

Least Bittern

Ixobrychus exilis



Photo by Martin Meyers

Conservation Profile

Priority Status	Conservation Target
Reasons for Priority Status	Possible declines Threats Small population size
Other Rankings	Continental PIF: None Audubon Watchlist: None Natural Heritage: S2b USFWS: Migratory Bird BLM: None NDOW: Conservation Priority IM West Waterbird: Moderate Concern
Trends	Historical: Unknown, substantial declines assumed [p1] Recent: Thought to be declining, but evidence mostly anecdotal [p1, p4]
Population Size Estimates	Nevada: Unknown [IWWCP] Global: Unknown [IWWCP] Percent of Global: Unknown
Population Objective	30 breeding birds a conservative goal based on assessment of available habitat in southern Nevada
Monitoring Coverage	No regional monitoring in Nevada, except local efforts
Key Conservation Areas	TBD

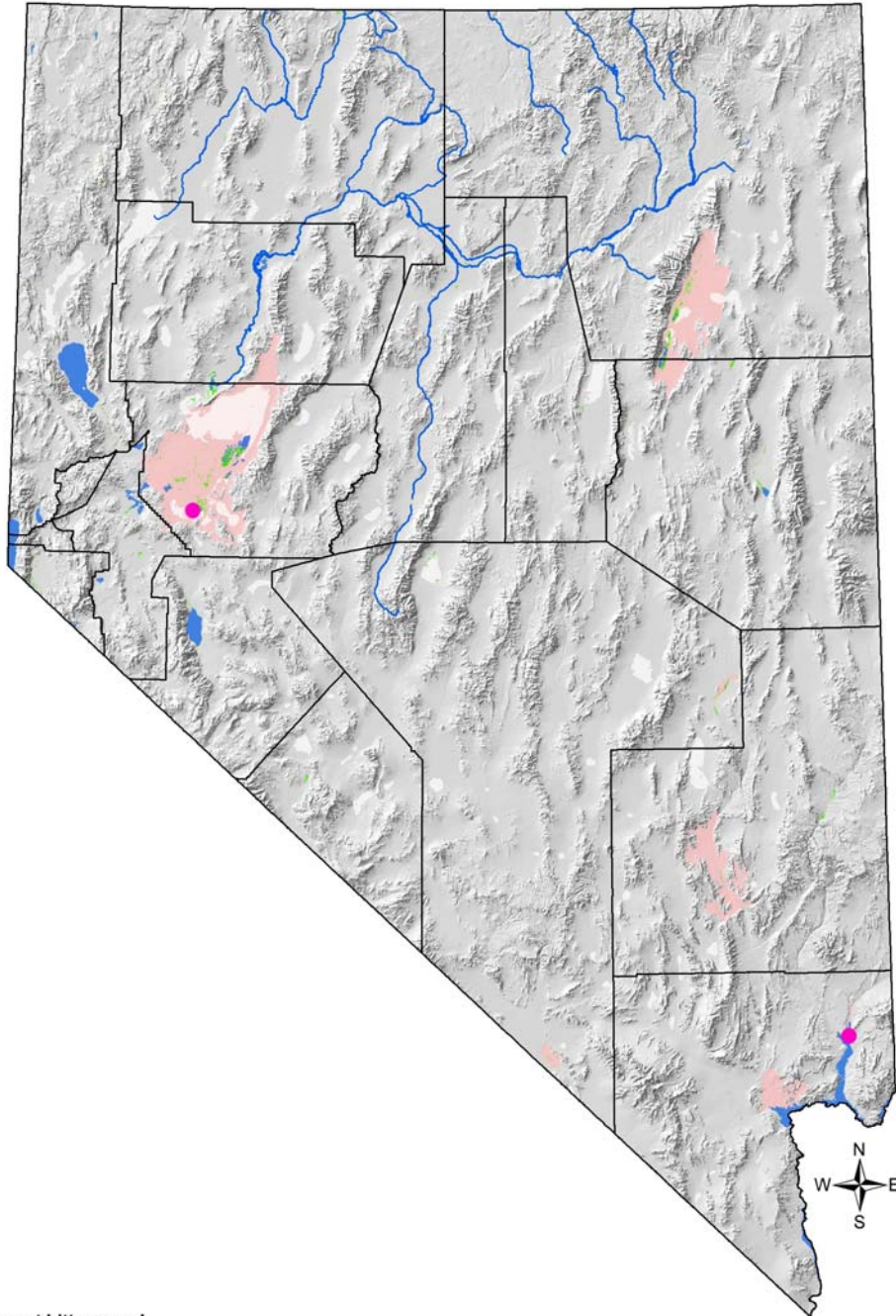
Habitat Use Profile

Main Habitats Used in Nevada	Marsh
Key Habitat Use Parameters	Freshwater marshes with dense emergent vegetation Emergent vegetation usually dominated by cattail, bulrush, sedges [p1] Preferred mosaic includes open water and clumps of woody vegetation interspersed with emergent vegetation [p1]
Minimum Patch Size	~ 1 bird / ha in suitable marshes along LCR [p1]

Natural History Profile

Seasonal Presence in Nevada	Spring – summer (breeding), southern Nevada breeders may be year-round residents [p1]
Known Breeding Dates in Nevada	May - August (estimated), possibly earlier in southern Nevada [p1]
Nesting Habits	Nests in emergent vegetation or adjacent woody vegetation, which is used to create nesting platform and canopy Nest usually 15 – 76 cm above water surface, over water 8-96 cm deep, and < 10 m from open water [p1]
Food Requirements	Mainly small fish and insects; also some crustaceans, small mammals, vegetable matter, eggs [p1] Forages in emergent vegetation near deep open water; may make foraging platforms from vegetation [p1] Forages mostly at water surface, but sometimes in water as deep as 60 cm [p1]

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File: Least bittern.mxd

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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 Least Bittern in Nevada is a largely unknown breeding bird. The Nevada Breeding Bird Atlas project confirmed earlier evidence of breeding in Lahontan Valley (Carson Lake, with earlier reports also including Stillwater NWR), and found likely breeding evidence at Overton WMA and Pahrangat NWR. Other areas with breeding activity include the Henderson Bird Viewing Preserve, the Virgin River near Littlefield (Rathbun and Braden 2003)[p4]. Old records also exist for Ruby Valley, but without recent confirmation of the species. These records paint a picture of a very spotty breeding distribution, but as with other secretive marshbirds, the possibility always exists that there are additional breeding locations in the state. Secretive marshbirds require a specialized survey technique for inventory and monitoring, and they are discovered only incidentally during other surveys. Developing an improved capacity to monitor this bird is a priority, as is implementation of general marsh conservation strategies in areas where breeding is known or likely to occur.

ABUNDANCE AND OCCUPANCY BY HABITAT

- ~ 1 bird / ha in suitable marshes along LCR [p1]

NEVADA-SPECIFIC STUDIES AND ANALYSES

- TBD

MAIN THREATS AND CHALLENGES

- Conversion or dewatering of marshes
- Water fluctuations during breeding season
- Possible effects of selenium accumulation

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CONSERVATION STRATEGIES

Habitat Threats

- General Marsh conservation strategy
- Maintain water levels in breeding marshes during nesting

Research, Planning, and Monitoring

- Develop improved population monitoring (according to Conway 2004)
- Inventory potential breeding areas in Nevada using these methods

PRIORITY SPECIES WITH SIMILAR CONSERVATION STRATEGIES

- Snowy Egret
- Clapper Rail

FURTHER READING

- TBD pending literature review

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
[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