



The Chicago Academy of Sciences' Peggy Notebaert Nature Museum Collections

The Chicago Academy of Sciences was founded in 1857, a time of prolific exploration and discovery in the United States. The quality of the institution, its growth rate, and scientific ambitions earned it the nickname “the Smithsonian of the West.” When the institution was destroyed in the Great Chicago Fire of 1871 it was reinvigorated by the return of duplicate specimens that had earlier been donated to other institutions. From this nucleus, the institution continued to expand its collections and scientific expertise. The impact of the Academy on science is apparent in many ways--from the Western Screech Owl *Otus kennicottii* named in 1867 after Robert Kennicott, one of the founding members of the Academy, to the foundational works on pond snails by Frank Baker in the 1920's, to the herpetological specimens and seminal publications of former director Howard Gloyd through the 1950's, and many more, some of which are noted below.

Although the collections can no longer be compared to the Smithsonian's in terms of size, their data remains comparable in value and because of their age, provenance, and geographic focus, it becomes more valuable with the passing of time. Access to the specimens and their data can be relatively difficult but perseverant scientists in many fields still use the data in their work. Because of the value of these specimens and their data, it is important to make them more accessible to scientists, and to ensure that the specimens will be available for current and future workers.

Currently the collections are housed in an off-site building that is shared with a variety of other tenants. They are cared for by the collections manager, Steve Sullivan, who will be joined in October 2006 by an assistant collections manager/malacologist, Dr. Stephanie Clark. The following paragraphs summarize each of the collections.

Ornithology (birds), consisting of 12,000 study skins and more than 1,000 mounted specimens. Thirty percent of the birds were collected before 1900 and the collection includes extinct species.

Oology (eggs), including more than 2,400 sets of eggs and nests, comprising 440 species of North American birds. The collection also has good field notes.

Mammalogy (mammals), with 4,500 specimens including a series from the Smoky Mountains collected in the late 1920s and early 1930s, and a series from Arizona collected in the 1930s and 1940s.

Herpetology (reptiles and amphibians), consisting of 20,000 specimens, many collected by Dr. Howard K. Gloyd, director of the Academy from 1936-1958, and some collected by Robert Kennicott in the 1850s. Of primary importance are Gloyd's rattlesnakes, which were used to form the basis for Gloyd's classic work on the group, *The Rattlesnakes*, genera *Sistrurus* and *Crotalus*. Well-documented geographic areas include Missouri, Arizona, and Illinois.

Malacology (shells), which contains approximately 60,000 specimens, including a number of types and figured specimens, many collected by F.C. Baker. The collection includes some marine material but is primarily freshwater and terrestrial species, including freshwater bivalves, the most endangered group of animals in North America.

Entomology (insects) includes approximately 50,000 specimens, mainly Lepidoptera (butterflies and moths) and Coleoptera (beetles). Most are from the Chicago area and were collected before 1900. Notable collectors include Berthold Neubarth, Leslie Banks, and Harry Sicher.

Arachnology (spiders and ticks) is a small collection of approximately 200 specimens in alcohol largely accumulated by Donald Lowrie in Arizona and Illinois in the 1940s.

Botany (plants) is a significant collection because ninety percent of the Academy's approximately 30,000 herbarium specimens were collected in the Midwest before 1900. It also contains important lichen and bryophyte specimens. We have recently begun a program of digitizing this collection with the goal of joining our regional, online database, vPlants,

Mineralogy (rocks and minerals) includes 20,000 specimens, most collected before 1900. Some of the collectors include Elizabeth Atwater, Col. John W. Foster, and Frank Woodruff. Among the more notable specimens is a small piece of the Canyon Diablo, Arizona meteorite.

Paleontology (fossilized organisms), with approximately 30,000 fossils including approximately 8,000 Silurian fossils from the Chicago region, most collected by William C. Egan between 1870-1890. There are about 70 type specimens and a relatively unstudied collection of Carboniferous plants from Henry Co. Missouri, donated to the Academy by J. H. Britts in 1904.

Archives, which include the historical records of the Academy, scientific instruments, and field notes and letters from several prominent scientists including Henry Cowles, Midwestern ecologist; Benjamin T. Gault, Illinois ornithologist and naturalist; Herman S. Pepon, botanist of the Great Lakes region; Robert Ridgway, naturalist and photographer, among many others. Among the more esoteric collections is a scrapbook of Elizabeth Atwater, which contains, among other items, specimens of George and Martha Washington's hair. We have recently begun digitizing portions of this collection.

Photography including approximately 2,500 glass negatives, most dating from 1890-1920, approximately 3,000 early 20th century lantern slides, illustrating the natural history of the Chicago region, approximately 3,000 modern slides portraying organisms from the Midwest as well as many original movies and videos of Midwestern habitats.

Display Mounts and Education Collections are a group of non-data bearing specimens representing species from all of the Academy's scientific collections for use in educational programs and dioramas.