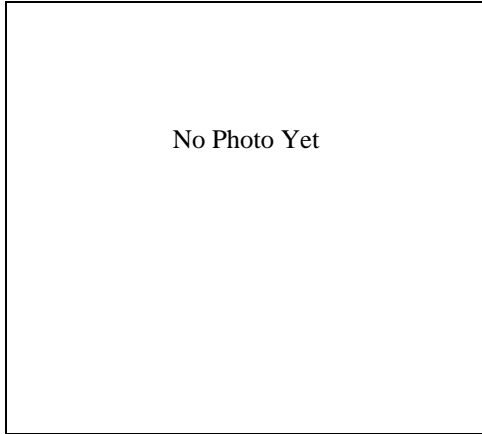


Spotted Owl

Strix occidentalis

Conservation Profile



Priority Status	Conservation Target
Reasons for Priority Status	Small population size Restricted habitat Possible threats
Other Rankings	Continental PIF: Watch List Audubon Watchlist: Yellow Natural Heritage: S1B USFWS: Bird of Conservation Concern (Sierra Nevada), Migratory Bird BLM: None NDOW: Conservation Priority
Trends	Historical: Probable large declines in Sierra Nevada [p1] Recent: Data limited, but may be declining in Sierra Nevada [p1]; Nevada population has been relatively stable [p3]
Population Size Estimates	Nevada: < 6 pairs [p3] Global: 11,000 [p5] Percent of Global: << 1 %
Population Objective	TBD
Monitoring Coverage	Source: Monitored by [USFS, TBD] Coverage and Adequacy: [TBD]
Key Conservation Areas	Carson Range

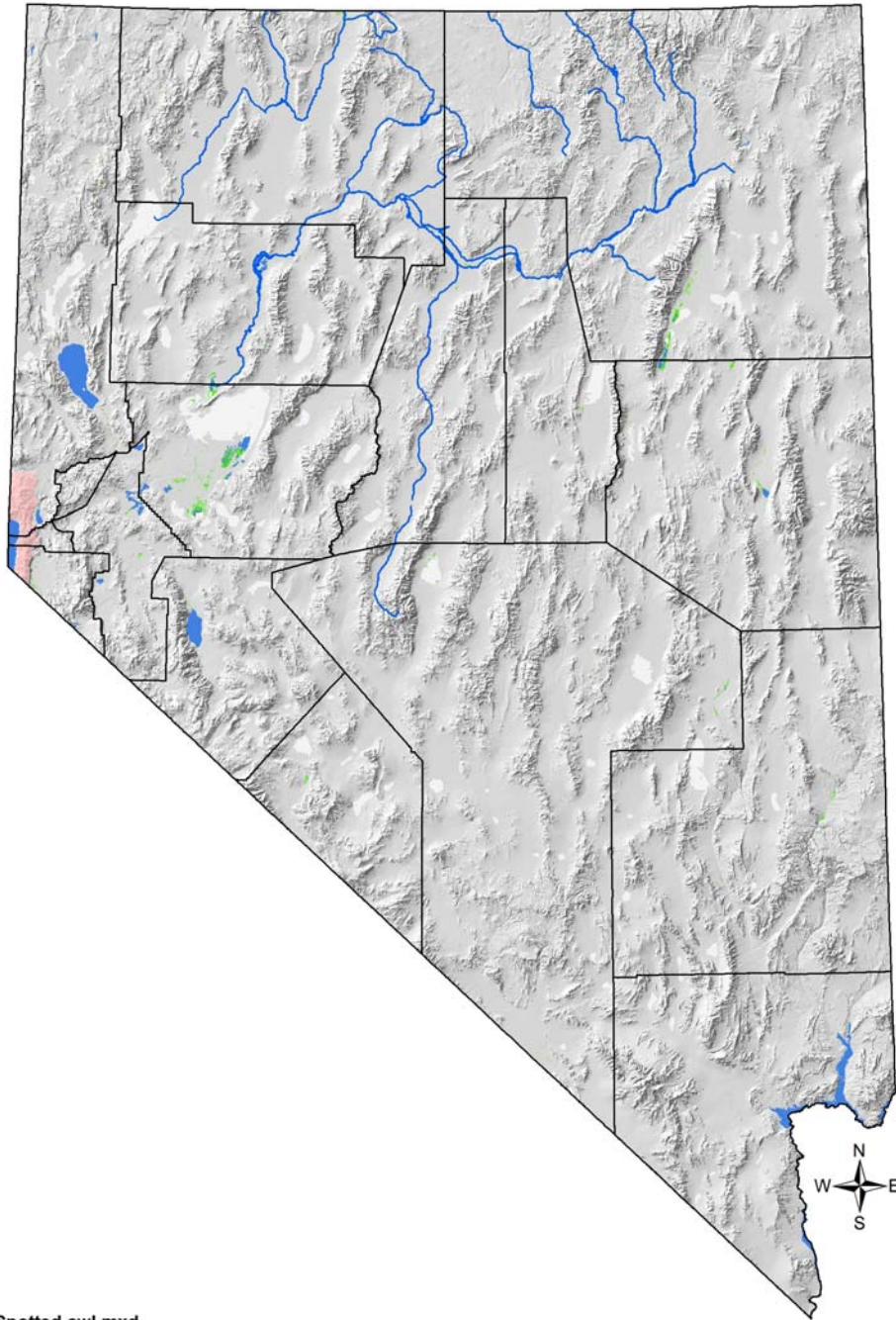
Habitat Use Profile

Main Habitats Used in Nevada	Coniferous Forest
Key Habitat Use Parameters	Closely tied to old-growth mixed conifer forest [EO] ; multi-storied stands may be preferred [p1] Canopy closure 40% or greater [Call et al 1992] Forest mosaic needs to include some trees with DBH > 90 cm [p1] Prefers intermediate to high amount of downed woody debris [EO] Preferred habitat has little or no shrub understory [EO] Foraging habitat may include a wider-range of age-class stands than breeding habitat [p1]
Minimum Patch Size	Low densities and large home ranges, especially during non-breeding season [EO, p1] Mean home range ~ 1,500 ha [Call et al 1992]

Natural History Profile

Seasonal Presence in Nevada	Year-round May exhibit seasonal altitudinal migrations (Laymon 1989)
Known Breeding Dates in Nevada	Mid-May – early August [EO]
Nesting Habits	Usually nests in pre-existing cavities in late successional mixed-conifer forest with high canopy closure [p1] Fidelity to breeding territory high [p1]
Food Requirements	Small and medium-sized mammals, mostly rodents, flying squirrels preferred [p1]

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File: Spotted owl.mxd

Spotted Owl

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Temporary Map Key

Pink: Breeding range

Hot pink / magenta: For some birds, breeding data was limited, and was supplemented by extrapolation to include likely breeding range. In these cases, hot pink represents known breeding range, and lighter pink the extrapolated breeding range.

Blue: Winter range

Yellow: Important migration stopover areas

Purple: Year-round range

Green: In some maps, wetlands mapped by SWReGAP are shown in green for interpretational purposes

Dot symbols: In cases where breeding records were isolated or very restricted in extent, they are represented by a pink dot symbol rather than a shaded area.

Arrows: Major migration routes. These are shown only for birds for which there are migration-associated conservation issues.

OVERVIEW

Within the Carson Range, western Nevada hosts a small number Spotted Owls of the subspecies *S. o. occidentalis*, the California Spotted Owl. Although breeding in Nevada has been conjectured [p4], it has only recently (2009) been confirmed. Spotted Owls are generally associated with large contiguous tracts of old growth forest, but breeding pairs in the Carson Range have been noted to occur in smaller, more isolated stands. As is the case with several other birds species associated with Coniferous Forest, conservation threats that occur elsewhere in the west as a result of widespread logging are absent or less pronounced in Nevada. Apart from managing fuels reduction projects appropriately, continued monitoring of our small population is the main need.

ABUNDANCE AND OCCUPANCY BY HABITAT

- For California Spotted Owls in Sierra Nevada, densities range from 0.12 – 0.21 owls / km²

NEVADA-SPECIFIC STUDIES AND ANALYSES

- TBD

MAIN THREATS AND CHALLENGES

- Increased fire frequency and intensity
- Fuels reduction projects that threaten old-growth forest characteristics in occupied habitat

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CONSERVATION STRATEGIES

Proscribed Strategies

- Sierra Nevada Framework (USDA 1995) provides detailed recommendations for managing Spotted Owls in the Sierra Nevada Range

Habitat Strategies

- General Coniferous Forest conservation strategy with focus on maintaining old growth stands
- In forest management practices, especially with regard to fuels reduction projects, aim to maintain old growth structure including multiple canopy layers, canopy cover > 40%, and large snags

Research, Planning, and Monitoring

- Continue current monitoring efforts [obtain more information]
- Conduct additional survey efforts that include more patches of “atypical” habitat, such as smaller forest patches
- Study juvenile dispersal via radio-telemetry studies to better determine habitat conservation requirements specific to the eastern Sierra Nevada

OTHER PRIORITY SPECIES WITH SIMILAR CONSERVATION STRATEGIES

- White-headed Woodpecker
- Band-tailed Pigeon

FURTHER READING

- Call et al. 1992

Temporary codes for standard references

[p1] Birds of N. America account for this species

[p2] NV Bird Conservation Plan ver. 1 (Neel 1999)

[p3] NV Wildlife Action Plan

[p4] Nevada Breeding Bird Atlas

[p5] PIF N. American Landbird Conservation Plan (Rich et al 2004) (NOTE:

[p6] Intermountain West Regional Shorebird Plan (Oring et al 2003)

[p7] Pacific Flyway reports

[p8] Shrubsteppe Landscapes in Jeopardy (Dobkin and Sauder 2004)

[p9] Birds in a Sagebrush Sea (Paige and Ritter 1999)

[s1] NBC-based population size estimates

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[s2, s3] NBC-based habitat relationship analysis
[s4] Breeding Bird Atlas breeding phenology data
[i1] BBS trends analysis (Sauer et al 2005)
[i2] NV Upland Game Management Plan (Espinosa et al in prep.)
[i3] Western Quail Management Plan (Zornes et al 2008)
[i4] NDOW Shorebird and Waterbird monitoring data (Neel)
[i5] Brad Andres IMJV Shorebird / Waterbird data set
[i6] GBBO Technical Report 08-01 (2008)
[EO] Expert opinion from NVPIF group members
[IWWCP] Intermountain West Waterbird Conservation Plan
[NAWCP] North American Waterbird Conservation Plan
[LBCUSACP] Long-billed Curlew Status Assessment and Conservation Plan
[USSCP] U.S. Shorebird Conservation Plan
[WHSRN] Western Hemispheric Shorebird Regional Network