

Trumpeter Swan

Cygnus buccinator

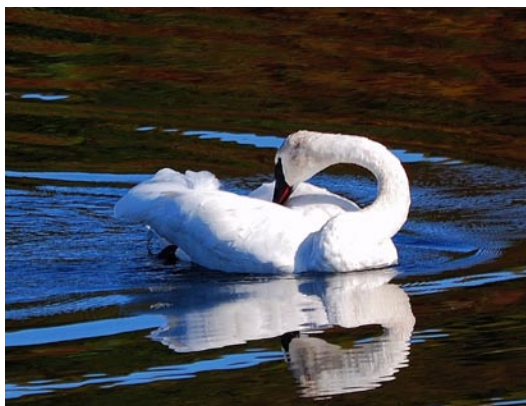


Photo by Larry Neel

Habitat Use Profile

Habitats Used in Nevada	
Marsh Open Water	
Key Habitat Parameters •	
Plant Composition	Cattail, bulrush, sedges, willows, submerged aquatic vegetation
Plant Density	Varying densities of emergent vegetation ³
Mosaic	Irregular shorelines with patches of emergent vegetation (hemi-marsh), areas with significant aquatic vegetation, and areas of open water; presence of islands surrounded by deep water highly desirable ³
Water Depth	> 50 cm [20 in] around nest site; < 130 cm [51 in] for foraging ³
Water Quality	Low salinity, little or no pollution ^{E0}
Hydrology	Minimal daily fluctuation in stage during nesting ^{E0}
Response to Vegetation Removal	Probably negative ^{E0}
Area Requirements •	
Minimum Patch Size	5 ha [12.3 ac] ^{E0} , including ≥ 2 ha [4.9 ac] of unobstructed open water ³
Recommended Patch Size	> 150 ha [370 ac] ^{E0}
Home Range / Territory Size	Unknown

Conservation Profile

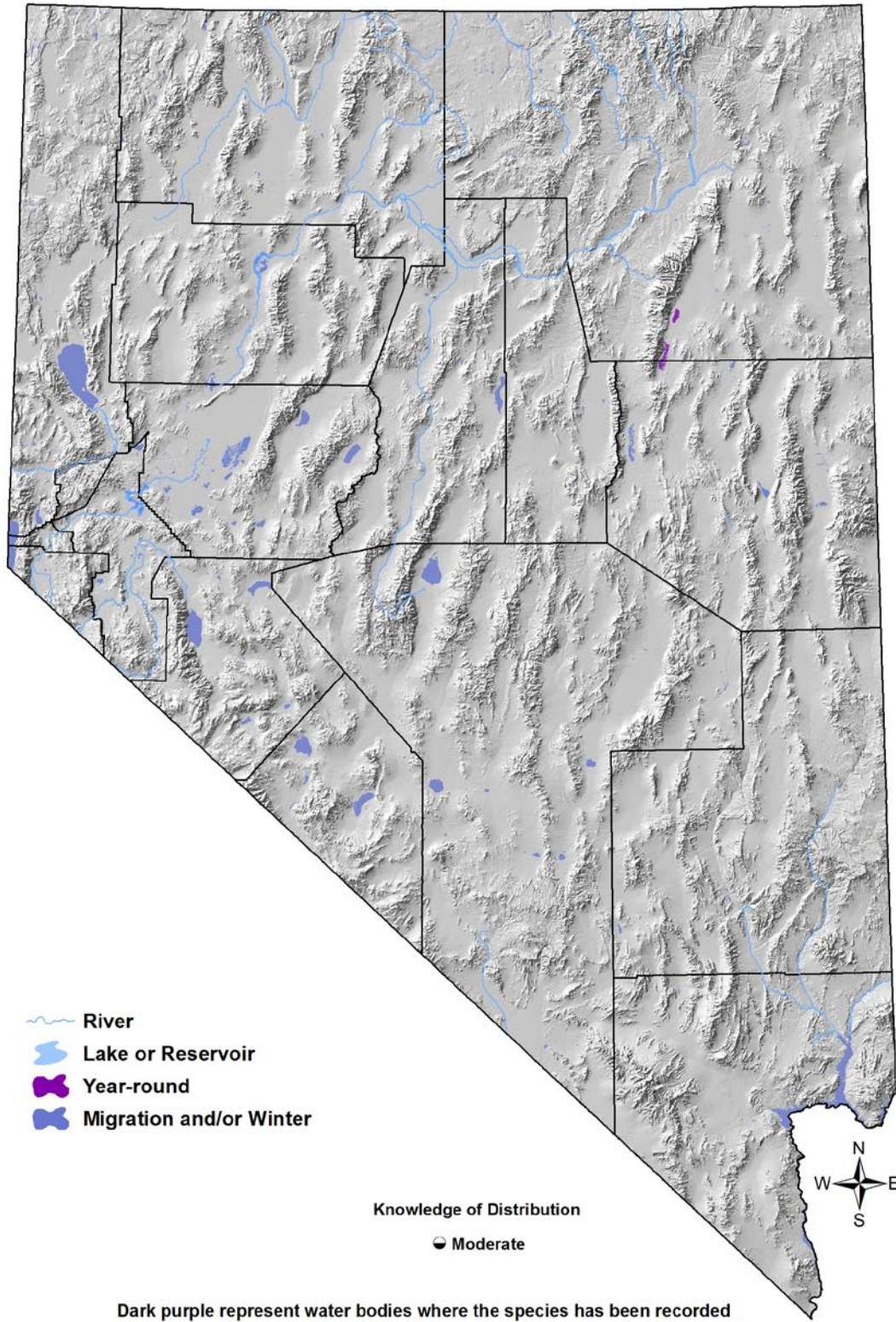
Priority Status	
Conservation Priority Species	
Species Concerns	
Small population size Habitat threats Historical declines	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S1b
USFWS	Migratory Bird
BLM	None
USFS	None
NDOW	None
Pacific Flyway Council	High
Trends	
Historical •	Nearly extinct south of Canada by 1935; subsequently, slowly recovering ^{3, 4}
Recent ○	Probably stable in Nevada ^{3, 5}
Population Size Estimates	
Nevada •	≤ 30 (breeding) ⁵
Global •	16,000 ³
Percent of Global	< 1%
Population Objective	
Maintain / Increase ^{E0}	
Monitoring Coverage	
Source	NWR surveys, NDOW aerial surveys
Coverage in NV	Good at Ruby Lake; Fair / Poor elsewhere
Key Conservation Areas	
Protection	Ruby Valley
Restoration	Ruby Valley

Natural History Profile

Seasonal Presence in Nevada	
Year-round	
Known Breeding Dates in Nevada	
Early May – mid-August ¹	
Nest and Nesting Habits	
Nest Placement	Nests on islands, hummocks, or floating vegetation ³
Site Fidelity	High for breeding sites ³
Food Habits	
Basic	Dabbler
Primary Diet	Submerged and emergent vegetation ³
Secondary Diet	Cygnets: aquatic invertebrates ³

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Overview

Nevada's small breeding population of Trumpeter Swans at Ruby Lake is the result of a successful reintroduction of the species in the 1940's-50's, following its earlier extirpation from the state. While persistent, this breeding population is very small and highly disjunct from other breeding populations farther to the north and east, and it appears to have become sedentary and abandoned migration.³ Reintroduction of additional breeding populations elsewhere in the state is possible, but it is not a current priority for management agencies.⁵ Given that Trumpeter Swan breeding populations to the east of Nevada are increasing in abundance (T. Floyd, *pers. comm.*), natural expansion of Nevada's breeding population seems possible as well. There is limited information on non-breeding occurrence of this species outside of Ruby Valley, and it is speculated that wintering birds, presumably individuals from populations that breed farther to the north, are found widely, albeit rarely, across the state.²

Abundance and Occupancy by Habitat

No information

Nevada-Specific Studies and Analyses

No information

Main Threats and Challenges

Habitat and Other Threats

- Sensitive to water pollution and vulnerable to changes in water level during the incubation period³
- Sensitive to nest-site disturbances³
- Cygnets at Ruby Lake suffer high predation rate,⁵ although the relative levels of degradation by coyotes, Common Ravens, and other predators is not clear
- Nevada's breeding population is small, disjunct, and may have minimal genetic interchange with other breeding populations³

Research, Planning, and Monitoring Challenges

- Post-breeding and winter occurrence and habitat use in Nevada not well documented

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Conservation Strategies

Established Strategies

- Ruby Lake NWR management plan and monitoring program
- Pacific Flyway Council oversees the monitoring of regional and continental populations, and sets or recommends policies and regulations related to harvest, management, and conservation (<http://www.pacificflyway.gov/>)

Habitat Strategies

- Open Water (p. Hab-15-1) and Marsh (p. Hab-9-1) habitat conservation strategies benefit this species
- Ruby Lake NWR population is carefully and effectively managed; implement similar management policies if other breeding populations are established, including the following:
 - Protect water quality
 - Maintain water level during incubation period
 - Protect nest sites from human disturbance

Research, Planning, and Monitoring Strategies

- Continue current Ruby Lake NWR monitoring program
- Conduct more intensive statewide surveys to determine post-breeding, migration, and winter presence and distribution of Trumpeter Swans in Nevada

Public Outreach Strategies

- None identified

References: ¹GBBO unpublished Atlas data; ²Ivey (1990); ³Mitchell and Eichholz (2010); ⁴Shea et al. (2002); ⁵(C. Mortimore, *pers. comm.*); ^{EO} Expert opinion