

Tundra Swan

Cyngus columbianus



Photo by Fred Peterson

Conservation Profile

Priority Status	Conservation Target
Reasons for Priority Status	Possible threats High stewardship for wintering
Other Rankings	Audubon Watchlist: Natural Heritage: [TBD] Pacific Flyway Council: High / Medium USFWS: Migratory Bird BLM: None NDOW: None
Trends	Historical: Significant declines through early 1990's followed by significant recovery [p1] Recent: Probably stable or growing moderately range-wide [p1]
Population Size and Stewardship %	Nevada: 1,000 – 10,000, winter only Global: ~ 150,000 as of 1989; ~ 60,000 that winter in western N. America [p1] Stewardship %: Up to 20% of swans wintering in western N. America [p1]
Population Objective	TBD
Monitoring Coverage	Source: USFWS midwinter Tundra Swan survey, refuge and WMA monitoring, [other, TBD] Coverage and Adequacy: Good [TBD]
Key Conservation Areas	Lahontan Valley Ruby Valley [Other TBD]

Habitat Use Profile

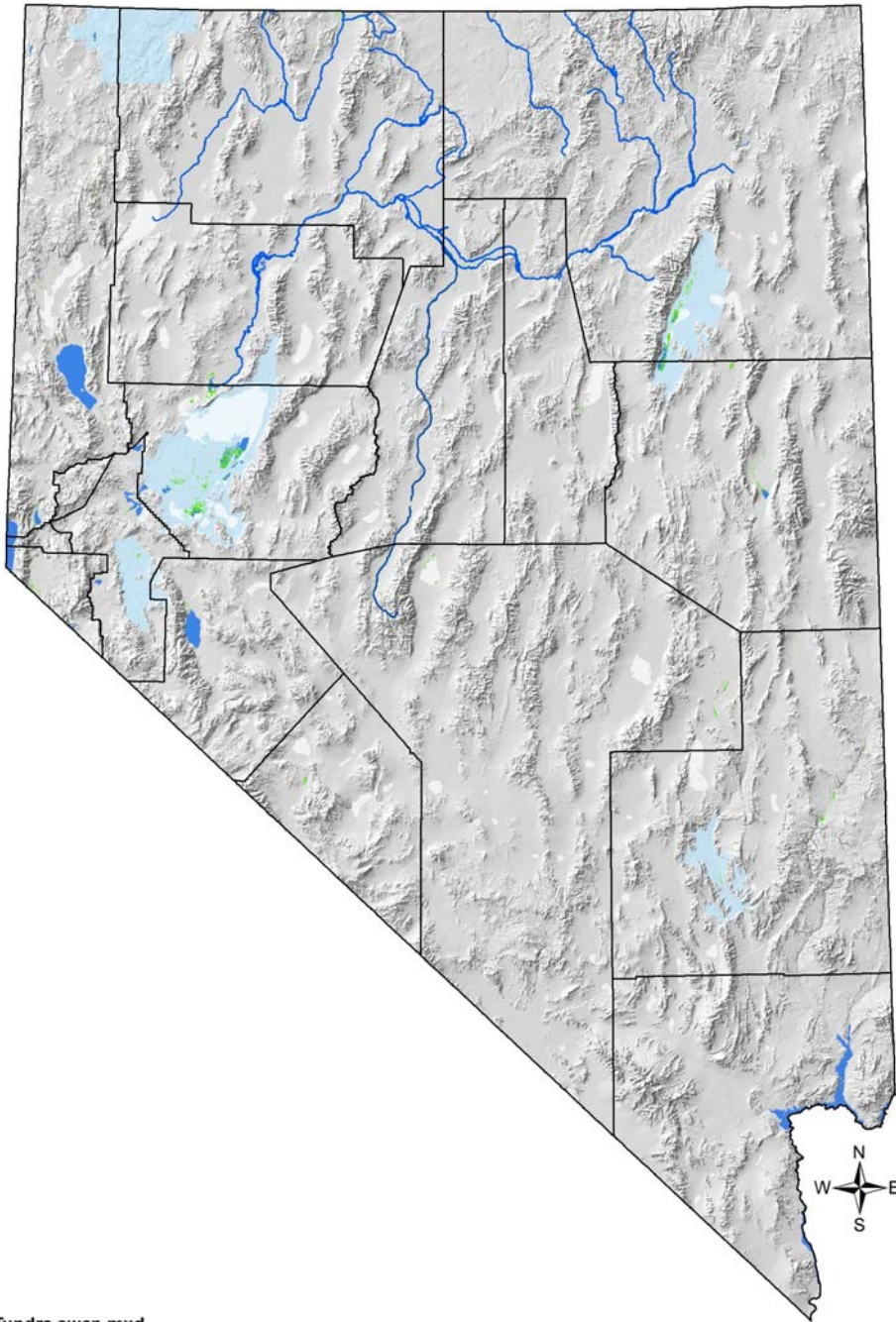
Main Habitats Used in Nevada	Marsh Open Water
Key Habitat Use Parameters	<u>In winter:</u> Permanent but shallow lakes, ponds, rivers, wetlands [p1] Presence of sago pondweed important [C. Mort. pers. comm.] May forage in agricultural uplands [p1] Presumed high fidelity throughout lifespan to traditional wintering sites [p1] <u>During migration:</u> Similar to winter, but also prefer larger (>1.3 km ²) bodies of predominantly open water [p1]
Minimum Patch Size	Not quantified, except preference for larger (>1.3 km ²) water bodies during migration [p1]

Natural History Profile

Seasonal Presence in Nevada	Winter Migration
Known Breeding Dates in Nevada	None
Nesting Habits	N/A
Food Requirements	All parts of submerged and emergent aquatic vegetation [p1] Feeds up to a depth equivalent to neck length (~ 1 m) [p1] May feed in agricultural fields Supplement plant food with occasional invertebrates [p1]

Tundra Swan

Cygnus columbianus



File: Tundra swan.mxd

Tundra Swan

Cyngus columbianus

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

The Tundra Swan breeds in the Arctic, and occurs in Nevada only through the winter and during migration. The species is divided into a “Western population” and “Eastern population” based on the location of wintering grounds, and Nevada hosts up to 20% of the Western population’s wintering birds. Current management appears sufficient to maintain these populations, but they depend on water-dependent habitats that are under threat from a variety of sources.

ABUNDANCE AND OCCUPANCY BY HABITAT

- TBD

NEVADA-SPECIFIC STUDIES AND ANALYSES

- TBD [add NDOW monitoring data]

MAIN THREATS AND CHALLENGES

- Few present threats exist, and Nevada wintering populations appear to be relatively stable under current management guidelines
- Climate change and future demands on water likely to be threats
- Nevada’s smaller wintering sites may not be sufficiently protected

Tundra Swan

Cyngus columbianus

CONSERVATION STRATEGIES

Proscribed Strategies

- Pacific Flyway Council and NDOW monitor populations

Habitat Strategies

- General Marshes and Open Water conservation strategies
- Manage wintering and migration stopover sites to encourage healthy growth of sago pond-weed

Research, Planning, and Monitoring

- Continue to monitor wintering populations, determine thresholds for conservation action, if habitat resources decline

OTHER PRIORITY SPECIES WITH SIMILAR CONSERVATION STRATEGIES

- Northern Pintail
- Lesser Scaup

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

Tundra Swan
Cyngus columbianus

[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