



**ARETAS ANDREWS SAUNDERS, 1884–1970**

(From a photograph taken in 1933)

## IN MEMORIAM: ARETAS ANDREWS SAUNDERS

JOSEPH BRAUNER

10426 Baird Avenue, Northridge, California 91326 USA

"Aret" as he was called by his wife Grace and "Tubby" by his intimate boyhood friends, wished that he could be known as a naturalist. Saunders tried to learn and record as much as he could about birds, plants, insects, mammals, and other organisms in the field in order to clearly understand their relationships. He had an insatiable drive to observe plants and animals throughout the year, and to continue this year after year. He devised a unique method of recording bird song, leading to the publication of his useful and original *Guide to Bird Song*. Beyond that, however, he accumulated a vast amount of data on the daily and seasonal onset and cessation of singing, the time and site of singing, and variations in individual songs.

He was outstanding as a disciple of outdoor behavior study. He walked slowly and softly and as a result, saw much more. He had the patience to spend countless hours of observation in the blind or behind the camera. He felt strongly that birds should not be classified purely on the basis of morphological characteristics, but that behavioral characteristics such as singing and other actions should also be considered.

Aretas Andrews Saunders, the son of George A. and Isabel Andrews Saunders, was born in Avon, Connecticut, near Hartford, on 15 November 1884. During his boyhood he lived in Hartford and New Haven, where his father owned a bicycle store. His early interest in all phases of nature was encouraged by his Aunt Beth who gave and loaned him books that enabled him to identify plants and birds. His lifelong interest in mushrooms, begun in 1906, was aided by Hamilton Gibson's book on edible and poisonous fungi. Wherever he lived he explored the surroundings on foot or bicycle, becoming very familiar with the natural history of the region. He attended Yale University and Yale School of Forestry, graduating in 1907. During his college career, he took time off to work on an experimental rubber plantation in Nicaragua in 1905, and later on a forestry project in Alabama.

After graduating from Yale, he joined the U.S. Forest Service, spending several years in the Lewis and Clark, Gallatin, and Deer Lodge National Forests in Montana. His lifelong habit of recording copious natural history notes already well established, he observed and collected birds during his residency in Montana. The result of this effort was his book, *Birds of Montana* (1921).

In 1912 he left the Forest Service and began his career as a teacher in New Haven, Connecticut, teaching general science, geometry, physics, and trigonometry. For two summers he was instructor in ornithology at the Summer Biological Station at Flathead Lake, Montana. In 1914 he began teaching biology at Central High School in Bridgeport, Connecticut, where he taught until 1949. He married Grace Adams in 1916. They had a son, Stanley, who became an engineer for Eastman Kodak. During his early years as a teacher, Saunders worked in the summers as a farm worker, express company checker, and White Pine Blister Rust disease eradicator. He was a Sergeant in the Home Guard during World War I. In 1921 he began summer work at the Roosevelt Wildlife Forest Experiment Station in the Allegany State Park, a division of the New York State College of Forestry. His observations resulted in another publication, *Birds of Allegany State Park*. He also studied the birds of the marsh area of central New York and of the Adirondacks. During the

summers of 1927 to 1940, he was instructor of ornithology at the Allegany School of Natural History. His *Guide to Bird Song*, was published during this period, as were *Butterflies of the Allegany State Park*, *Breeding Birds of the Allegany State Park*, and *Variations and Movements of the Red Eft*.

Saunders' background in music was important to his later efforts to describe bird songs. He learned on his own to play the mandolin and violin at an early age and later the flute and recorder. In church, he always volunteered for choir duty, offering his services singing bass or tenor as the situation dictated, and he sang in the Bridgeport Oratorio Society for years. After unsuccessfully attempting to record bird song using the traditional musical scales, he resorted to using a small tuning fork that he carried in his vest pocket. After hearing a bird song he plucked the fork, held it to his ear, and tried to approximate a position of the first note on the musical scale. He used a stop watch for accurate timing. These efforts resulted in the development of his unique method for pictorializing the sounds of birds in his *A Guide to Bird Songs*.

Saunders was also an accomplished artist. In his notes there were many sketches illustrating his observations. He obligingly covered the boards of other teachers with accurate full color drawings of regional birds, which often became permanent displays. Through the years, he gave many "chalk" talks on birds to varied groups, where he sketched on a board or paper the bird under discussion. Dominick D'Ostilio, a high school student who later illustrated Saunders' book *The Lives of Wild Birds*, said, "I don't know why he asked me to do it. He could easily have done the job himself." Knowing Saunders' interest in young people, it is not difficult to understand the choice.

Although Saunders had a pudgy figure, he was in good physical condition most of his life except for periodic troubles with asthma. Around 1938 he discovered that he was losing the ability to hear high notes. He spoke of watching a bird throw its head back with open mouth and vibrating throat and obviously sing its song, but did not hear it. This was disturbing to him, as he found that his migratory dates for certain birds that were first detected by song were later than in former years. He had me accompany him on certain dates to specific areas where certain birds had been recorded in previous years. My job was to hold my finger up as soon as the song began and drop it at the end. The most interesting example was the Blackpoll Warbler, which sings a high pitched song with notes on the same scale. The song starts softly with each succeeding note louder until the middle loudest note, after which the notes recede in loudness. Most of the time, he would hear the middle loudest note and no more.

During World War II, Saunders corresponded with many of his former students, stationed throughout the world. He acted as a liaison, informing all as to conditions at home and the whereabouts of others. In his letters, he expressed his philosophy of life and living repeatedly. Dominick D'Ostilio is eloquent in his review of Saunders' way of sharing his experiences:

. . . that one should have pleasure and happiness in the study of living things. This is what he imparted in his narration, illustration, discussion approach to teaching. And he made things alive. There is no way to measure the total effect he had upon his students. They loved him for his congeniality and for his enthusiasm. His was the way to encourage others to get closer to nature—to know nature. His was the way of appreciating beauty in nature and finding value in

life. Again and again these letters bring out, "I'm all for the study of things that are alive." . . .

And what had he expressed about the knowledge we gain? You'll find it in the preface to his *A Guide to Bird Songs* (pp. v-vi):

"I hope that those who use this book will find, thereby, even greater pleasure in the studies of live birds; that some of them will go on from bird listing to bird watching, and will perhaps find pleasure in contributing something to our greater knowledge of wild birds and their ways. If, among these, there are some who have a special ear for bird songs, I hope that they may try the detailed study of such songs, not merely for the purposes of identification, but to make contributions to a greater knowledge than we now possess."

And what has he expressed about the search for knowledge? You'll find this in a quotation from Henry Van Dyke which Mr. Saunders used to introduce his *The Summer Birds of the Northern Adirondack Mountains*:

"You shall take pleasure in the time while you are seeking, even though you obtain not immediately that which you seek, for the purpose of a journey is not only to arrive at the goal, but also to find enjoyment by the way."

And what of his personal statement with respect to meaningful education? You'll find it in his "Suggestions Concerning Policies for the Allegany State Park," New York State Museum Handbook 17, on pp. 386-387:

"In fact, education, rightly considered, is a recreation, and that man who has discovered this, and makes his recreation educational, has found a source of true happiness. To give to more and more persons this source of happiness is a far greater achievement than to give them mere recreation alone."

Mr. Saunders lived as that source of happiness in showing the way to more and more of his students.

In 1949, when he retired from teaching and moved to Canaan, Connecticut, he was awarded a grant from the Philosophical Society to study bird song. His studies concentrated upon certain birds in Florida, Georgia, North Carolina, West Virginia, Minnesota, Louisiana, North and South Dakota, and Oklahoma. The results of his studies were never published.

Saunders became an Associate of the American Ornithologists Union in 1906, a Member in 1920, and a Fellow in 1950. In 1954, he was a guest lecturer in ornithology at Cornell University. The Bureau of Sport Fisheries and Wildlife awarded him in 1961 a citation for reporting, for use in scientific investigations, observations on the distribution, migration, and abundance of North American birds for 35 years during the period 1911 to 1953. The National Audubon Society established an Aretas A. Saunders Memorial Fund in 1972.

Later in life, he developed Paget's disease—a progressively increasing porosity of the bone. Although it only affected the shin bone of one leg, it required him to use crutches. He had to give up driving. Nevertheless he persisted as best he could in getting out to observe nature. With the death of his wife Grace, 80, in 1964, Saunders lost interest or found that he did not have the energy for maintaining his lifelong habit of observing. He remarried within a year to a widow living next door. His second wife, Margaret, tried to make the last 5 years of his life comfortable. He died 7 April 1970 at the age of 85, after surgery on a broken hip caused by a fall.

I am indebted to Stanley Saunders who made available his father's unpublished autobiography *On Being a Naturalist* as well as other background material. In his

possession at 195 Weston Road, Rochester, New York, are large amounts of his father's notes, diagrams, and tabulations. In addition I am grateful to Richard J. Clark, Dominick D'Ostilio, and Stephen W. Eaton for their assistance.

BIBLIOGRAPHY OF NATURAL HISTORY PUBLICATIONS

*Aretas A. Saunders*

- 1906 Habits of the Black Vulture in Nicaragua. *Bird-Lore* 8: 165-167.
- 1907 The Starling at New Haven, Conn. *Bird-Lore* 9: 207.
- 1908 The Growth of Young Black-billed Cuckoos. *Bird-Lore* 10: 205.  
Some Birds of Central Alabama. *Auk* 25: 413-424.
- 1909 Nesting of the Broad-Tailed Hummingbird. *Condor* 11: 197.
- 1910 The Bluebird (*Sialia sialis*) in Park County, Montana. *Condor* 12: 80.  
Singing of the female Slate-colored Fox Sparrow. *Condor* 12: 80.  
Bird notes from southwestern Montana. *Condor* 12: 195-204.
- 1911 Virginia Rail at Helena, Montana in winter. *Condor* 13: 108.  
A study of the nesting of the Cedar Waxwing. *Auk* 28: 323-329.  
Preliminary list of birds of Gallatin County, Montana. *Auk* 28: 26-49.
- 1912 Some birds of southwestern Montana. *Condor* 14: 22-32.  
Changes and additions to the list of birds of southwestern Montana. *Condor* 14: 107.  
Western Marsh Wren wintering near Helena, Montana. *Condor* 14: 108.  
A horseback trip across Montana. *Condor* 14: 215-220.  
Probable breeding of the Bohemian Waxwing in Montana. *Condor* 14: 224.
- 1913 Additional notes birds of Gallatin County, Montana. *Auk* 30: 116.  
Study of the nesting of the Marsh Hawk. *Condor* 15: 99-104.  
Notes on nesting of the Short-eared Owl. *Condor* 15: 121-125.  
An unusual nest of the Sora Rail. *Condor* 15: 128.  
The Old-squaw in Connecticut in summer. *Auk* 30: 577.
- 1914 Birds of Teton and northern Lewis and Clark Counties, Montana. *Condor* 16: 124-144.  
English Sparrow as occurring in northwestern Montana. *Condor* 16: 183.  
An Ecological study of the breeding birds of an area near Choteau, Montana. *Auk* 31: 200-210.  
The Rusty Blackbird in Connecticut in winter. *Auk* 31: 250.  
The Blue-gray Gnatcatcher at West Haven, Connecticut. *Auk* 31: 402.
- 1915 The California Shrike in Montana. *Condor* 17: 102.  
A summer at Flathead Lake. *Condor* 17: 109-115.  
The Harlequin Duck in Glacier National Park, Montana. *Auk* 32: 225.  
Changes and additions to the list of birds of Gallatin County, Montana. *Auk* 32: 238-239.  
Suggestions for better methods of studying and recording bird songs. *Auk* 32: 173-183.  
The fearless White-eyed Vireo. *Wilson Bull.* 37: 316-321.
- 1916 A note on the food of the Western Robin. *Condor* 18: 81.  
The plumage of the young male Red-shafted Flicker. *Condor* 18: 82.  
Additions and changes to the summer birds of Flathead Lake, Montana. *Condor* 18: 85-86.  
Additions to the birds of Custer County, Montana. *Auk* 33: 203-205.  
Graphic method of recording bird songs. *Auk* 33: 103-107; 229-230.
- 1918 Some recent Connecticut bird notes. *Auk* 35: 340-344.  
A note concerning bird mortality. *Auk* 35: 358.
- 1919 Spring shore birds in Connecticut. *Auk* 36: 104-105.  
The Rose-breasted Grosbeak in Connecticut in November. *Auk* 36: 114.  
Evolution of bird song. *Auk* 36: 149-151.  
Concerning a note of the Long-eared Owl. *Auk* 36: 283.  
Blue-winged Warbler feeding a young Field Sparrow. *Auk* 36: 283.  
Geographical variation in the song of the Ruby-crowned Kinglet. *Auk* 36: 525-528.  
The Raven in Connecticut. (with C. H. Pangburn) *Auk* 36: 572.
- 1920 Ornithological pronunciation. *Auk* 37: 181.  
Birds and tent caterpillars. *Auk* 37: 312-317.  
The color of natal down in passerine birds. *Auk* 37: 312.

- 1921 A distributional list of the birds of Montana. Pacific Coast, Avifauna 14: 1-195.  
The song periods of individual birds. Auk 38: 283-284.
- 1922 Flight songs and mating songs. Auk 39: 172-175.  
A Connecticut record of the Stilt Sandpiper. Auk 39: 252.  
Early nesting of the Mourning Dove. Auk 39: 254.  
The nesting of Henslow's Sparrow in southern Connecticut. Auk 39: 264.  
The song of the Field Sparrow. Auk 39: 386-389.  
A question concerning the distribution of the Long-billed Marsh Wren. Auk 39: 267-268.
- 1923 Mimicry in bird songs. Condor 25: 68-69.  
The summer birds of the Allegany State Park, New York. Roosevelt Wild Life Bull. 1: 235-254.  
A double song of the Cardinal. Auk 40: 539-541.  
Concerning the field identification of the Anatidae. Auk 40: 526.
- 1924 Recognizing individual birds by song. Auk 41: 242-259.  
The study of bird sounds. Condor 26: 209-213.
- 1926 Additional notes on the summer birds of the Allegany State Park. Roosevelt Wild Life Bull. 3: 477-497.  
The summer birds of the central New York marshes. Roosevelt Wild Life Bull. 3: 335-475.  
The Sycamore Warbler in Connecticut. Auk 43: 248.
- 1929 The summer birds of the northern Adirondacks. Roosevelt Wild Life Bull. 5: 225-354.  
Possible reasoning power in a Phoebe. Auk 46: 238.  
Bird song. New York State Museum Handbook 7: 1-202.
- 1932 Recent nesting of the Piping Plover in Connecticut. Auk 49: 80.  
Iceland Gull in Connecticut. Auk 49: 84.  
Increase of the Roseate Tern in Connecticut. Auk 49: 84.  
Wilson's Warbler in Connecticut in January. Auk 49: 355.  
Butterflies of the Allegany State Park, Albany, New York. New York State Museum Handbook 13: 270.
- 1933 Purple Gallinule in Connecticut. Auk 50: 99.  
Black Tern in Connecticut in spring. Auk 50: 105.
- 1934 A curious habit of gulls. Auk 51: 234.  
Obituary notice of Edgar C. Stiles. Auk 51: 136.
- 1935 A guide to bird songs. New York, D. Appleton Century Co.
- 1936 Ecology of the birds of Quaker Run Valley, Allegany State Park, New York. New York State Museum Handbook 16: 1-174.  
Whistling Swan in Connecticut. Auk 53: 204.  
Late spring records of water birds in Connecticut. Auk 53: 226.  
Relation of field characters to the question of species and subspecies. Auk 53: 283-287.
- 1937 Injury feigning in the Wood Duck. Auk 54: 202.  
Suggestions concerning policies for the Allegany State Park. New York State Museum Handbook 17: 383-398.
- 1938 Studies of breeding birds in the Allegany State Park. Bull. New York State Museum 318: 1-159.
- 1939 The Chipping Sparrow's song. Auk 56: 89.
- 1942 The Brown Thrasher and the territory theory. Bird-Banding 13: 75-76.  
Summer birds of the Allegany State Park. New York State Museum Handbook 18: 1-313.
- 1943 Obituary notice for Charles Ketcham Averil. Auk 60: 135.
- 1944 Review of Wallace Craig's "Song of the Wood Pewee." Auk 61: 658.
- 1945 Connecticut records. (with Elting Arnold). Auk 62: 312.
- 1947 The Ruff in Connecticut. Auk 64: 187-188.  
Obituary of Louis Hopkins Porter. Auk 64: 665.  
Obituary of Henry Emerson Tittle. Auk 64: 667.  
The seasons of bird song—The beginning of song in spring. Auk 64: 97-107.
- 1948 The Louisiana Heron in Connecticut. Auk 65: 312.  
The seasons of bird song—Cessation of song after the nesting period. Auk 65: 373-383.
- 1949 A Bittern pumps from a perch in a tree. Auk 66: 196.
- 1950 Changes in status of Connecticut birds. Auk 67: 253-255.
- 1951 A guide to bird songs. (2nd Edition, with additional species). New York, Doubleday and Co.  
Song of the Song Sparrow. Wilson Bull. 63: 99-109.
- 1953 Review of "Bird songs of dooryard, field and forest." Jerry and Norma Stillwell. Auk 70: 223.

- 1954 *The lives of wild birds*. New York, Doubleday and Co.
- 1955 Review of Stillwell's "Bird songs of dooryard, field and forest No. 2." *Auk* 72: 101-102.
- 1956 The growth of a chickadee's tail feathers. *Auk* 73: 560.  
Description of newly hatched passerine birds. *Bird-Banding* 27: 121-128.
- 1958 A yellow mutant of the Evening Grosbeak. *Auk* 75: 101.  
Letter to the Editor (concerning species and subspecies). *Auk* 75: 379.
- 1959 Forty years of bird migration in southern Connecticut. *Wilson Bull.* 71: 208-219.  
Octaves and kilocycles in bird song. *Wilson Bull.* 71: 280-282.
- 1960 An unusual winter plumage of the goldfinch. *Auk* 77: 229.
- 1961 Song of the Wood Thrush. *Auk* 78: 595-606.