

Hermit Warbler

Dendroica occidentalis

Conservation Profile



Immature Hermit Warbler. Photo by Martin Meyers

Priority Status	Conservation Target
Reasons for Priority Status	Vulnerable due to specialized habitat requirements and small population size
Other Rankings	Continental PIF: Watch List Audubon Watchlist: Yellow Natural Heritage: S2B USFWS: Migratory Bird BLM: None NDOW: Conservation Priority
Trends	Historical: Recent: Stable [i1]
Population Size Estimates	Nevada (NBC): 140 Nevada (PIF): 7,300 Global: 2,400,000 [p5] Percent of Global: < 1%
Population Objective	TBD
Monitoring Coverage	Source: Nevada Bird Count Coverage and Adequacy: Insufficient
Key Conservation Areas	Carson Range

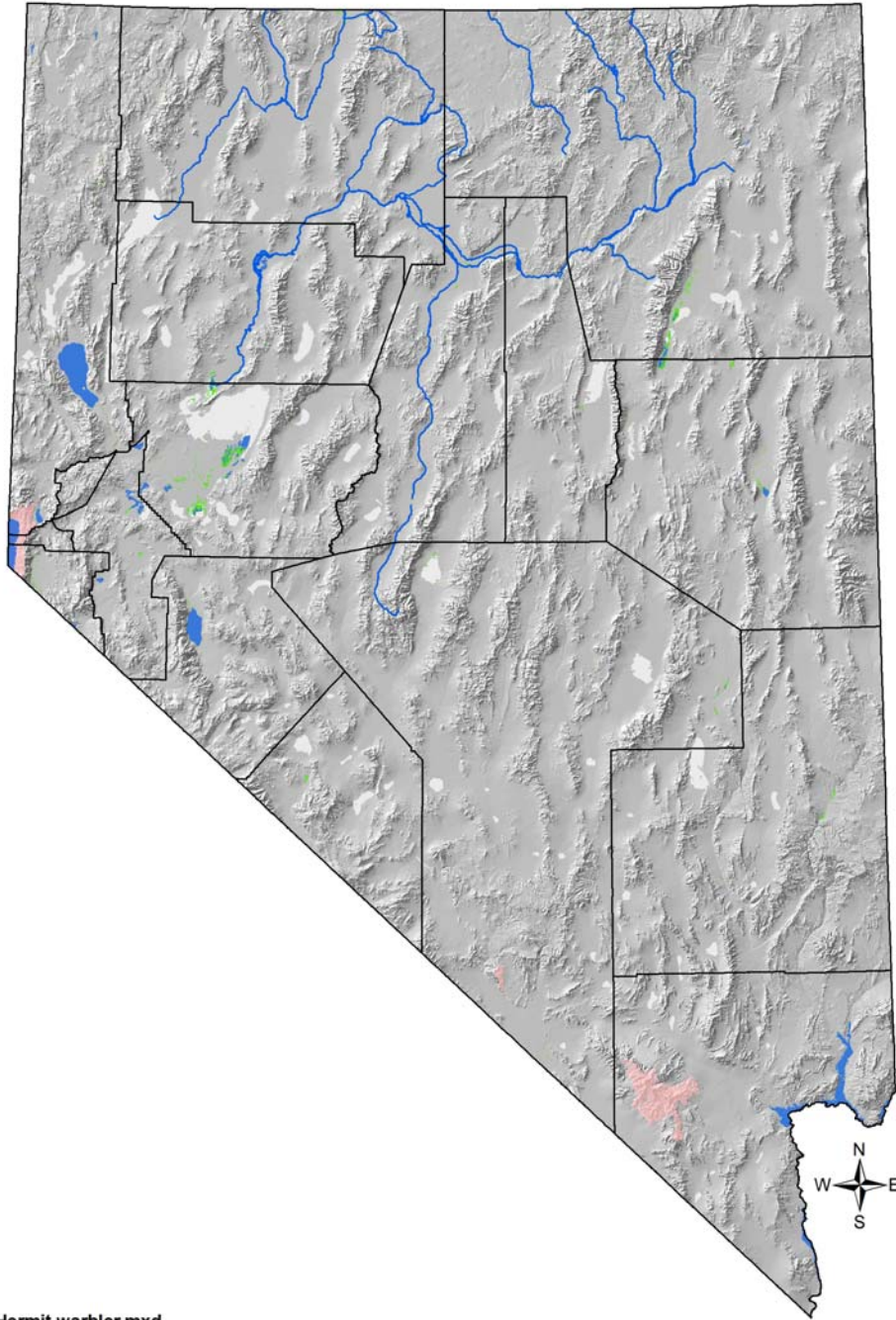
Habitat Use Profile

Main Habitats Used in Nevada	Coniferous Forest
Key Habitat Use Parameters	Interiors of mature forests comprised of Douglas Fir, Jeffrey / Ponderosa Pine, Lodgepole Pine, Incense Cedar, Red Fir [p1] Most studies suggest preference for closed canopies [p1] Tree size not directly determined, but species not present in early successional forest; appears in mid – late- successional stages [p1] Understory composition and density not important [p1]
Minimum Patch Size	No information, but avoids areas with extensive forest edge [p1] Territory sizes in nearby regions average ~ 0.35 ha [p1]

Natural History Profile

Seasonal Presence in Nevada	Spring - summer
Known Breeding Dates in Nevada	Mid-April – July [p1] over most of range, but not specifically known for Nevada
Nesting Habits	Nests saddled on concealed conifer branch [p1] Typical nest 7m above ground and 4m out from central trunk [p1]
Food Requirements	Variety of invertebrates; forage in canopy almost exclusively, usually > 30 m from ground, nearly always > 5 m from ground [p1, p3]

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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

Hermit Warblers breed in montane coniferous forests in the Pacific Northwest and the northern and central Sierra Nevada. Nevada's breeding population in the Carson Range is small and located at the periphery of the species overall distribution, and it is one of the few presumed breeding birds for which a nest has yet to be confirmed due to their highly secretive nesting habits. Given this geographical situation, the NBC-based population estimate for Nevada is likely more realistic than the PIF estimate. Hermit Warblers require large tracts of mature coniferous forest, but they apparently tolerate moderate forest thinning or removal of trees in small patches; extensive thinning that creates a large amount of habitat edge is detrimental, however [p1]. In July, after breeding, birds often migrate upwards in elevation in small flocks that persist until the initiation of fall migration [p1]. Perhaps the greatest need for this species, other than conservation of larger tracts of mature coniferous forest in the Carson Range, is to expand monitoring efforts to better capture the population status of this species.

ABUNDANCE AND OCCUPANCY BY HABITAT

- Densities in Sierra Nevada reported from ~ 40 – 70 birds / 40 ha [p1]

NEVADA-SPECIFIC STUDIES AND ANALYSES

- None

MAIN THREATS AND CHALLENGES

- Specialized habitat needs (for large contiguous patches of mature coniferous forest; fragmented forest with significant edge is avoided)
- Nevada population is very small

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CONSERVATION STRATEGIES

Habitat Strategies

- General Coniferous Forest conservation strategy applied to sufficiently large forest tracts
- Protect and conserve large tracts of mature Coniferous Forest in Carson Range

Research, Planning, and Monitoring

- Increase monitoring coverage in Carson Range
- Conduct additional studies to determine Hermit Warbler tolerance for fuel reduction efforts
- Develop fire and fuel reduction plans and policies that balance competing needs, including maintaining large tracts of mature forest as Hermit Warbler habitat

OTHER PRIORITY SPECIES WITH SIMILAR CONSERVATION STRATEGIES

- Spotted Owl
- Williamson's Sapsucker

FURTHER READING

- TBD

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
- [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

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[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