

Least Bittern (*Ixobrychus exilis*)

NMPIF level: Biodiversity Conservation Concern, Level 2 (BC2)

NMPIF assessment score: 12

NM stewardship responsibility: Low

NAWCP status: Unknown

New Mexico BCRs: 16, 18, 35

Primary breeding habitat(s): Emergent Wetlands and Lakes

Summary of Concern

Least Bittern is a secretive wetland species that is restricted to a few breeding locations in New Mexico. Population trends in the state are not well known.

Associated Species

Pied-billed Grebe, Black-crowned Night-Heron, American Bittern (BC1), American Coot, Common Moorhen, Red-winged Blackbird, Great-tailed Grackle

Distribution

The North American subspecies of the Least Bittern breeds throughout the eastern United States, from southern Canada to the Gulf Coast, and at scattered locations throughout the west, mostly in the Pacific states. It is also a resident species breeding in coastal and interior areas of eastern and southern Mexico south to Costa Rica. Populations are small and discontinuous between the Mississippi River valley and the Pacific states.

In New Mexico, Least Bittern is a regular breeder at Tucumcari Lake and Bosque del Apache NWR; it may breed elsewhere in suitable habitat statewide, such as below Conchas Dam (Gibbs and Melvin 1992, Parmeter et al. 2002).

Ecology and Habitat Requirements

Least Bittern occupies reed beds in freshwater or brackish marshes. It requires fairly tall growth of aquatic or semi-aquatic vegetation, interspersed with clumps of woody vegetation and open water. Relatively large areas of wetland habitat (10 ha or more) are preferred. Nests are built in dense, tall stands of emergent or woody vegetation, typically a foot or two above water level and less than 30 feet from open water or channels. The nest platform is made by pulling down and crimping surrounding vegetation (Gibbs and Melvin 1992).

In South Carolina, Least Bitterns nested in small groups on cattail islands surrounded by open water (Post 1998). This species forages for small fish and invertebrates, sometimes from foraging platforms constructed out of bent reeds. It may be sympatric with American Bittern, but tends to occupy somewhat deeper water areas (Gibbs and Melvin 1992). Rarely seen during migration, Least Bittern is present in New Mexico from May to September.

Conservation Status

Species Assessment

| | |
|--------------------------------------|-----------|
| DISTRIBUTION | 2 |
| THREATS | 3 |
| GLOBAL POPULATION SIZE | 3 |
| LOCAL POPULATION TREND | 3 |
| IMPORTANCE OF NEW MEXICO TO BREEDING | 1 |
| COMBINED SCORE | 12 |

Least Bittern is a Biodiversity Conservation Concern, Level 2 species for New Mexico, with a total assessment score of 12; it receives no vulnerability scores higher than 3.

Population Size

No population estimates are available. Size of the New Mexico population is unknown, but must be considered very small. Reports of densities in other parts of the range, where the species is more common, range from 1-15 nests/ha (Gibbs and Melvin 1992).

Population Trend

Little information is available. The species is declining in parts of its range, due to loss of freshwater marshes (Post 1998). Because of its secretive nature, this species is particularly difficult to survey. A local trend score of 3 from NMPIF indicates uncertainty.

Threats

Range-wide destruction of wetland habitat is likely the greatest threat to the species. Least Bittern is relatively tolerant of human presence, and may occupy man-made impoundments (Post 1998). However, it requires habitat that is undisturbed and unpolluted. This species is not considered to be highly threatened in New Mexico, but is vulnerable due to its small population size and number of breeding locations.

Management Issues and Recommendations

Management for Least Bittern in New Mexico should focus on the preservation, protection, and improvement of wetland breeding habitat.

NMPIF Recommendations

- Maintain large (>10 ha), shallow wetlands with dense growth of robust, emergent vegetation.
- Implement marsh bird survey protocols in New Mexico to assess populations.

Species Conservation Objectives

NMPIF Objectives

- Maintain or increase populations in known breeding areas.
- Survey for additional breeding locations.

Sources of Information

Gibbs, J. P., F. A. Reid, and S. M. Melvin. 1992. Least Bittern. *In* The Birds of North America, No. 17 (A. Poole, P. Stettenheim, and F. Gill, Eds.). Philadelphia, PA: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.

Parmeter, J., B. Neville, and D. Emkalns. 2002. New Mexico Bird Finding Guide. New Mexico Ornithological Society, Albuquerque, NM.

Post, W. 1998. Reproduction of Least Bitterns in a managed wetland. Colonial Waterbirds 21:268-273.