

BRIEF SKETCH OF THE HISTORY THE UNIVERSITY OF WISCONSIN ZOOLOGICAL MUSEUM (UWZM)

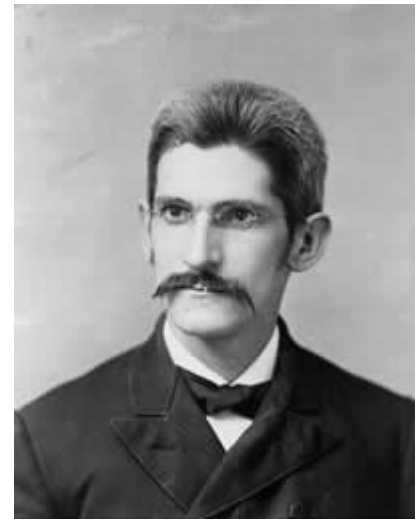
In 1848, even prior to construction of the first university building, the University of Wisconsin Regents requested that specimen collecting for a “Natural History Cabinet” be initiated. Horace Tenney, later the Assistant State Geologist, with guidance and assistance from Increase Lapham, began collecting



Biology Museum in Science Hall, ca. 1900

samples for use in teaching of zoology and natural history courses. With completion of North Hall in 1851 the collections were housed there; in 1855 the growing museum collections were moved to newly built South Hall. Upon completion of University Hall in 1859 (later Bascom Hall), the collections were moved once again. By 1865 the specimen inventory had reached 12,137.

In the fall of 1875, Edward A. Birge was hired as an instructor (later Professor, Dean, and President) of natural history and “Assistant Curator of Cabinet”. Science Hall was completed in 1876 to house the many new science courses and laboratories. The Museum, central to natural history research and instruction, was relocated to the fourth floor of Science Hall. This old Science Hall burned in the fall of 1884, and with it was lost museum collections, instruments, and instructional material.



Edward A. Birge, ca. 1890

By January of 1885, in response to this tragic loss, E.A. Birge had already begun acquiring and



Science Hall

purchasing natural science and anatomical specimens and models, books, and equipment. His catalog of specimens and many of his acquisitions from 1885 through 1899 remains a part of the Zoological Museum archives. To increase representation of Wisconsin birds, Birge employed Thure Kumlien who prepared and provided about 500 study skins. These early bird specimens with records of their habitats dating from 1865 to 1888 are a primary resource for

monitoring chemical and ecological changes of the environment throughout the state. Birge became

Dean of Letters and Science in 1891 and was also appointed superintendent of the Wisconsin Geological and Natural History Survey in 1897. He served as its director and superintendent from 1900 to 1919. Through collecting and exchanges with other members of the Survey, early curators of the Zoological Museum were able to create a State Repository for Wisconsin Biodiversity and acquire, for the University of Wisconsin, unusual and rare specimens from the United States and abroad.



Laboratory in Science Hall

George Wagner, an early Curator, attempted to elevate the UWZM to the status of a State Museum through his work on the Wisconsin Geological and Natural History Survey. Wagner was hired in 1903 to teach general zoology, comparative anatomy of vertebrates, invertebrate zoology, and animal behavior. He introduced courses in heredity, bionomics (now known as ecology), and ornithology. Wagner began a state bird banding program and between 1925 and 1943 he and his students banded approximately 30,000 birds; voucher specimens from those early phenological studies are preserved in the UWZM. Beginning in 1905 he spent summers collecting fish for the Wisconsin Survey of Fishes, a study of state resources; these specimens are also deposited in the museum.

In 1912, the museum was relocated into the “new biology” building, later named Birge Hall. From 1917-1920 Birge and Wagner recruited herpetologists A. J. Poole, H. H. Sheldon, and A. I. Ortenbuger to collect and deposit specimens of Wisconsin reptiles and amphibians in the UWZM. The outstanding malacologist F. C. Baker collected widely and discovered new species of mollusks in Wisconsin. His Survey collection was deposited in the UWZM. (This entire collection of several thousand lots is currently on long-term loan to the University of Michigan Museum of Zoology, as they have a major program and curatorial support for study of mollusks.) Aaron Ludwig Kumlien, son of Thure and a noted ornithologist in his own right, donated his private collection of bird specimens. This collection contains study skins, eggs, and mounts of Wisconsin birds, in addition to those he collected as naturalist on the Howgate Arctic Expedition of 1878.



Birge Hall, ca. 1912



George Wagner

Wagner was the first curator systematically to catalog specimens; between 1905 and 1940, he made the initial 13,000 catalog entries, except for those done by Hartley H. T. Jackson, who worked for a time as a student museum assistant. Jackson, who worked closely with Wagner, later served as a mammalogist with the U.S. Biological Survey and was a founder of the American Society of Mammalogists in 1919. Jackson was well known in Wisconsin for his book “The Mammals of Wisconsin”; his large personal collection of mammals (specimen dates 1898-1923 and including mammals collected by some of the most illustrious mammalogists of the late 19th and early 20th centuries) was deposited in the UWZM.

John T. Emlen, Professor Zoology from 1946 to 1974, early specialized in Ornithology. During that time, he intermittently acted as director of the Zoological Museum. He and his students (see appended list of doctoral students) studied ecology and behavior of birds in Wisconsin and elsewhere. He expanded his studies to primate behavior, including the landmark field studies of mountain gorillas in Africa with his student George Schaller; crucial voucher specimens of African birds and mammals as well as those from American research programs were deposited in the Museum.

Between 1962 and 1979, William G. Reeder was director of the UWZM and during that time a number of major collaborative research and collecting programs were undertaken (see appended list of graduate students). In the 1960's, Reeder, in cooperation with William S. Laughlin, professor of Anthropology, and graduate students, made collecting trips to Alaska and the Aleutian Islands, yielding marine invertebrates, bird, and sea mammal specimens now in the UWZM collection. In the 1970's, an agreement was made between Reeder and the University Primate Research Center for anatomical voucher specimens of their behavioral experiments to be deposited at the UWZM. Also during his



William G. Reeder

tenure here, Reeder supervised several graduate students studying the biota of the Galápagos Islands. This program was given rare collecting privileges to provide vouchering to UWZM. Since the early 1970's, these ecological and behavioral studies have been supplemented by the field work of E. Elizabeth Pillaert, who has returned 1400 most important specimens to UW for study in a collaborative program with Reeder and Tjitte de Vries (Professor at Catholic University, Quito, Ecuador). Dr. Richard C. Vogt (former student of Reeder and currently at the Instituto Nacional de Pesquisas da Amazonia; Manaus, Brazil), has collected and deposited approximately 4000 herpetological specimens in the

museum. These include the important specimen series serving as basis for his book “Natural History of Amphibians and Reptiles in Wisconsin” (1981), which is still the most comprehensive resource for Wisconsin Herpetology. He has deposited Brazilian specimens resulting from collaborative studies with UW professor, Dr. W. Porter.

John T. Robinson, UWZM director from 1980-1983, acknowledged as one of the world leaders in the study of human evolution, contributed his professional library and collection of skeletons and casts that document much of the history of hominid paleontology. Included in this collection, are many cranial casts and memorabilia from South African paleoanthropologist Robert Broom, including some of Broom’s original sketches and drawings.

Robinson’s brief stint at the museum was followed by Dr. John A. W. Kirsch, director from 1983 to 2006. During Kirsch’s tenure, a laboratory was established for the study of bird and mammal DNA, using the techniques of DNA/ DNA hybridization. These studies have produced a flow of voucher specimens to the museum from Australia, Tasmania, Brazil, Argentina, and Ecuador, resulting from the studies of Kirsch, his students and collaborators.



John A. W. Kirsch



E. Elizabeth Pillaert

After Kirsch’s retirement, E. Elizabeth Pillaert, who had been Distinguished Curator of Osteology and Assistant Director of the UWZM for nearly 40 years, served as the Museum Director until her retirement in 2011. When Elizabeth came to the Museum, the osteology collection consisted of roughly 200 skeletons. For 30 years, Elizabeth was instrumental in continuing and strengthening the UWZM’s collaborations with the

Ecuadorian National Park Service and the Charles Darwin Research Station in the Galápagos Islands. By the time Elizabeth retired, the Osteology collection had grown to contain nearly 20,000 specimens.

In addition to the people and collections mentioned above, numerous other UW faculty, alumni, and noteworthy zoologists have made significant contributions to the UWZM collections.



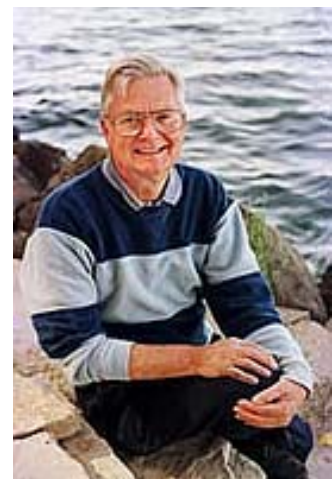
William S. Marshall

Early Wisconsin zoologists who donated their collections include H. V. Ogden (mammals, mollusks, reptiles, 1870-1907); W. E. Snyder (Birds, mammals, 1890-1936); A. W. Schorger (birds, mammals; 1913-1969 [also major gifts to Wildlife Ecology collections]); Louis D. Sumner (bird eggs, 1883-1920); the first entomologist on the UW faculty, William S. Marshall (protozoan and insect slides, 1890 – 1920's [specimens also in Entomology Department collections]). The UWZM obtained the only known specimen of a Wisconsin mountain lion, collected in 1857, from Schorger. The ornithology collection includes specimens from important early ornithologists Robert Ridgeway and Elliot Coues, both active in the federal survey of the West, (1860-1885).

Subsequent to 1886, Brother Joseph Dutton, who cared for people with Hansen's Disease (leprosy) on the Hawaiian island of Molokai, gathered a large sample of the unique and endemic land snails, which were donated to the UWZM. Most of these species are now endangered, extinct, or of unknown status.

Harland W. Mossman, a professor in the Department of Anatomy from 1920 until, at retirement in 1968, he was appointed adjunct curator of the Zoological Museum. In 1987 he published a compilation of his lifelong research on vertebrate fetal membranes and the mammalian ovary, resulting in two major volumes based upon his collection of 100,000 slides and preserved specimens of mammalian reproductive tissues. This is the most complete collection of its kind in any institution; researchers from North America and Europe regularly visit the Zoological Museum to study this material.

Between 1972 and 1977, John J. Magnuson, followed by James F. Kitchell, Professors of Zoology (Limnology), led annual cruises studying the marine ecology of the Gulf Stream and its interfaces (the Eastward Cruises) off Cape Hatteras, North Carolina. The researchers obtained and deposited at UWZM large collections of vertebrate and invertebrate animals-the continuing basis for graduate studies.



John J. Magnuson

In 1981, John J. Magnuson, now Director Emeritus of the Center for Limnology, initiated a long-term ecological research project to document changes in seven northern and four southern Wisconsin lakes and their surrounding landscapes. Professor Stephen R. Carpenter has since continued the project which



Lowell E. Noland (right) with other graduates

has yielded thousands of plankton samples collected over time, which are cataloged and housed at the UWZM; they are used regularly in this continuing comparative research by Center for Limnology staff and students.

Dr. John Lyons (UW Zoology Ph.D.) has held a full time position since 1984 as Ichthyologist and Research Scientist at the Wisconsin Department of Natural Resources; he was appointed Adjunct Curator of Fishes for the UWZM and is an Honorary Fellow at the Center for Limnology. The

Wisconsin DNR supports his collaboration with the University; he has spent thousands of hours on research projects and preparation of specimens for reference deposition at the UWZM. The Department of Natural Resources provides in-kind support for the collection of fishes as well as modest support for supplies and travel.

Milton College, an early educational institution in Milton, Wisconsin, closed permanently in 1982. Their important bird and mammal collections with specimens documented from 1844 to 1940's were given for deposit to the Zoological Museum. The earliest specimens were collected by UW alumni Ludwig Kumlien and F. G. Hall, then teachers and curators at Milton College; as with other early specimens they are valued as state of Wisconsin historical records, but most importantly for chemical comparisons documenting modern environmental contamination.

Despite the sad loss of the very first museum specimens in the Science Hall fire, the University of Wisconsin Zoological Museum has re-acquired specimens that date back to the 1840's. The museum also has several type specimens and paratypes of birds and mammals from North America as far back as the 1800's. These are the unique specimens used in original descriptions of new species.