

# Black-necked Stilt

*Himantopus mexicanus*



Photo by Larry Neel

## Habitat Use Profile

Habitats Used in Nevada	
Ephemeral Wetland and Playa Open Water (shorelines)	
Key Habitat Parameters •	
Plant Composition	Cattail, sedges, rushes
Plant Density	Sparse or no emergent vegetation <sup>1</sup>
Mosaic	Shallow marsh with sparse emergent vegetation, interspersed with dry spots, mudflats; also playa margins <sup>7</sup>
Water Depth	< 30 cm [12 in] <sup>EO</sup>
Water Quality	Prefers relatively low salinity <sup>7</sup>
Hydrology	Stage can be variable <sup>EO</sup>
Response to Vegetation Removal	Probably neutral <sup>EO</sup>
Area Requirements ◦	
Minimum Patch Size	Unknown
Recommended Patch Size	> 130 ha [320 ac] <sup>7</sup>
Home Range / Territory Size	Unknown

## Conservation Profile

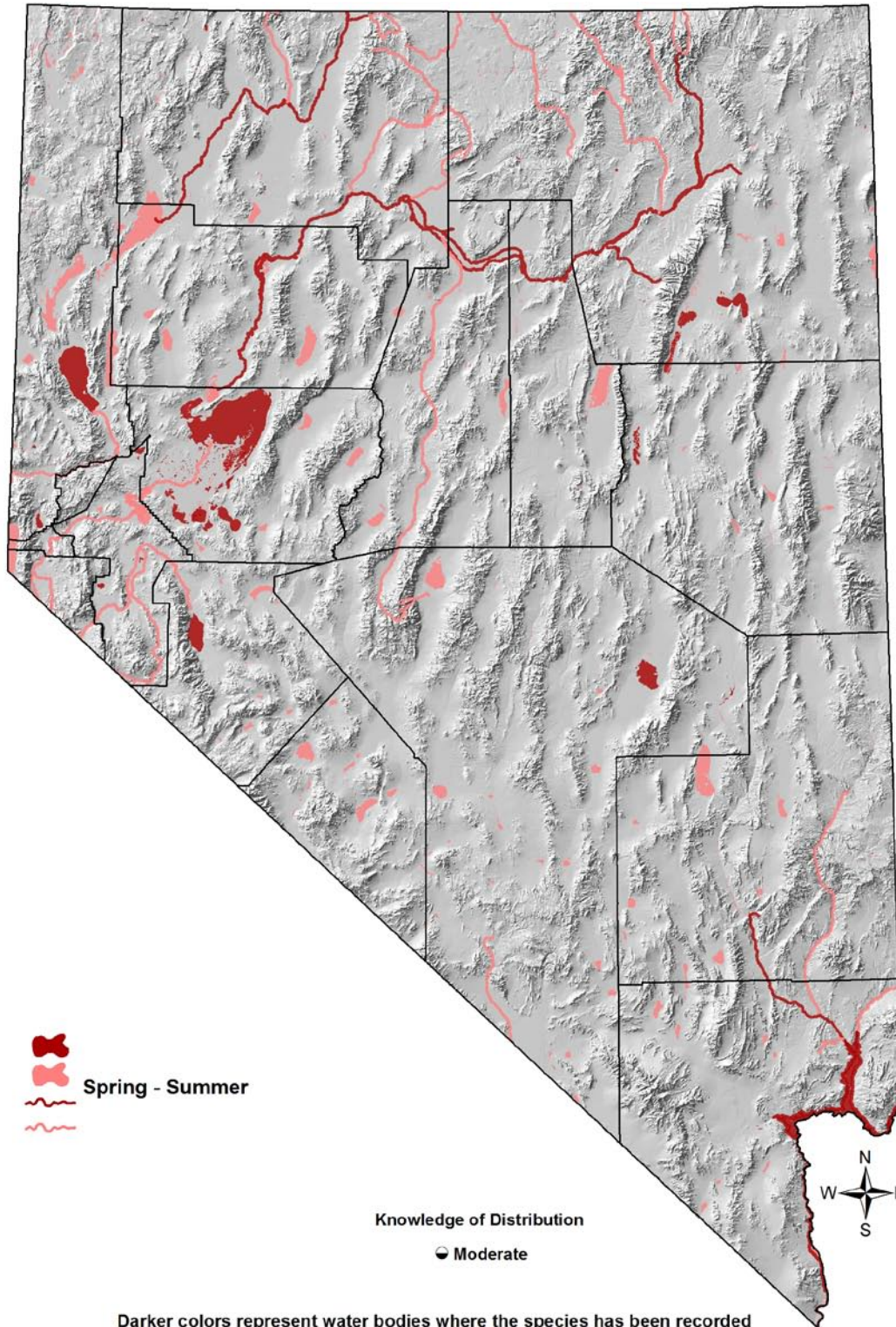
Priority Status	
Conservation Priority Species	
Species Concerns	
Habitat threats	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S3S4B
USFWS	Migratory Bird
BLM	None
USFS	None
NDOW	Conservation Priority
IW Shorebird Plan	Critically Important
Trends	
Historical •	Range contractions, but extent of declines unclear <sup>7</sup>
Recent •	Unknown, thought to be declining in Nevada <sup>EO</sup>
Population Size Estimates	
Nevada •	~ 3,000, with high annual variability <sup>EO</sup>
Global •	175,000 <sup>1,4</sup>
Percent of Global	~ 2 %
Population Objective	
Increase by 30% <sup>EO</sup>	
Monitoring Coverage	
Source	NDOW Lahontan Valley counts, NWR and WMA counts, Aquatic Bird Count
Coverage in NV	Good in managed areas, Fair / Poor elsewhere, especially playas
Key Conservation Areas	
Protection	Lahontan Valley, Humboldt system, Lake Mead
Restoration	Degraded / dewatered marshes and playa wetlands, mitigation wetlands

## Natural History Profile

Seasonal Presence in Nevada	
Spring – Summer Fall and Spring (migration)	
Known Breeding Dates in Nevada	
Early April – July <sup>2</sup>	
Nest and Nesting Habits	
Nest Placement	On ground near shore in sparse vegetation, or slightly elevated over water on mats of vegetation <sup>7, EO</sup>
Site Fidelity	Unknown
Other	Semi-colonial nester <sup>7</sup>
Food Habits	
Basic	Prober
Primary Diet	Invertebrates from sediment or water <sup>7</sup>
Secondary Diet	Small fish, seeds <sup>7</sup>

# Black-necked Stilt

*Himantopus mexicanus*



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.

# **Black-necked Stilt**

*Himantopus mexicanus*

## **Overview**

Like the more numerous and equally handsome American Avocet, the Black-necked Stilt is able to exploit ephemeral wetlands and other temporarily favorable wetland conditions. During wet years, when suitable habitat is widely available, their populations can show significant peaks. Compared to avocets, stilts are somewhat less tolerant of saline or alkaline waters, are less colonial, and also are more likely to forage within emergent vegetation.<sup>7</sup> Overall, the American Avocet is slightly better documented in Nevada than the Black-necked Stilt, probably because its population is larger. Stilts breed more commonly in the Great Basin portion of the state, but southern Nevada has breeding strongholds as well in the Lake Mead area and at Ash Meadows NWR. As is the case with many other Conservation Priority shorebirds, Lahontan Valley is Nevada's most consistently important site for Black-necked Stilts. For this reason, it has been designated as a "Site of Hemispheric Importance" by the Western Hemisphere Shorebird Reserve Network ([www.whsrn.org](http://www.whsrn.org)).

Black-necked Stilts are also common in Nevada during migration, particularly during the fall.<sup>8</sup> They wander widely across the Great Basin in the post-breeding season, moving among wetlands as the summer progresses and some sites dry out or become otherwise unsuitable, and this ability to shift among seasonally-available ephemeral wetlands is a critical feature of the Black-necked Stilt's adaptive biology.<sup>6</sup> Conservation strategies need to provide for the protection of suitable wetland habitat well beyond the breeding season. This complicates the management challenge, since the sites that are important for breeding may not be the same as the sites that are important for post-breeding wandering and migration. Because of their substantial similarities, Black-necked Stilts and American Avocets can be regarded as having the same management needs in most circumstances.

## **Abundance and Occupancy by Habitat**

- The Nevada population estimate is based on an average count of 2,400 for Lahontan Valley and 600 in other scattered sites across the state (L. Neel, pers. comm.)
- The most recent ten-year peak population estimate is ~ 7,000 birds,<sup>3</sup> and a peak of 8,000 birds in Lahontan Valley alone was recorded in 1987<sup>5</sup>

## **Nevada-Specific Studies and Analyses**

No information

# **Black-necked Stilt**

*Himantopus mexicanus*

## **Main Threats and Challenges**

### Habitat and Other Threats

- Loss or degradation of ephemeral and permanent wetlands due to water diversions or development
- Increased salinization of wetlands and accumulation of contaminants<sup>7</sup>
- Because Black-necked Stilts use ephemeral wetlands and wet playas extensively, they may be impacted by changing precipitation patterns associated with climate change

### Research, Planning, and Monitoring Challenges

- Populations using ephemeral wetlands are not well monitored
- The impact of water quality is not well-studied

## **Conservation Strategies**

### **Habitat Strategies**

- Ephemeral Wetland and Playa (p. Hab-6-1) and Open Water (p. Hab-15-1) habitat conservation strategies benefit this species
- Promote seasonal fresh-water runoff into ephemeral wetlands and playas, as well as into sparsely-to-moderately vegetated permanent marshes, sufficient to create mudflats and maintain a shallow-water shoreline for the longest possible period
- Manage or restrict playa activities to protect the integrity of the clay soil pan and maximize water retention
- Wetlands with uneven bottoms and shallow islands are especially important for nesting<sup>EO</sup>
- Artificial mitigation wetlands can provide productive breeding habitat. Ideal configuration is > 130 ha [320 ac] wetland with a 2:1 ratio of shallow water (<15 cm [6 in]) feeding areas to elevated nesting areas<sup>1</sup>

### **Research, Planning, and Monitoring Strategies**

- Improve monitoring coverage of ephemeral wetlands and playas from the breeding season through the post-breeding and fall migration periods<sup>9</sup>
- Conduct additional study to determine tolerance to water quality variations

### **Public Outreach Strategies**

- None identified

References: <sup>1</sup>Brown et al. (2001); <sup>2</sup>GBBO unpublished Atlas data; <sup>3</sup>IWJV (in prep.); <sup>4</sup>Morrison et al. (2006); <sup>5</sup>Neel and Henry (1996); <sup>6</sup>Robinson and Oring (1996); <sup>7</sup>Robinson et al. (1999); <sup>8</sup>Shuford et al. (2002); <sup>9</sup>Warnock et al. (1998); <sup>EO</sup> Expert opinion