

## Heritage Ranking Form - State Rank

**Scientific Name:** *Strix occidentalis caurina*  
**Common Name:** Northern Spotted Owl  
**Classification:** Vertebrate Animal

**Heritage Rank:** **S2**

Rank Date: 12/14/2015

Comments: Continued population and habitat declines, significant threats from Barred Owls.

**Range Extent:** F = 20,000-200,000 sq km (~8,000-80,000 sq mi)

Comments: Range extent is 66,661 sq km based on nest locations post 2000.

**Population Size:** Not assessed

Comments: None

**Number of Occurrences:** B = 6 - 20

Comments: When nest sites are buffered to 15km separation distance, end up with 4-6 separate Eos.

**Area of Occupancy:** GH = 501-12,500 4-km<sup>2</sup> grid cells

Comments: 1200 4 km sq grid cells, based on post-2000 nests, buffered to 70 acres. But if you buffer the nests to the 15 km separation distance, you get 13618 4 km 2 grid cells.

**Good Viability:** B = Very few (1-3) occurrences with excellent or good viability or ecological integrity

Comments: All sites threatened by habitat loss, Barred Owl invasion.

**Environmental Sensitivity:** Not Evaluated

Comments: None

**Short Term Trends:** F = Decline of 10 - 30%

Comments: Habitat loss on federal lands averaged 3.4% from 1994 to 2007 (Davis et al. 2011). USFWS estimates population is declining by 2.9% annually .

**Long Term Trends:** D = Decline of 50 - 70%

Comments: USFWS estimates loss of 60% of suitable habitat since 1825.

**Threat Impact:** B = High

Comments: Competition from Barred owls, habitat loss from logging, land conversion and fire

**Intrinsic Vulnerability:** Not Evaluated

Comments: None

Rank Notes: None

References: Davis, Raymond J.; Dugger, Katie M.; Mohoric, Shawne; Evers, Louisa; Aney, William C. 2011. Northwest Forest Plan-the first 15 years (1994-2008): status and trends of northern spotted owl populations and habitats. Gen. Tech. Rep. PNW-GTR-850. Clark, D. A., R.G. Anthony, L. S. Andrews. 2011. Survival rates of Northern Spotted Owls in post-fire landscapes of Southwestern Oregon. Journal of Raptor Research 45(1):38-47. Dugger, K.M., R.G. Anthony, and L. S. Andrews. 2011. Transient dynamics of invasive competition: Barred Owls, Spotted Owls, habitat, and the demons of competition present. Ecological Applications 21:2459–2468.

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