## The History of Ornithology at The University of Oklahoma

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The state of Oklahoma, because of its key location and great variety of habitats, has always offered unusually fine opportunities for the study of birds, as well as of the other vertebrate classes. The notes of the early pioneers, beginning with those of the French trader, La Harpe, in 1719, present a vivid picture of the wealth of bird life in Oklahoma. Unquestionably, the avifauna of the state has varied noticeably even within the past several decades, with the coming of white man. Here a challenging array of both interesting and significant problems on bird taxonomy and ecology still exists.

The initial evidence of formal bird study at the University was the appearance, in 1902, of the first list of Oklahoma birds, the work of Dr. A. H. Van Vleet: included were 168 species, all of which had been collected. Unfortunately, in January 1903, all of his field notes, 274 skins, and ninety-two of the 163 mounted birds were destroyed by a fire of undetermined origin. Working with Dr. Van Vleet was Mr. Charles D. Bunker, who acted as collector and taxidermist at the University from 1901 to 1903. These two men made several extensive trips within the state for the purpose of building up the specimens in the Museum of Zoology.

The most important early collection of Oklahoma birds was that of Dr. Edwin D. Crabb. In 1910 and 1911 he took a number of specimens in Canadian County, and, working with the Oklahoma Geological Survey, he collected from most of the areas of the state during 1913 and 1914. As a member of the Sykes Alaskan Expedition of 1921, Dr. Crabb succeeded in securing a number of Alaskan birds which he brought back to the University.

A great proportion of the birds now in the Museum represent his work. Again disaster struck when, in 1918, all of his note books and many of his specimens were destroyed by a fire which, according to Margaret Morse Nice, "was set by a boy who didn't like to go to school". Having already burned down the public school house, he next destroyed the temporary barracks on the campus where the bird collection was stored and where the children were then attending school. It is unfortunate that Dr. Crabb's labors were so largely wasted.

From 1906 to 1920 Dr. Henry H. Lane was professor of zoology at the University, and held a bird class at least some of this time. Although he himself was not much interested in birds, some of his students made contributions to the knowledge of birds of the area. In 1917, Dr. Howard O. Cross, member of the department of zoology, contributed an annotated list of 325 birds to the "Geography of Oklahoma"; that he had a real interest in birds is further attested by the fact that he presented an excellent discussion of game birds, hawks, owls, song birds, etc., in the same publication. At about this period Dr. Charles N. Gould of the School of Geology also published several notes on Oklahoma birds.

From the points of view of both quality and quantity of material, the greatest contributions toward bird knowledge of the state have been made by Mrs. Margaret Morse Nice and her husband, Dr. Leonard Blaine Nice; this conscientious team worked from 1919 to 1927 in the state, and again in 1929. In cooperation with the Oklahoma Geological Survey they undertook, in 1920, a study of the birds of Oklahoma, subsequently making numerous field trips to all parts of the state. In addition to their book, "The Birds of Oklahoma", published as a University Study in 1924, Dr. and Mrs. Nice, with the assistance of their four daughters, published a number of papers while they were living in Oklahoma. Notable are the excellent studies which they contributed of the Mourning Doves and Bell Vireos on the campus and their list of the birds of the campus. Mrs. Nice's revised edition of "The Birds of Oklahoma", a publication of the Oklahoma Biological Survey, has been, since its appearance in 1931, the outstanding work on the birds of the state. (At the present time a new book on Oklahoma birds is being written by Dr. and Mrs. Fred M. Baumgartner of Oklahoma A. and M. College.)

The first summer field trips of the University of Oklahoma Biological Survey were taken in 1925 and 1926, under the leadership of Dr. A. I. Ortenburger. Birds, as well as other vertebrates, were collected from over much of the state, especially from the southeast. Mrs. Roberta Deam Ortenburger accompanied the 1925 trip and wrote a report on the bird collections for the Proceedings of this Academy. Mr. Norman A. Wood, while on the third expedition of the Biological Survey, collected from eastern Oklahoma a number of birds for the Museum of Zoology.

During the years 1929 and 1930, Dr. Ralph D. Bird took specimens especially in Cleveland County, the Arbuckle Mountains, and in the north-western part of the state; he was the last active ornithologist at the University until the arrival of Dr. M. Dale Arvey in 1949. Dr. Arvey, although only once teaching a class directly relating to the avifauna, was quite active as a bird collector in the vicinity of Norman until his recall into the United States Navy in 1950.

The University of Oklahoma Biological Station at Lake Texoma has offered, since its inception in 1950, course work in beginning ornithology. Here birds are in abundance; special note is being given to shore and water birds. A well-rounded ornithology library is available to the student, both at the biological station and on the main campus at Norman. At the student's disposal in the Museum of Zoology are the hundreds of specimens, both study skins and mounted birds, from all counties in the state. Included

also are a hundred or so Mexican birds, most of which were collected and mounted by the late C. W. Bunker, and representative birds, some quite exceptional, from other parts of the world.

It is quite evident from the foregoing that the study of ornithology at the University of Oklahoma, as at so many other institutions, has been vigorous during some periods and lax during others. However, the study of birds now is in the process of marked revival at the University, largely because of the appointment of Dr. George Miksch Sutton as a permanent staff member. His recent arrival has helped to renew the enthusiasm of bird observers and workers throughout the state.

As already noted, there are many unusual opportunities for the student of birds in Oklahoma because of its unique geographical location and its varied habitats. In Oklahoma there is neither seashore nor high mountains; but there is contained in the state much to attract a remarkable avian population. One can name many places in the United States where east and west or north and south meet when bird distribution is considered; but where can one find more vivid examples of species range overlaps and extensions than here where all four points of the compass coincide, ornithologically speaking? Such a typically southeastern bird as the yellow-crowned night heron actually nests as far west as the western state-line of the main body of the state. The road-runner, formerly thought to be strictly a southwestern bird, is now known to range into Kansas on the north and Arkansas on the east. The upland plover, whose breeding concentrations are in the northern states and Canada, has been found nesting in northeastern Oklahoma.

Commonly seen in wooded parts of the eastern half of the state are such typically eastern forms as the scarlet tanager, wood thrush, yellow-throated and white-eyed vireos, indigo bunting, and the prothonotary, black and white, pine, prairie, parula, and cerulean warblers. Moving westward into the tall grass prairie, one finds middle-western birds as the scissor-tailed flycatcher, Bell's vireo, dickcissel, and western meadowlark. farther west, in the mixed and short grass prairie, are to be seen such western birds as the burrowing owl, Swainson's hawk, and western kingbird. Indeed, especially in the counties of central Oklahoma, all of these and other forms might well be recorded in a relatively small area. It is not uncommon, for instance, to see and hear eastern and western meadowlarks in the same field simultaneously. In western Oklahoma the Baltimore and Bullock's orioles may be seen together, along with hybrids between these two species. If one were to travel to the Black Mesa, in the extreme northwestern corner of the panhandle, one might expect to see such montane forms as the pinon jay, pigmy nuthatch, gray vireo, and bushtit. Within the state also are notable concentrations of the Mississippi kite, lesser prairie chicken, and snowy plover. Oklahoma is truly a melting pot of a great variety of birds.

Lake Texoma, along the southern border of Oklahoma, has attracted already great numbers of shore and water birds since its impoundment within the decade. What significant migration and breeding records can be established in the future at that very large man-made body of water? In 1931 Mrs. Nice listed 334 species of birds in Oklahoma; the list, as tabulated by Dr. Baumgartner, now totals about 375 species. Is it possible that eventually within the borders of Oklahoma will be found as great a number of bird species as in such states as Arizona, California, or Texas?

With the nuclei of workers in the state educational institutions, under the leadership of such persons as Dr. and Mrs. Baumgartner at Oklahoma A and M. College and Dr. Sutton at the University, and with the assistance of the many excellent amateur bird enthusiasts over the state, much meaningful ornithological information will continue to come from Oklahoma.