

Purple Martin

Progne subis

As a result of their close association with humans, Purple Martins were widespread summer residents during the Atlas Project. They were recorded within every county and 535 priority blocks representing 70.0% of the statewide total. Martins were most widely distributed within the Illinoian Till Plain and Lake Plain regions with records from 91.3 and 86.3% of the blocks respectively. They proved to be most locally distributed in the Unglaciated Plateau region (represented in 58.5% of the priority blocks), while intermediate levels were achieved in the Till Plain and Glaciated Plateau regions. Their relative abundance on Breeding Bird Surveys exhibited a similar pattern. Summering martins appear to be most numerous on surveys within the Illinoian Till Plain region, least numerous in the Unglaciated Plateau region, and intermediate in numbers within the other physiographic regions.

The statewide distribution of breeding Purple Martins has not appreciably changed during this century. Hicks (1935) considered them to be common to abundant summer residents in every county, ranking as the “secondmost numerous breeding swallow in more than half of the state”. They became locally distributed only in rural areas where nest boxes were not provided for them.

While their statewide distribution patterns have not changed, numbers of breeding martins have declined during portions of the previous century. Jones (1903) described reduced numbers after the 1880s, blaming competition with House Sparrows for nest sites as the primary factor in this decline. Similar declines were not apparent to Hicks (1935). In subsequent decades, population trends are less certain as a result of dramatic fluctuations in the numbers of nesting pairs. Inclement weather during the breeding seasons of 1968, 1972, 1977, and 1978 noticeably reduced martin populations in eastern Ohio and elsewhere in the vicinity of the Appalachian Mountains (Robbins, C. S., et al. 1986). These populations recovered with the return of favorable weather conditions, producing stable or slightly increased numbers on Breeding Bird Surveys in eastern and central North America between 1965 and 1979. While overall trends on Breeding Bird Surveys have remained reasonably stable, local declines have been reported from Ohio since the early 1970s. Causes of recent declines are uncertain, but do not appear to be the result of a shortage of suitable nest sites.

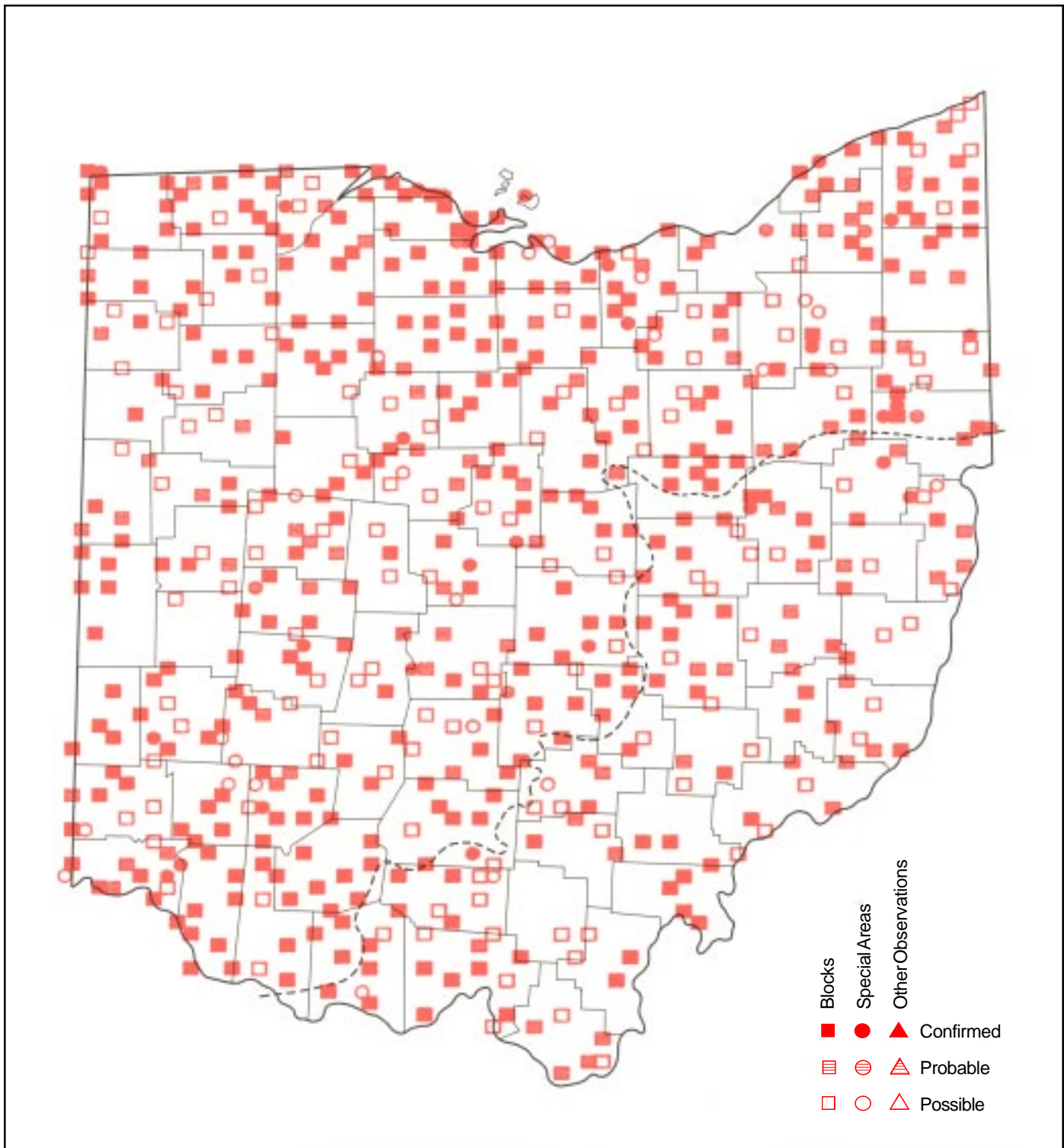
Wheaton (1882) and Jones (1903) were the last ornithologists to witness Purple Martins nesting in tree stumps and other natural sites within Ohio. Breeding pairs have been restricted to nesting houses during the present century. Preferred martin houses are located near rural residences where open fields and bodies of water provide suitable foraging sites. However, they will also occupy houses erected in urban areas and forage high in the sky over residential neighborhoods.

This habit of nesting as colonies in houses allowed breeding Purple Martins to be easily confirmed during the Atlas Project. Of the 319 confirmed records in priority blocks, active nests were reported in 295 blocks. The remaining records were scattered among the other confirmed categories, except for the “30” code which was not accepted for this species. While nesting houses were not located in the other 216 priority blocks, the reports of martins flying overhead (both possible and probable breeders) indicated that breeding colonies were present in the vicinity of most of these blocks.



John Pogacnik

Allen and Nice (1952) describe the breeding biology of Purple Martins, based in part on data collected in Ohio. The timing of their nesting activities varies from colony to colony as well as with the spring weather conditions. Breeding pairs return to their colonies by late April or early May. Nest construction is a lengthy process that may take 3–4 weeks, especially when delayed by inclement weather, and may not be completed until the first half of June. Most clutches are laid during the second half of May and early June, with the young martins hatching by late June and fledging during mid–July. Early nests have produced fledglings by the first week of July (Peterjohn 1989a). Martins raise only one brood in Ohio, but will renest if their first clutch is destroyed. These late nesting attempts are responsible for nests with eggs as late as July 7 (Price 1935, Trautman 1940), nests with young through August 14 (Williams 1950), and reports of recently fledged young as late as August 20 (Trautman 1940).



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	82	86.3	15.3	3.9
Till Plain	271	185	68.3	34.6	3.3
Ill. Till Plain	46	42	91.3	7.9	6.5
Glaciated Plateau	140	102	72.9	19.1	2.8
Unglaciated Plateau	212	124	58.5	23.2	1.9

Summary of Breeding Status

No. of Blocks in Which Species Recorded		
Total	535	70.0%
Confirmed	319	59.6%
Probable	91	17.0%
Possible	125	23.4%