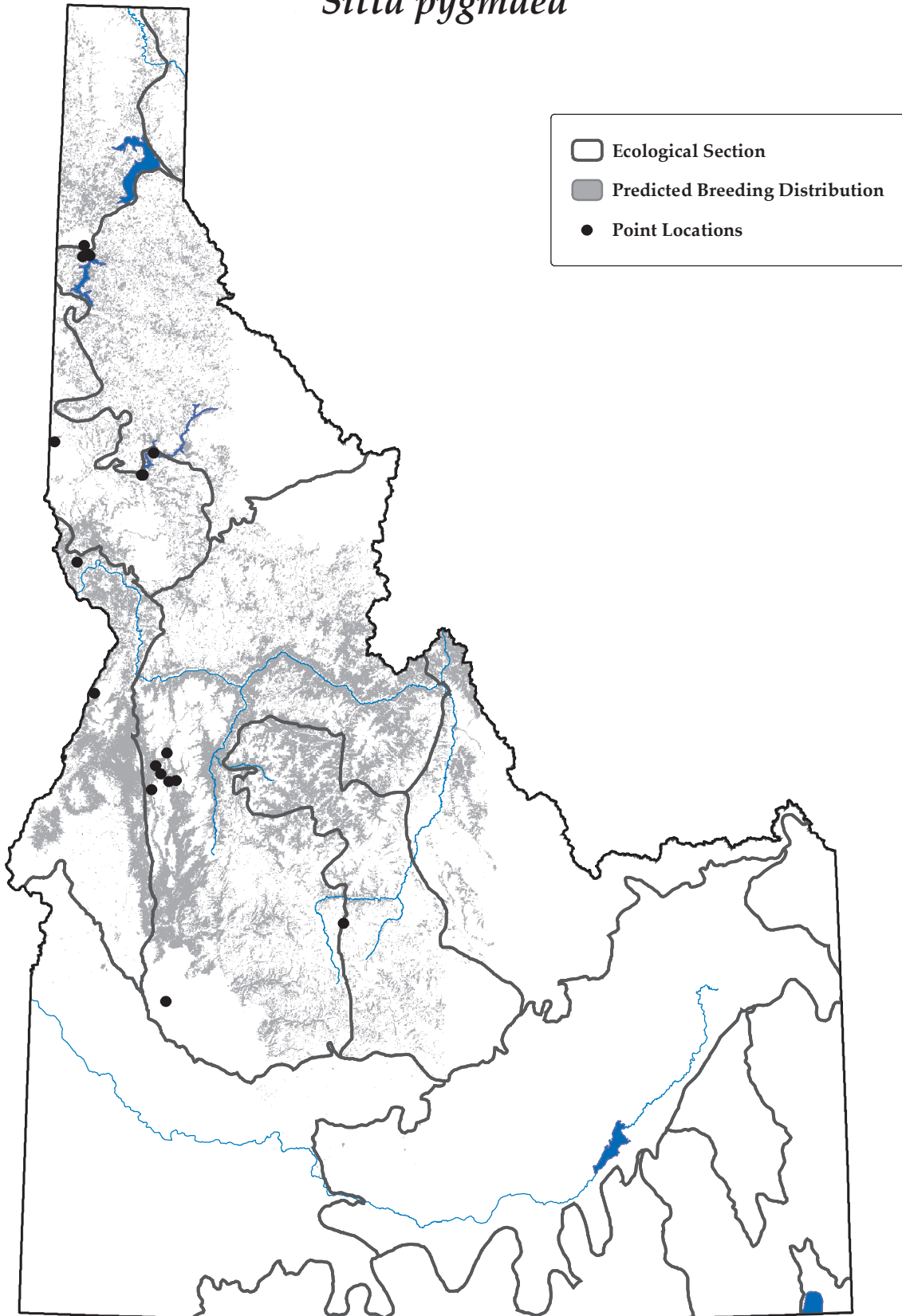
Primary issues of relevance to the pygmy nuthatch would be those related to the degradation of ponderosa pine forests throughout the intermountain west, including in Idaho, as a result of timber harvest, fire suppression, and grazing (Sallabanks et al. 2001). Throughout the intermountain west, these primary anthropogenic impacts have resulted in extensive changes in the distribution, structure, and species composition of ponderosa pine forests during the last 100–150 years (Agee 1993). Loss of historical open, park-like stands of pine during the 1900's may be responsible for the drastic population declines experienced by this species in recent times.

## **RECOMMENDED ACTIONS**

Primary actions should focus on restoring ponderosa pine forest and woodlands wherever it occurs in the state, but especially in the west-central region of Idaho where the pygmy nuthatch is a relatively common species. Management activities might follow recommendations made by Idaho Partners in Flight (IDPIF 2000) or the Idaho Steering Committee of the Intermountain West Joint Venture (IWJV 2005), emphasizing snag recruitment and retention, return of historical fire regimes, and reduced grazing pressure, at least in some areas (Kingery and Ghalambor 2001). Studies to determine why the pygmy nuthatch is declining so rapidly in Idaho also are needed.

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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](http://www.wildlife.uidaho.edu/idgap/idgap_report.asp)).

