

ARETAS ANDREWS SAUNDERS—A PIONEERING NATURALIST (1884-1970)

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Aretas A. Saunders was born November 15, 1884 in Avon, Connecticut. During his boyhood he lived in Hartford and New Haven. Brauner (1979) wrote, “Wherever he lived he explored the surroundings on foot and bicycle, becoming very familiar with the natural history of the region.” He attended Yale University and Yale School of Forestry, graduating in 1907. After graduation from Yale, he joined the United States Forest Service. In 1912 he left the Forest Service to teach, which he did until 1949.

Saunders was a pioneering naturalist/birder. He documented the avian fauna from one end of New York State to the other, particularly in Allegany State Park, the Northern Adirondack Mountains and the central New York wetlands. In the following pages I have cited some of his more significant publications concerning the occurrence and life histories of New York State birds.

In 1921 he began summer work at the Roosevelt Wildlife Forest Experiment Station in Allegany State Park. His observations between July 3 and August 13 resulted in the publication *The Summer Birds of Allegany State Park* (Saunders 1923). He writes that “to help bird students to know where to look for certain birds [he] grouped the species in the main text in ecological associations, rather than in taxonomical order.” Saunders documented 105 species present in Allegany State Park. It is interesting to compare his sightings with the most recent New York State Breeding Bird Atlas survey for Allegany State Park (McGowan and Corwin 2008). For example, atlas observers recorded the presence of Osprey, Common Raven and Turkey Vulture—large, conspicuous species not recorded by Saunders in 1921.

In addition, during the summers of 1927 to 1940, he was instructor of ornithology at the Allegany School of Natural History. Arthur Cleveland Bent, in his *Life Histories of North American Flycatchers, Larks, Swallows and Their Allies* (1963) cited observations by A.A. Saunders and his students of a Least Flycatcher nest in Allegany State Park that showed “that the parents fed the young 24 times an hour, as an average in 13¾ hours of observation.” Saunders’ notes, especially concerning song, appear frequently in the A.C. Bent *Life Histories of North American Birds* series. For example, Bent (1965) writes, “Saunders has written a very excellent analysis of the song and notes of the meadowlark...” and goes on to explain in great detail the cadence and quality of the song.

In 1925 and 1926 Saunders would travel to the northern Adirondack Mountains to document its avian fauna. His observations resulted in the

publication *The Summer Birds of the Northern Adirondack Mountains* (Saunders 1929). In his introduction he addresses those who would climb to the top of these mountains. "Yes the view from the top was beautiful and worth the long climb. But there were other things as well. Did you stop on your way up to observe the "pretty wood sorrel, flower and leaves that carpet the forest floor?" Did you "stop to breathe the sweet odor of the twin-flower?" Did you "admire the tall straight trunks of the maples and the spruces and moss-covered, fern-draped logs and boulders?" And did you "recall the clear whistle of the white throated sparrow, the dainty black and yellow of a magnolia warbler, the tinkling trills of the winter wren, and the wonderful music of the hermit thrush? Had clouds obscured the view when you reached the top, these alone would have been worth the climb."

It is also entertaining to compare the common and scientific names of birds used by Saunders in this 1925/26 publication with those in use today. Back in that era some of the common names included sparrow hawk, pigeon hawk, and chicken hawk, Canada spruce partridge, myrtle warble and Acadian chickadee.

In *The Summer Birds of Central New York Marshes*, Saunders (1926) says, "how much broader and saner our outlook on life becomes by turning to nature and wild places for recreation." And in marshes, "we overlook the great value of these things that we cannot measure in money." He expounds on the importance of setting aside grasslands, marshes and other areas inhabited by wildlife unique to those areas, admonishes nature lovers to pay closer attention to the marshes, and warns of draining these marshes that highly specialized wildlife depend on for food, shelter, and breeding habitat. Saunders' report consists mainly of accounts of the habitat of the marsh-inhabiting birds. He presents us with excellent life histories of a much neglected group of birds, and pleads that "provisions be made for saving what marshlands remain...before they are entirely exterminated."

In 1930/31 Saunders studied the birds of the Quaker Run Valley, one of the principal streams of Allegany State Park (Saunders 1936). This study covered an area of some 26½ square miles and 16,967 acres. He found 79 breeding bird species in the area. In this study he quantitated the occurrence of these species by reporting the total number of pairs and average number of pairs per 100 acres. In 1983 to 1985, 50 years after Saunders' analysis, Timothy Baird repeated the analysis and reported the changes in breeding bird populations (Baird 1990). He found the species composition had changed but the total number of species remained the same. Maturation of the forest and increased browsing of the understory by white-tailed deer were the two most significant changes in the habitat of Quaker Run during the 50 years span of time since Saunders' analysis.

Saunders contributed much to the study of bird song, noting in the acknowledgement section of his 1951 edition of *A Guide To Bird Songs* that he had made a special study of birds' song for 35 or more years. In this publication he develops a unique graphic notation, a musical shorthand as he calls it, which

takes into account five characteristics of bird song: time, pitch, loudness (intensity), quality and phonetics (pronunciation). In addition he includes the familiar mnemonic phrases for many species. In another publication, *An Introduction to Bird Life for Bird Watchers* (1954), in the chapter 'The Study of Songs and Calls' Saunders distinguishes between flight song, territory song, courtship song, nesting song, and whisper song. He also describes the timing of the various types of songs during the seasons of the year. In this publication and others he raises many questions concerning bird song, prompting further study.

Saunders' publications and the observations therein would be referred to and built upon in many future studies of the birds of New York, such as John Bull's *Birds of New York State* (1974), *The Kingbird*, and the two completed Breeding Bird Atlas projects. His publications continue to serve as primary documents that facilitate the continuing process of more fully documenting the occurrence, ecology and life history of birds across New York State.

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