

Black Tern

Chlidonias niger



Photo by Martin Meyers

Habitat Use Profile

Habitats Used in Nevada	
Marsh Open Water Great Basin Lowland Riparian	
Key Habitat Parameters ●	
Plant Composition	Pondweed, bulrushes, sedges, rushes ⁴
Plant Density	25-75% cover in emergent vegetation, 1:1 ratio of emergent to open water ⁴
Mosaic	Large wetland complexes (avoids isolated wetlands) ⁴
Water Depth	0.5 – 1.2 m at nest site (in emergent or dense submerged vegetation) ⁴
Hydrology	Minimal daily fluctuation in stage ^{EO}
Water Quality	Presumed to require very low salinity ^{EO}
Response to Vegetation Removal	Presumably negative ^{EO}
Area Requirements ●	
Minimum Patch Size	20 ha (45 ac) ⁴
Recommended Patch Size	1,000 ha (2,200 ac) based on requirement of wetland complexes ^{4,EO}
Home Range	Unknown

Conservation Profile

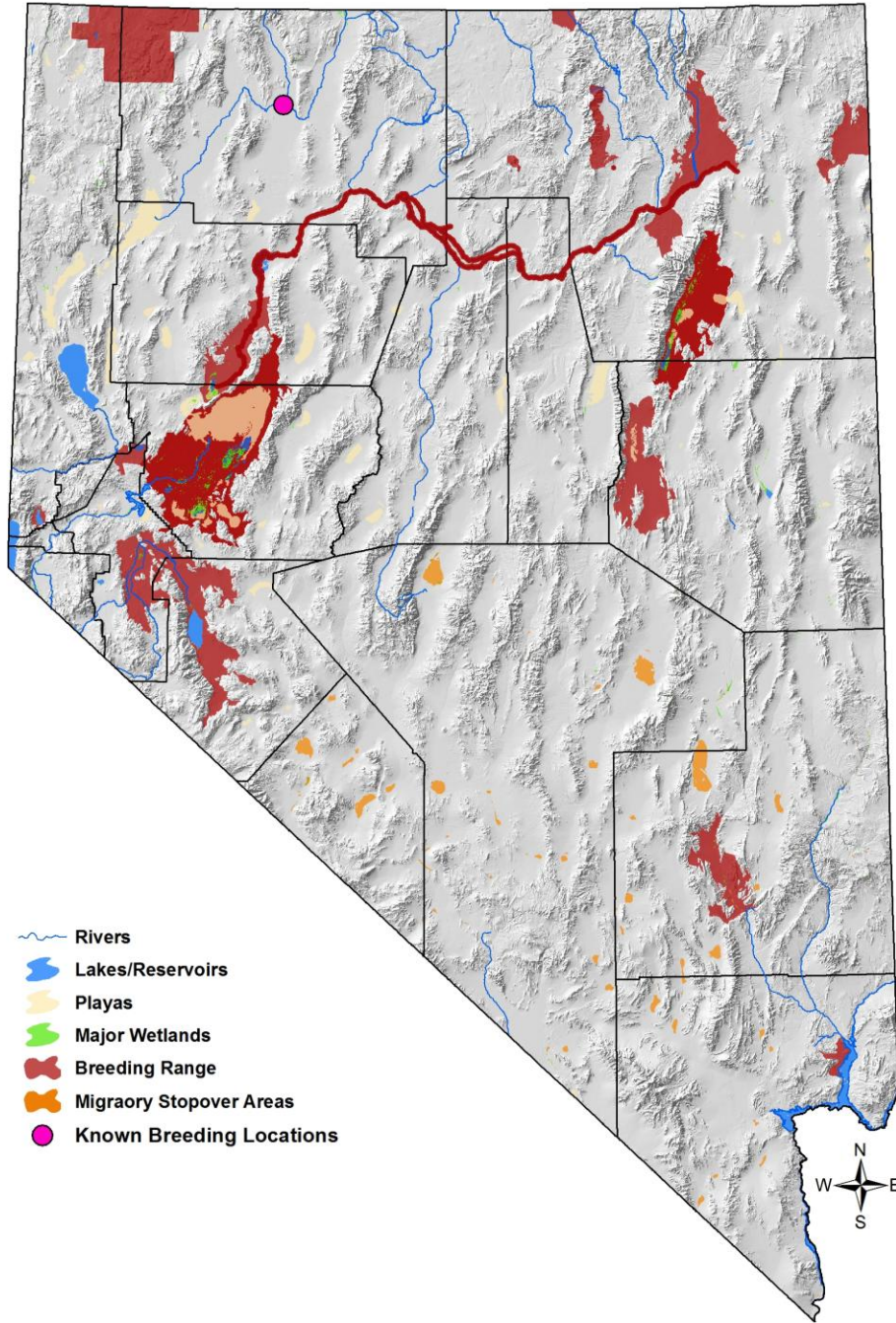
Priority Status	
Conservation Species	
Species Concerns	
Small population size Habitat threats	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S2S3B
USFWS	Migratory Bird
BLM	None
USFS	None
NDOW	Conservation Priority
IW Waterbird Plan	High Concern
Trends	
Historical ●	Rangewide declines ¹
Recent ●	Declining ²
Population Size Estimates	
Nevada ●	700 ^{EO}
Global ●	300,000 ³
Percent of Global ●	< 1%
Population Objective	
Maintain/Increase ^{EO}	
Monitoring Coverage	
Source	Ruby Lake NWR surveys, Aquatic Bird Count
Coverage in NV ●	Very good at Ruby Lake, Fair/Poor elsewhere
Key Conservation Areas	
Protection	Ruby Valley
Restoration	Lahontan Valley, Ruby Valley

Natural History Profile

Seasonal Presence in Nevada	
Spring – summer	
Known Breeding Dates in Nevada	
Late June – August ⁵	
Nest and Nesting Habits	
Nest Placement	Floating nest in emergent or dense mats of submerged vegetation ⁴
Site Fidelity	Unknown, but probably moderate-high
Other	Semi-colonial, 11-50 pairs, nests spaced 5 - 20 m ⁴
Food Habits	
Basic	Insects and fish; aerial forager and dipper
Primary Prey	Insects; fish 2.5-3 cm (1-1.5") in length ⁴
Secondary Prey	Unknown

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Note: Walker Basin patch needs to be reduced to just Walker Lake

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References: ¹ Sauer et al. (2008), ² Ivey and Herziger (2006), ³ Kushlan et al. (2002), ⁴ Dunn and Agro (1995), ⁵ GBBO unpubl. atlas data, ^{EO} expert opinion

Overview

Black Terns are one of several conservation species covered in this plan that are declining in Nevada without a clearly identified cause for the declines. General reductions in wetland extent and quality are undoubtedly important contributors. But for unknown reasons, Black Terns are declining more rapidly than most other waterbird priority species. Traditionally, the main breeding colony in Nevada has been located at Ruby Lake NWR. Most recently, no breeding has been observed in this colony since 2006, and conservationists have currently no explanation for this phenomenon, nor information about whether the birds have been displaced into other areas. This is perhaps the most disturbing development for Black Tern conservation, because Ruby Valley has been the species' stronghold in the state.

Other known historic breeding sites within the state include the Lahontan Valley wetlands, Humboldt Sink, Mason Valley WMA, the Boyd Humboldt Valley IBA, Quinn Lakes, and Pahranaagat NWR, though numbers of breeders at these sites have been relatively low and variable. Possible breeding locations include Kirch WMA, and Key Pittman WMA, which are currently migration stopover sites of the species. Black Terns clearly merit additional research and attention in Nevada.

Abundance and Occupancy by Habitat

- Nevada population estimate based on recent historic average of 600 breeders at Ruby Lake NWR before 2006, plus 100 additional breeders at scattered locations throughout state

Nevada-Specific Studies and Analyses

- None reported

Main Threats and Challenges

Habitat Threats

All threats to marshes and open water probably apply to this species, and the following:

- Loss or degradation of wetlands; loss of freshwater conditions to higher salinities also likely plays a role
- Heavy metal contamination may be a threat
- Human nest disturbance, invasive plants, and pesticides have also been suggested as threats, but not well documented (Dunn and Agro 1995)

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Other Threats

- Causes of ongoing declines are not well understood and require more detailed research and monitoring of conservation action

Species with Similar Conservation Strategies

- Franklin's Gull

Conservation Strategies

Habitat Strategies

1. Open Water and Marsh conservation and restoration strategies will benefit this species (see habitat accounts).
2. Artificial wetlands can provide suitable breeding habitat if amount of emergent vegetation is appropriate (Dunn and Agro 1995).
3. River restoration projects along the Humboldt River system may benefit this species, especially if extensive networks of river-associated wetlands are created.

Research, Planning, and Monitoring

1. Additional research is needed to determine current status of Ruby Lake NWR population, and causes for recent failure of reproduction since 2006
2. Additional research is needed to better pinpoint specific causes for ongoing statewide and regional declines
3. Additional monitoring is needed to better document important breeding sites around Nevada