

Long-billed Dowitcher

Limnodromus scolopaceus



Photo by Larry Neel

Habitat Use Profile

Habitats Used in Nevada	
Marsh Open Water Ephemeral Wetland and Playa	
Key Habitat Parameters •	
Plant Composition	Cattail, bulrush, sedges, rushes, submerged aquatic vegetation
Plant Density	Forages in open (shallow) water or where stem density is low ⁹
Mosaic	Shallow marsh with low stem densities, interspersed with mudflats and shallow open water ⁹
Water Depth	< 16 cm [6.2 in] for foraging ⁹
Water Quality	Tolerates variety of salinities ^{7, 9}
Response to Vegetation Removal	Probably neutral ^{E0}
Area Requirements ○	
Minimum Patch Size	Unknown
Recommended Patch Size	> 50 ha [125 ac] ^{E0}
Home Range / Territory Size	Unknown

Conservation Profile

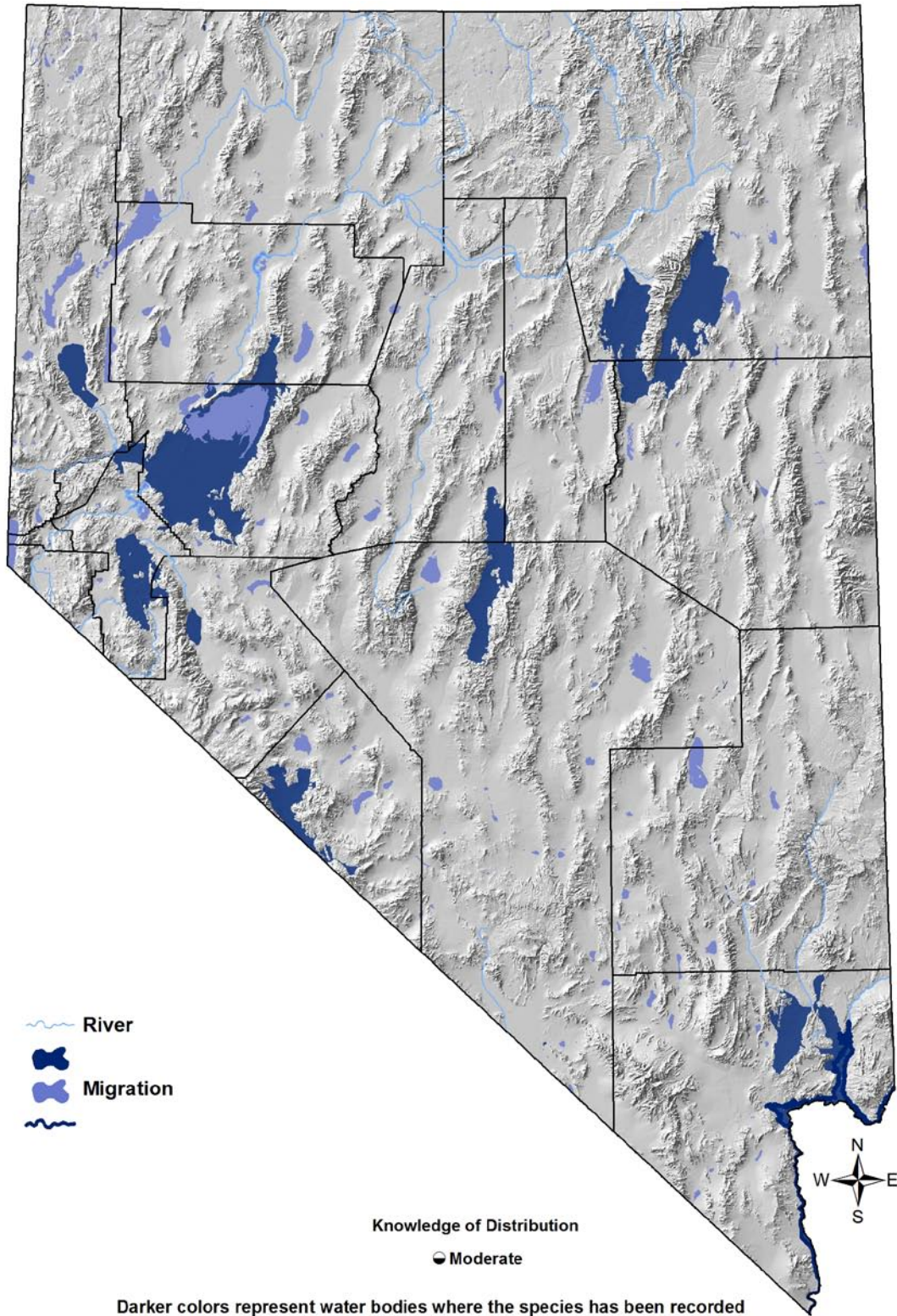
Priority Status	
Conservation Priority Species	
Species Concerns	
Habitat threats Historical and recent declines High stewardship responsibility (migration)	
Other Rankings	
Continental PIF	None
Audubon Watchlist	None
NV Natural Heritage	S4N
USFWS	Migratory Bird
BLM	None
USFS	None
NDOW	Conservation Priority
IW Shorebird Plan	Critically Important
Trends	
Historical •	Rangewide declines ⁹
Recent ○	Probably declining ^{5, 10}
Population Size Estimates	
Nevada •	14,000 – 20,000, with high annual variability ^{3, 10}
Global ○	500,000 ¹
Percent of Global	~ 3%, but much higher in peak years
Population Objective	
Maintain / Increase ^{E0}	
Monitoring Coverage	
Source	NDOW shorebird counts, NWR and WMA counts, Aquatic Bird Count
Coverage in NV	Good in Lahontan Valley and NWR's; Fair elsewhere
Key Conservation Areas	
Protection	Lahontan and Ruby Valleys
Restoration	Degraded marshes

Natural History Profile

Seasonal Presence in Nevada	
Spring (migration, May peak) Fall (migration, September peak)	
Known Breeding Dates in Nevada	
N/A	
Nest and Nesting Habits	
Nest Placement	N/A
Food Habits	
Basic	Prober
Primary Diet	Benthic and soil invertebrates ⁹
Secondary Diet	Terrestrial invertebrates, seeds ¹⁰

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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.

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Overview

The Great Basin provides critical migration stopover habitat for Long-Billed Dowitchers in both fall and spring.^{7, 8} and this species is one of the most numerous migrant shorebirds in the big wetland complexes of western Nevada,⁶ where they typically spend their time wading in shallow open water, probing for invertebrates.⁹ The Lahontan Valley is particularly important for migrating dowitchers, hosting perhaps 90% of all birds passing through Nevada. As such, it has been designated as a “Site of Hemispheric Importance” by the Western Hemisphere Shorebird Reserve Network (www.whsrn.org). Other locations with significant numbers include Lake Mead, Ash Meadows NWR, and Ruby Valley, along with a number of smaller sites, including some ephemeral wetlands.² A few Long-billed Dowitchers are present in mid-winter in western Nevada near Reno (www.ebird.org), but it is not clear if this is a regular or unusual phenomenon, or whether it involves overwintering birds or late / early migrants.

Most Long-billed Dowitchers in Nevada use areas that are actively managed for birds and have some level of protection, but nonetheless the population may be declining. Long-billed Dowitcher numbers in Lahontan Valley have recently been averaging ~ 14,000 – 20,000 birds,^{3, 10} down substantially from levels seen in the 1980’s.⁵ While some of this decline can perhaps be attributed to water diversions and cyclic drought, dowitchers have not rebounded as might be expected during periods when available water increased (L. Neel, pers. comm.). Apart from the obviously critical issue of water supply, factors that might be responsible for lower numbers are not known.

Abundance and Occupancy by Habitat

NDOW and USFWS inventories in Lahontan Valley in the 1980’s documented peak annual numbers in excess of 100,000 birds, in two different years.⁵ Average numbers for this period were approximately 30,000 birds, with annual differences attributable to precipitation patterns and available water. During the peak years, Nevada may have hosted up to 30% of the global Long-billed Dowitcher population.⁵

Nevada-Specific Studies and Analyses

No information

Main Threats and Challenges

Habitat Threats

- Diversion of water, causing shrinking or drying of marshes, ponds, or lakes before the fall migration peak

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Research, Planning, and Monitoring Challenges

- It is not known whether apparent declines are directional or cyclical, and if the former, their causes are unclear
- There is little information on the impacts of water quality

Conservation Strategies

Habitat Strategies

- Marsh (p. Hab-9-1), Open Water (p. Hab-15-1), and Ephemeral Wetland and Playa (p. Hab-6-1) habitat conservation strategies benefit this species
- Protect / maintain inflows into key stopover areas that are sufficient to provide water through the migration peaks
- Where the inflow volume can be controlled, flooding of mudflats to a depth of ≤ 10 cm [4 in] from April 20 – May 10, and from August 1 – 30 creates maximum numbers of benthic prey items for the migration periods^{EO}

Research, Planning, and Monitoring Strategies

- Possible declines need to be further investigated to determine if they are “real” or a cyclic fluctuation, and if real, the possible causes should be researched and assessed
- The effects of water quality need further research

Public Outreach Strategies

- None identified

References: ¹Brown et al. (2001); ²GBBO unpublished Nevada Aquatic Bird Count data; ³IWJV (in prep.); ⁴Morrison et al. (2006); ⁵Neel and Henry (1996); ⁶Neel et al. (2000); ⁷Oring and Reed (1996); ⁸Shuford et al. (2002); ⁹Takekawa and Warnock (2000); ¹⁰Nevada Wildlife Action Plan Team (2006); ^{EO} Expert opinion