

Wilson's Phalarope

Phalaropus tricolor



Photo by Steve Ting

Habitat Use Profile

Habitats Used in Nevada	
Marsh Open Water Ephemeral Wetland and Playa (Wet Meadow)	
Key Habitat Parameters •	
Plant Composition	<u>Breeding</u> : Spikerush, sedges, other short, dense vegetation near shore ³
Plant Density	<u>Breeding</u> : Variable, but often dense, short vegetation within 100 m [330 ft] of shore ^{3, EO}
Mosaic	<u>Breeding</u> : Variety of large and small marshes with sufficient shoreline vegetation; <u>Staging / migration</u> : larger saline lakes comprised of mostly open water ³
Water Depth	Variety of depths, but most often < 2 m [6.6 ft] ^{3, EO}
Water Quality	<u>Breeding</u> : Freshwater; <u>Staging / migration</u> : saline lakes ³
Response to Vegetation Removal	Neutral ^{EO}
Area Requirements •	
Minimum Patch Size	Unknown
Recommended Patch Size	> 10 ha [25 ac] ^{EO}
Home Range	<u>Breeding</u> : Small territories with nest spacing as close as 5 m [16 ft], but may be more solitary in NV ^{3, EO}

Conservation Profile

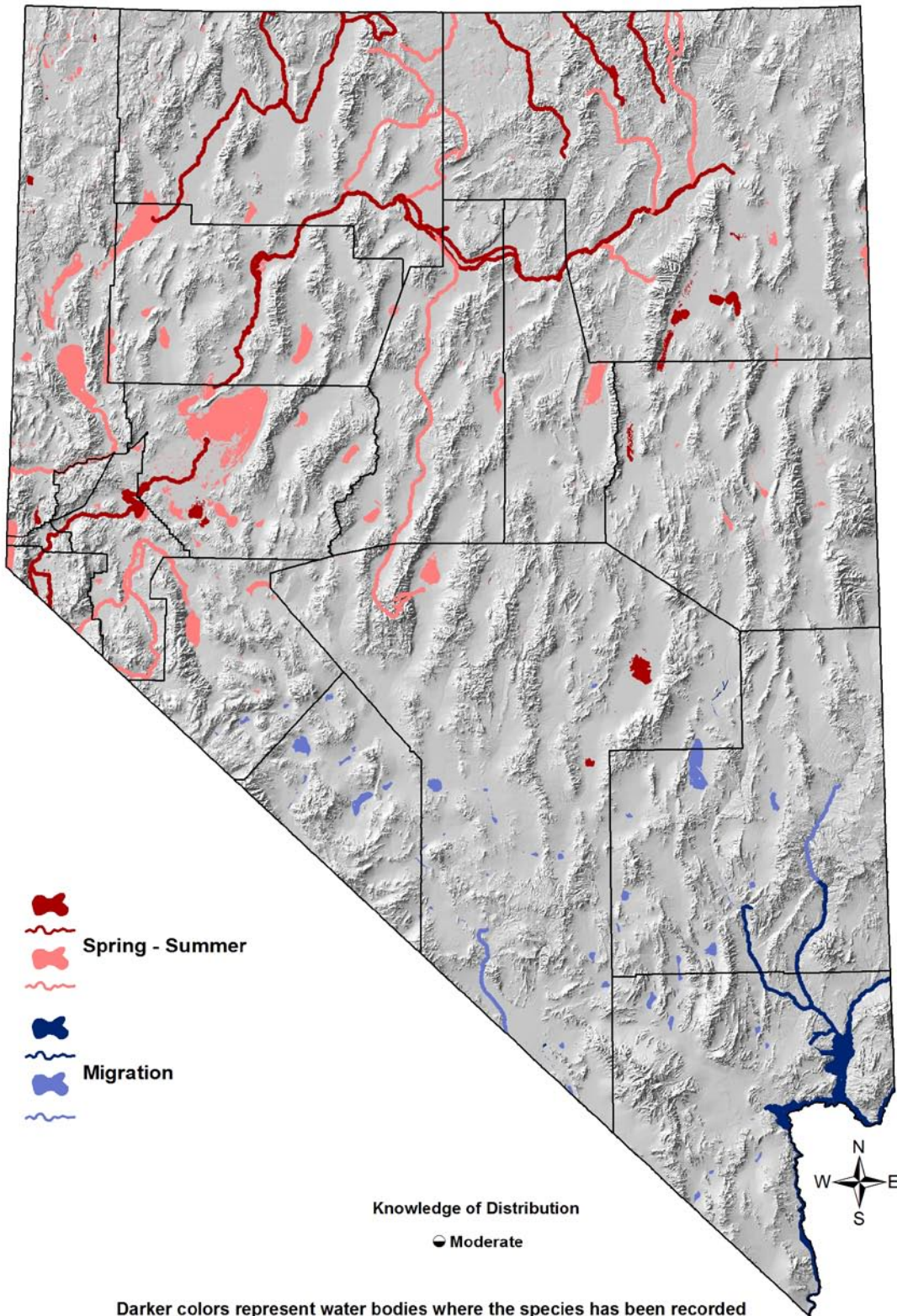
Priority Status	
Conservation Priority Species	
Species Concerns	
Historical and recent declines Habitat threats High stewardship responsibility (staging and migration)	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S2S3B
USFWS	Migratory Bird
BLM	None
USFS	None
NDOW	None
IW Shorebird Plan	Critically Important
Trends	
Historical •	Significant declines ³
Recent •	Probable declines ^{1 EO}
Population Size Estimates	
Nevada •	3,000 (breeding); ~12,000 (staging and migration), with high annual variability ^{7, EO}
Global ○	1,500,000 ^{1, 3, 10}
Percent of Global	< 1%
Population Objective	
Maintain / increase ^{EO}	
Monitoring Coverage	
Source	NODW shorebird counts, WMA and NWR counts, Aquatic Bird Count
Coverage in NV	Good / Fair in Lahontan Valley, NWR's, and WMA's; Fair / Poor elsewhere
Key Conservation Areas	
Protection	See "Overview", below
Restoration	Degraded or at-risk marshes, lakes, and ponds

Natural History Profile

Seasonal Presence in Nevada	
Spring – Summer (breeding) Fall and Spring (migration)	
Known Breeding Dates in Nevada	
May – July ^{1, 6}	
Nest and Nesting Habits	
Nest Placement	Ground nests in wet areas with vegetation cover, < 100 m [330 ft] from water edge ³
Site Fidelity	Probably low ⁴
Other	Gregarious nester ³
Food Habits	
Basic	Dabbler and prober
Primary Diet	Invertebrates from water column or sediment ³
Secondary Diet	Terrestrial invertebrates ³

Wilson's Phalarope

Phalaropus tricolor



Darker colors represent water bodies where the species has been recorded within the past 12 years. Lighter colors represent water bodies where the species could potentially occur. Smaller water bodies may be difficult to visualize on the map.

Wilson's Phalarope

Phalaropus tricolor

Overview

Wilson's Phalarope is well known for the huge flocks that congregate at saline lakes prior to their long-distance fall migration,⁸ especially just outside Nevada's borders at the Great Salt Lake and Mono Lake. Although the Wilson's Phalarope's presence in our state is more modest, Nevada does contain important staging sites, particularly in Lahontan Valley, where a peak staging abundance of 67,000 birds was recorded in 1987.¹¹ Because of their critical importance to staging Wilson's Phalaropes and other species, the Lahontan Valley Wetlands have been designated as a "Site of Hemispheric Importance" by the Western Hemisphere Shorebird Reserve Network (www.whsrn.org). Ruby Lake NWR, the Henderson Sewage Ponds, Lake Mead, Pyramid Lake, and several WMA's are also known staging locations.¹⁴

Wilson's Phalaropes also breed fairly widely across the northern part of the Nevada, in permanent or ephemeral freshwater marshes and ponds. Their nesting habitat may extend somewhat beyond the actual marsh edge into dense cover in meadows, grasslands, or irrigated agricultural fields.³ In addition to Lahontan Valley, important breeding locations include Ruby Lake NWR, wetlands along the Humboldt River, and Washoe Valley.^{5, EO} Although Nevada's staging population has been reasonably well characterized, less information has been collected on the breeding population. This is unfortunate, because indications are that Wilson's Phalaropes, though still numerous, have been declining rather steadily within Nevada and the greater region for some time. Better identification of the specific threats to this bird, during both the breeding season and the staging period, is a critical prerequisite to identifying effective conservation strategies.⁹

Abundance and Occupancy by Habitat

Although the fall staging population is typically ~ 12,000 birds (mostly in Lahontan Valley), peak numbers reached 67,000 in Lahontan Valley alone in 1987.¹¹ Even larger counts were reported in Lahontan Valley in 1970's, but have not recurred since.²

Nevada-Specific Studies and Analyses

Shuford et al. (2002)¹⁴ provides the most comprehensive data for migratory shorebirds in the Intermountain West region, including Nevada.

Main Threats and Challenges

Habitat Threats

- Loss or degradation of marshes, ponds, and lakes due to water diversions, declines in water quality, development, or climate change¹³

Wilson's Phalarope

Phalaropus tricolor

- Possible negative impacts of livestock grazing / trampling on wet terrestrial habitats used for nesting¹³

Research, Planning, and Monitoring Challenges

- The relative importance of ephemeral wetlands such as flooded playas, particularly during spring migration, has not been well-studied and deserves further investigation¹²
- The conservation needs of breeding birds have not been well studied

Conservation Strategies

Habitat Strategies

- Open Water (p. Hab-15-1), Ephemeral Wetland and Playa (p. Hab-6-1), and Marsh (p. Hab-9-1) habitat conservation strategies benefit this species
- Maintain conditions that produce healthy populations of aquatic invertebrates (brine shrimp, brine flies, and others) during the spring and fall migration periods
- Manage livestock grazing, recreation, and other land uses to minimize the disturbance of shoreline and wet meadow vegetation that provide nest cover

Research, Planning, and Monitoring Strategies

- Improve current monitoring programs to better count peak migration numbers
- Devote more inventory and monitoring effort to ephemeral wetlands to determine their relative importance as migration habitat
- Conduct studies to better determine breeding habitat requirements and conservation needs
- Monitor water quality in occupied sites, especially key staging areas

Public Outreach Strategies

- None identified

References: ¹Brown et al. (2001); ²Chishom and Neel (2002); ³Colwell and Jehl (1994); ⁴Colwell and Oring (1988); ⁵Floyd et al. (2007); ⁶GBBO unpublished Atlas data; ⁷IWJV (in prep.); ⁸Jehl (1988); ⁹Lesterhuis and Clay (2010); ¹⁰Morrison et al. (2006); ¹¹Neel and Henry (1996); ¹²Oring et al. (2000); ¹³Powers and Glimp (1996); ¹⁴Shuford et al. (2002); ^{EO} expert opinion