Barn Owl

Tyto alba

When Barn Owls spread into Ohio during the last half of the 19th century, they found nearly ideal habitats. Grassy pastures and hayfields composed a large percentage of the rural farmlands and provided excellent foraging sites for breeding owls (Bunn et al. 1982). Suitable nest sites were widely available in proximity to these fields, either in barns or other buildings, natural cavities in trees, or occasionally on cliffs (Trautman 1940, Williams 1950). While these owls were most numerous within farmlands, they could be found in other habitats. Barn Owls regularly occurred within cities where they nested on water towers, church steeples, and other structures, hunting in vacant lots and nearby fields. They were also infrequently found in large marshes along western Lake Erie, although it is doubtful that they nested there (Campbell 1968, 1973).

Ohio's first Barn Owl was reported from the Cincinnati area around 1861 (Langdon 1879). There were few additional records through the early 1880s (Wheaton 1882), and they did not become established at many locations until the 1890s (Bales 1909). Their initial center of abundance was along the Scioto River valley (Henninger 1902). By the early 1900s, Barn Owls had spread throughout the state. They were locally common in southern Ohio but rare in the northern counties (Jones 1903). Their numbers continued to increase in subsequent decades, and probably peaked in the 1930s. Hicks (1935) cited nesting records from 84 counties. While they were least numerous in the two northernmost tiers of counties, Barn Owls ranked as the second most numerous owl in much of the state.

This population started to decline during the 1940s, a trend that accelerated during the 1950s and 1960s (Peterjohn 1989a). By the mid–1960s, Barn Owls had disappeared from most counties. Additional declines were evident during the 1970s, when these owls became in danger of disappearing from Ohio. Of the factors contributing to this decline, changing land use practices may have been most important. As grasslands were converted to cultivated fields, the loss of foraging habitats caused many pairs to abandon their territories (Colvin 1985). However, since owls also disappeared from apparently suitable habitats, poisoning by pesticides may have contributed to this decline as has been noted elsewhere in their range (Bunn et al. 1982).

This status did not improve during the 1980s. The Atlas Project produced records from 12 priority blocks, 2 special areas, and 13 other locations within 20 counties. Small populations of five or fewer pairs remained in the Ross–Pickaway county line area and in the vicinity of Killbuck Creek in Wayne and Holmes counties. Most of the other records were of isolated pairs occupying locations for only 1–3 years. Based on these reports, the known Barn Owl population within Ohio totals only 10–20 pairs during most years. However, all of these reports were of owls occupying barns or other structures, frequently in nest boxes erected for this species. Barn Owls inhabiting natural cavities are very difficult to detect. This segment of the population was completely missed during the Atlas Project, and the number of pairs using cavities is unknown.

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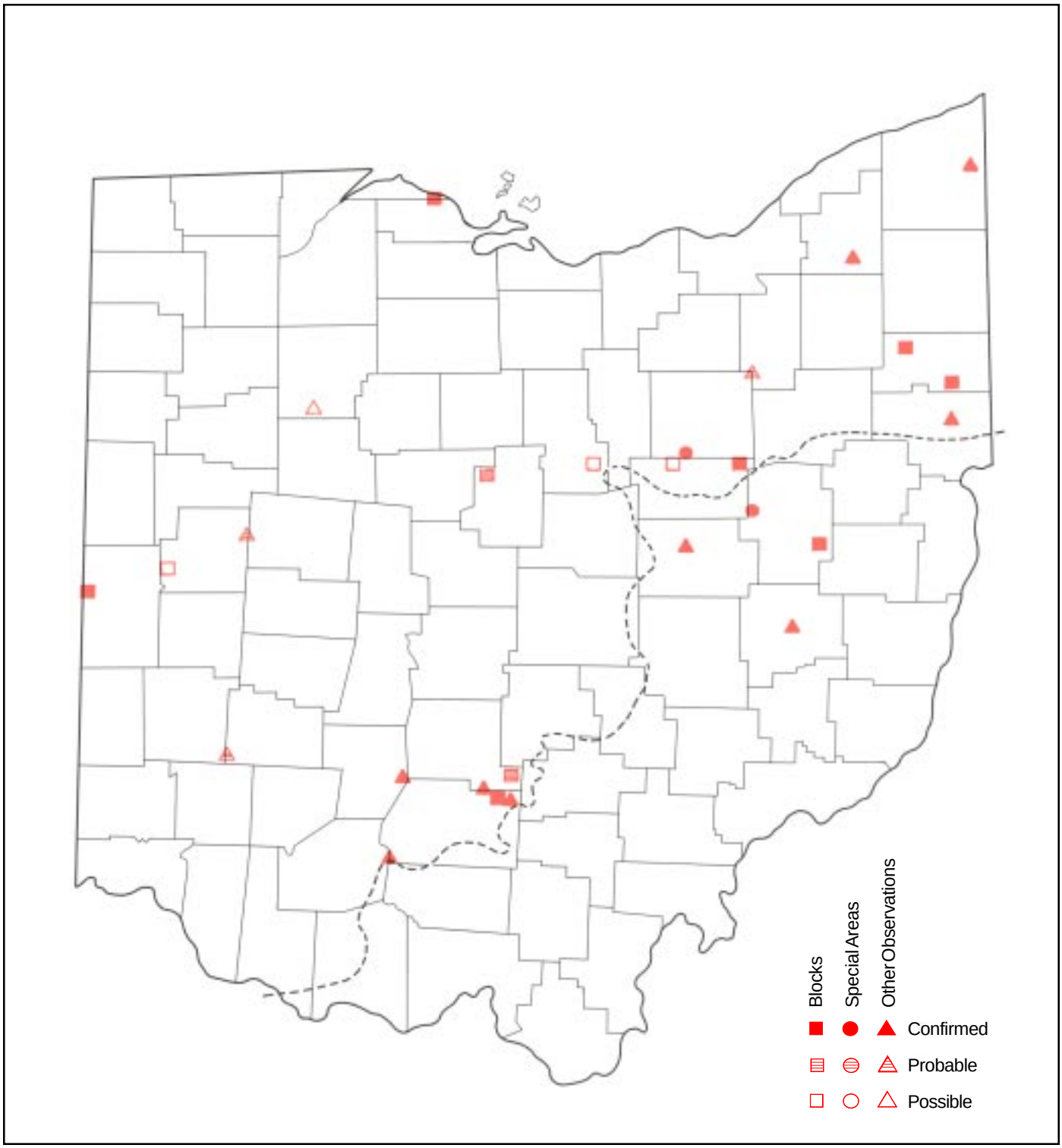
Of the 26 records during the Atlas Project, breeding was confirmed at 17 locations. Their use of buildings as nest sites facilitated the discovery of this high proportion of confirmed nesting attempts. Breeding was considered likely at the five locations where the probable codes were used, although the actual nest sites were not discovered.

Barn Owls are opportunistic nesters whose success is directly dependent upon the availability of adequate numbers of voles (Microtus sp.) and other prey. During most years, their nesting activities begin during April and clutches are discovered between April 10 and May 20. The first young may hatch during the second half of May, but nests with young are most frequently noted during June and July. These young owls normally fledge between July 15 and August 10. When their prey is plentiful, the Barn Owl breeding season can become protracted and some pairs may attempt to raise two broods. Nests with eggs have been reported as early as March 17 while nests with small young have been noted by April 2 (Campbell 1940, 1973). These young owls fledge by the first half of May. Late nesting attempts are not unusual. Nests with eggs have been discovered through September 3 (Phillips 1980). These young owls would not fledge until November. Even later nesting attempts are possible, since nests with young Barn Owls were reported from the Cincinnati area on November 26, 1931 (Goetz 1932) and at Dayton on December 3, 1961 (Mathena et al. 1984).



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	1	1.1	8.3	–
Till Plain	271	4	1.5	33.3	–
Ill. Till Plain	46	–	–	–	–
Glaciated Plateau	140	6	4.3	50.0	–
Unglaciated Plateau	212	1	0.5	8.3	–

Summary of Breeding Status

No. of Blocks in Which Species Recorded		
Total	**12**	**1.6%**
Confirmed	7	58.3%
Probable	2	16.7%
Possible	3	25.0%