

BIRDS OF THE ALBANY COUNTY PINE-OAK BARRENS

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The pine-oak barrens, lying between Albany and Schenectady, New York, have an unusually interesting avifauna. For some years the Schenectady Bird Club has made annual field trips to this locality, but little intensive work has been done. This study was initiated for the purpose of determining the actual bird population of a portion of this area during the breeding season.

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The total area of these barrens is now approximately 35 to 40 square miles. The soil is predominantly sandy, its upper portions being somewhat loamy fine sand, the deeper portions a coarse compact sand (Ritter, Alice M. 1941 — *A biological survey of a sandy area west of Albany, Albany Co., N. Y.* Unpub. thesis, Cornell Univ., Ithaca, N. Y.). The elevation of the area varies from 200 feet above sea level at the southern border to 360 feet in the northern portion. This large area of sand originated as a delta formed in a glacial lake, known as Lake Albany.

Part of the area was forested, at one time, with white pine, but at present the trees and shrubs of the area include these prominent species — Scrub Oak (*Quercus ilicifolia* Wang.), Dwarf Chestnut Oak (*Quercus prinoides* Wild.), Black Locust (*Robinia pseudo-acacia* L.), Sweet Fern, (*Comptonia peregrina* (L) Coult.), Pitch Pine (*Pinus rigida* Mill.), Large-toothed Aspen (*Populus grandidentata* Michx.), Trembling Aspen (*Populus tremuloides* Michx.), Smooth Sumach (*Rhus glabra* L.), and Staghorn Sumach (*Rhus typhina* L.).

The history of the barrens is one of disturbance. After the original pine-oak growth was cut or burned off by the early settlers, attempts at farming were made. Poor soil conditions and wind-blown shifting sands soon discouraged most attempts, but remnants of orchards and cleared fields still persist. More and more the periphery of the barrens is being populated, and residential districts of considerable size are springing up. The New York State Thruway from New York City to Buffalo, to be completed soon, is cutting through the heart of the area and is but one of the many disturbing agents. The area is used extensively for recreation with bridle paths traversing it in many places. Evidences of past picnic sites are everywhere, and wholesale dumping of trash and refuse has unfortunately marred many ravines. Almost yearly vast areas are burned over by fire, springing from carelessly attended picnic fires and unattended dumps. It is probable that this periodic firing of the area plays a major role in controlling the present bird population.

In February 1951 a study area was selected in the center of the sand barrens near Karner, Albany County. A 30 acre tract was marked off in a grid on lines 208 feet, 8 inches apart in the manner described by Pough in 1947. During May 1952 on eleven separate occasions a census was made by walking slowly along each line with map, pencil and binoculars. Each bird seen or heard was noted on the map and after each trip the records were transferred to maps for each species.

Forty-two species of birds were observed during these trips but only eighteen species appeared to be resident on the study area (Table 1). To this number may be added the Cowbird which was seen frequently on the study area.

It will be seen from Table 1 that forty-five pairs of birds, representing eighteen species, had established territories on this thirty acre tract. Disregarding the fact that many of these territories extended beyond the study area this represents 1.5 pairs per acre.

Of the forty-five breeding pairs, twenty-seven belong to six species. These six — Field Sparrow, Red-eyed Towhee, Black-capped Chickadee, Brown Thrasher, Chestnut-sided Warbler and Chipping Sparrow — are the only ones which could be considered common.

The chickadee territories were in areas where Pitch Pine was present. Probably this tree was the only plant species of the area of sufficient size to provide nesting holes. The towhee was found in areas where Scrub Oak was the dominant plant, although one territory included a locust grove. All four pairs of Chipping Sparrows were in and around an open area where an abandoned farm existed. Three of the four pairs of Chestnut-sided Warblers were found in groves of locust, although their territories extended beyond these groves in every case. A possible explanation for this distribution is that the males have the habit (here) of singing from relatively high perches.

TABLE 1

Territories of eighteen species established on area.	
Field Sparrow -----	6 pairs
Red-eyed Towhee -----	5
Black-capped Chickadee -----	4
Brown Thrasher -----	4
Chestnut-sided Warbler -----	4
Chipping Sparrow -----	4
Kingbird -----	2
Bluejay -----	2
Bluebird -----	2
Starling -----	2
Pine Warbler -----	2
Indigo Bunting -----	2
Flicker -----	1
House Wren -----	1
Catbird -----	1
Yellowthroat -----	1
Scarlet Tanager -----	1
Vesper Sparrow -----	1
Total	45 pairs

