## The University of Kansas

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THE HISTORY OF BIOLOGY and ornithology at the University of Kansas dates back to 1864, the year of its founding, because the charter for the University called for establishment of a "cabinet of natural history." Francis H. Snow, a natural historian, was one of the three original faculty members. His "cabinet" has grown to become the Museum of Natural History, one of North America's outstanding university-associated museums, with divisions of vertebrate paleontology, ichthyology, herpetology, mammalogy, ornithology, community ecology, public education, and exhibits.

Among the workers and builders associated with the Museum in the late nineteenth century was the ebullient explorernaturalist, Lewis Lindsay Dyche. He collected over much of the continent and was naturalist on the Peary rescue mission; a significant number of specimens from Greenland resulted from that trip. In 1901, Dyche's collection of large mounted mammals resulted in the building of Dyche Hall, which still houses the Museum of Natural History.

The most notable worker in the earlyto mid-twentieth century was Charles Dean Bunker, for years curator of modern vertebrates. He had distinct curatorial skills and established many museum practices that are now standard in museums. Bunker held no formal teaching appointment, but he inspired a generation of students (they came to call themselves "Bunk's Boys") who went forth to extraordinary collective achievement. These included Alexander Wetmore, Remington Kellogg, William H. Burt, Jean M. Linsdale, E. Raymond Hall, R. A. Stirton, and Claude Hibbard, to name only a few.

In 1944, E. R. Hall became the Director of the Museum and in 1947, his student, George H. Lowery, Jr., was as-



Dyche Hall, which houses the Museum of Natural History, was built between 1901 and 1903. It is on the National Register of Historic Places. A new wing, not shown in the picture, was dedicated in 1963.

signed the duty of curating the bird collection. Donald S. Farner, who held a teaching position with the Department of Zoology in 1946-1947, also contributed to the collection. In 1950, the Division of Ornithology was formally established, and Charles G. Sibley served as its first faculty curator. Harrison B. Tordoff served as Curator from 1951 to 1957. Since that time, the collection has been tended by one or more of the curators presently on the staff; Clayton M. White served as acting curator in 1965-1966.

The bird collection now contains more than 80,000 specimens. The skeleton collection, with over 23,000 specimens, is its most important component and one of the world's greatest such collections. We owe this to Bunker, who realized the importance of assembling a large collection of bird skeletons long before other ornithologists. In 1920, he began to collect skeletons and to develop methods for preparing and caring for them. He founded the practice of using dermestid beetles for cleaning skeletal material. Virtually all of the other major skeletal collections in North America have been begun by or greatly augmented by workers who were associated with Bunker or the University of Kansas. As a tribute to Bunker's pioneer work, the Museum will soon formally name the skeleton collection "The Charles Dean Bunker Bird Skeleton Collection."

Over 2000 fossil bird specimens from the Division of Vertebrate Paleontology are stored next to the skeleton collection. These include specimens of *Hesperornis*, *Ichthyornis*, and *Baptornis* from the Cretaceous chalk beds of Kansas, numerous fossils from Miocene, Pliocene, and Pleistocene sites in the United States, and hundreds of specimens from three Pleistocene Puerto Rican cave faunas. We estimate that the collection includes as many as 75 new fossil species, which await study and description by future students.

Our 45,000 study skins represent an outstanding resource for the Great Plains, the southwestern United States, and Mexico, and we also have significant collections from Borneo and Alaska. A majority of families of birds of the world are represented by one or more specimens. We also curate about 3000 specimens of pickled birds and 2000 eggs.

 $\mathbf{D}_{\text{have been entered into our computer}}^{\text{ATA FOR ALL of these specimens}}$  and we are now establishing a regional



The main entrance to the Museum was modeled after that of St. Trophime Cathedral in Arles, France.

data base to include six other collections in a five-state area. Microcomputers, printers, and terminals connected to the University's mainframe computer are available for this work as well as for staff and student research use.

Much, but certainly not all, research by Museum staff and students involves specimens in the collection. Active research programs in the recent past and at present include rapid evolution in birds, multivariate analysis of morphological characters, the origin and early radiation of birds, various aspects of biogeography, reproductive biology of pigeons, osteological studies of cuculiform birds, systematics of cormorants, studies of South American steamer-ducks, breeding biology of Eastern Kingbirds, and electrophoretic studies of Brown-headed Cowbirds.

We think we are fortunate to be housed on what many people consider to be one of the most beautiful campuses in North America. Lawrence is situated in hilly eastern Kansas where the eastern deciduous forest and tall-grass prairie interdigitate. Southern and northern as well as eastern and western floras and faunas meet in Kansas. Thus, studies involving hybrids (Eastern and Western meadowlarks, "Bullock's" and "Baltimore" orioles, "yellow-shafted" and "red-shafted" flickers, Carolina and Black-capped chickadees) have attracted University of Kansas workers, past and present.

People who work directly or indirectly to enhance the ornithology program of the Museum, with very brief indications of their areas of specialty, are: Richard F. Johnston, Curator (avian breeding biology), Robert M. Mengel, Curator (avian biogeography), Marion A. Jenkinson, Adjunct Curator (collection and data base management), Douglas Siegel-Causey, Adjunct Curator (seabirds and the marine environment), Philip S. Humphrey, Museum Director (systematics and ecology of Patagonian birds), Larry D. Martin, Curator (fossil birds), Robert Holt, Curator (community ecology), Robert S. Hoffmann, Curator (Holarctic birds and mammals), and Edward O. Wiley, Curator (theoretical systematics). Overall, there is a very strong emphasis in the Museum on general ecology and statistical analysis.

The museum has publication series that can deal with contributions from a few pages in length to monographs. Also, the Kansas Ornithological Society publishes a bulletin that is highly respected in the scientific community. A number of curators in the Museum have had or now have major editorial assignments. This work is enhanced by the fact that Allen Press, Inc., which prints virtually every major journal in natural history in North America, is located in Lawrence. Ample opportunity exists for graduate students to learn about editing.

All Museum curators hold joint appointments with the Department of Systematics and Ecology and it is through that department that Master's and PhD students are awarded their degrees. Within that department, bird students can find additional workers interested in such subjects as behavior, biochemical studies, and electron microscopy.

The department has a number of field study areas within a few miles of the campus; these range in size from a few to several hundred acres, and include both reserves and experimental plots of deciduous forest, prairie lands, and ponds. The University is a member of a consortium that supports the Organization for Tropical Studies. Through this organization, many graduate students are able to find support for study of tropical ecology in Costa Rica.

Other areas of strength in the University supplement the ornithology program. KU has one of North America's great collections of rare ornithological books (the Ralph N. Ellis Collection) and an outstanding map library. The entomology and geology departments are especially strong.

THE UNIVERSITY OF KANSAS is noted for its international program; normally about 50 graduate students are housed in the Museum and about 20 percent of these are from foreign countries. At this time we have students from Mexico, Ethiopia, China, Portugal, India, Colombia, and Uruguay.

Former graduate students at the University of Kansas who are now Elective Members or Fellows of the American Ornithologists' Union are: Jon C. Barlow, Abbot S. Gaunt, John William Hardy, Jerome A. Jackson, Marion A. Jenkinson, Erwin E. Klaas, Peter E. Lowther, Dennis M. Power, James D. Rising, Sievert A. Rohwer, Gary D. Schnell, Max C. Thompson, and Glen E. Woolfenden. Approximately 15 ornithology students have earned advanced degrees from the University in the last 10 years.

——The Museum of Natural History, The University of Kansas, Lawrence, Kansas 66045.



Black-billed Cuckoo/Drawing by Michael DiGiorgio.