Least Bittern

Ixobrychus exilis

Unlike American Bitterns that may occupy a variety of wetland habitats, the secretive Least Bitterns are essentially restricted to cattail marshes of at least 5–10 acres in size. Except as migrants, they normally avoid small marshes and the narrow strips of cattails bordering ponds and lakes.

Upon return to their nesting territories each May, Least Bitterns are most frequently detected by their distinctive territorial calls—a series of quiet cuckoo-like notes produced at dawn and dusk. Once nesting activities are initiated, they become quite inconspicuous. Their nests are platforms of dried vegetation usually suspended 0.5-2.5 feet above water between cattail stems, although they are rarely placed in dense shrubs (Palmer 1962, Peck and James 1983). Most nests are constructed during May and the first week of June, and the earliest reported Ohio egg dates are May 18-21 (Trautman 1940, Williams 1950). The first clutches are normally laid between May 25 and June 15. Earlier nesting attempts are possible, as Trautman (1940) recorded young Least Bitterns out of the nest by June 10. However, young bitterns are adept climbers at several weeks of age and regularly leave the nest before they are able to fly.

When the young bitterns are hiding in dense vegetation, they communicate with their parents by means of loud, harsh, rail—like calls. These distinctive calls are most frequently heard between June 25 and July 20 when most pairs are associated with dependent young. As these dependent young learn to fly, they are not as wary as their parents and may be observed quietly sitting at the edge of the marsh waiting to be fed. Once they become independent, normally during the first half of August, they rapidly learn the stealthy behavior of their parents.

Least Bitterns will renest if their first clutches are destroyed. Nest construction has been noted through July 7 (Mathena et al. 1984). July clutches have been reported at several locations and the latest egg date is August 3, 1929 in Ashtabula County (Hicks 1933a). If these late attempts were successful, the young bitterns would not fledge until September.

The current distribution of breeding Least Bitterns reflects their habitat preferences and the decidedly local distribution of suitable nesting areas in Ohio. They were reported from 15 priority blocks and 12 other locations during the Atlas Project. Of these 27 records, five pertain to possibly nonbreeding bitterns observed on only single dates during the summer or within unsuitable areas for nesting. The remaining locations supported territorial bitterns, with nesting confirmed in nine marshes and strongly suspected at most other sites.

Breeding Least Bitterns are most numerous in the marshes bordering western Lake Erie and Sandusky Bay in Lucas, Ottawa, and Sandusky counties. Small populations occupy every extensive marsh in this area. Elsewhere along the Lake Plain, Least Bitterns are regularly recorded only within Mentor Marsh (Lake County) where as many as 11 males were counted in 1986

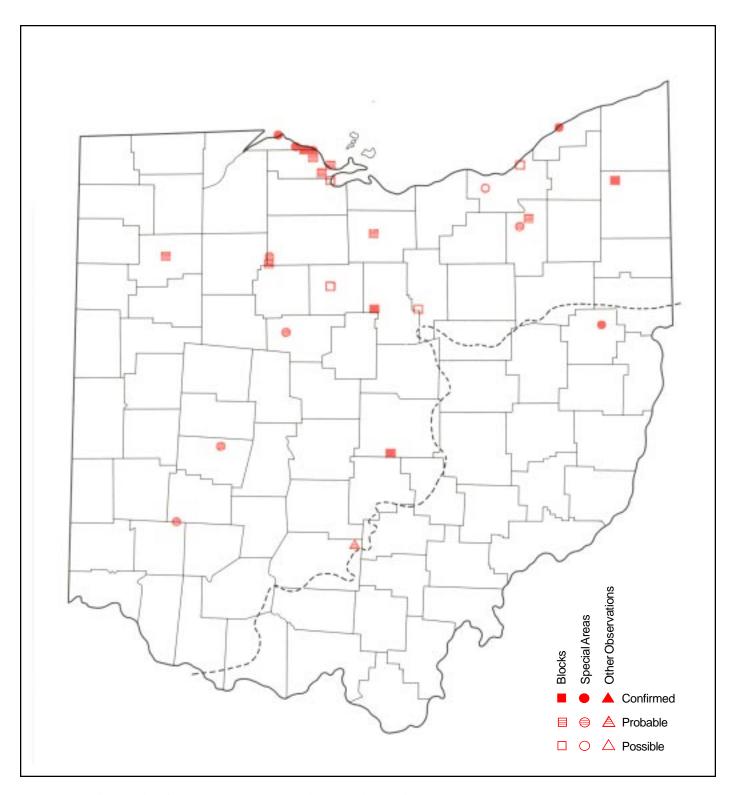
(Peterjohn 1986a). On the Till Plains of western Ohio, Least Bitterns are very locally distributed with records from nine locations south to Spring Valley Wildlife Area in Warren County. Most of these records were of isolated pairs, although small populations occupy suitable marshes at Big Island Wildlife Area (Marion County) and Springville Marsh State Nature Preserve (Seneca County). These bitterns were also noted at five sites on the Glaciated Plateau as far south as the Buckeye Lake area (Licking County). On the Unglaciated Plateau, summering bitterns were only reported from Specht Marsh in Carroll County and an unnamed marsh in northeastern Ross County.



Division of Natural Areas and Preserves

Least Bitterns are very sporadic summer residents elsewhere in Ohio. In the southwestern counties, they have nested in Clermont, Butler, and Montgomery counties (Kemsies and Randle 1953, Mathena et al. 1984). On the unglaciated Allegheny Plateau, these bitterns have historically nested in Muskingum, Guernsey, Coshocton, Holmes, and Tuscarawas counties, although these records are all prior to 1935 (Hicks 1935).

The present distribution represents a substantial decline in Ohio's Least Bittern population during this century. Formerly, they were locally common residents in areas of suitable habitats, particularly along western Lake Erie, Lake St. Mary's, and Buckeye Lake. At the latter location, they were the most numerous breeding heron during the 1920s and 1930s (Trautman 1940). As summarized by Peterjohn (1989a), the greatest reduction in numbers occurred between 1935 and 1965 but their populations have remained reasonably stable in subsequent years. Habitat destruction was the primary cause of this decline, especially in the counties away from western Lake Erie.



Analysis of Block Data by Physiographic Region

| Physiographic Region | Total Blocks Surveyed | Blocks with Data | % with Data | Regional % for Ohio | Ave. # Individ per BBS Route (1982–1987) |
|-------------------------|-----------------------------|------------------------|-------------------|---------------------------|--|
| Lake Plain | 95 | 7 | 7.4 | 46.7 | 1 |
| Till Plain | 271 | 4 | 1.5 | 26.7 | _ |
| III. Till Plain | 46 | _ | _ | _ | _ |
| Glaciated Plateau | 140 | 4 | 2.9 | 26.7 | _ |
| Unglaciated Plateau | 212 | _ | _ | _ | _ |

Summary of Breeding Status

| No. of Blocks in Which Species Recorded | | | | |
|--|----|-------|--|--|
| Total | 15 | 2.0% | | |
| Confirmed | 4 | 26.7% | | |
| Probable | 7 | 46.7% | | |
| Possible | 4 | 26.7% | | |