

A History of the Joseph Moore Museum at Earlham College

I. Early History

MILLARD S. MARKLE, Earlham College

Not only its founder, Joseph Moore, but all of the men who have been responsible for the development of the Joseph Moore Museum have been active members of the Indiana Academy of Science. Joseph Moore and David Worth Dennis were charter members.

It is hard to fix a date for the beginning of the museum. During the first forty years of its existence practically the entire program of the college was carried on in Earlham Hall, which only last year was razed to make way for a more modern building. In old Earlham Hall was a small room, called the Cabinet, where natural history specimens were kept for reference and display. This collection was constantly augmented through the efforts of Joseph Moore. So much was this aspect of his work appreciated that in 1887, when a new classroom building, Lindley Hall, was erected, the lower floor of one wing was planned especially for the museum.

The museum of Earlham College has always been considered a part of its educational equipment, as well as a means of extending a knowledge of science and an appreciation of nature to the general public.

Joseph Moore was a teacher of science at the college, 1853-1865; its president, 1868-1883; professor of geology and curator of the museum, 1885-1905. Entering Earlham College as a student in the spring of 1904, I remember him as a skull-capped old man, working away among his beloved exhibits. During his period of service some of the most valuable specimens were obtained, generally through his personal efforts. Among these were the most spectacular one, the mastodon, *Mastodono americanus* and its most valuable one, the giant fossil beaver, *Castoroides ohioensis*. Well do I remember the effect upon me as I entered the museum to see the giant mastodon, beside which the skeleton of a large elephant, salvaged from a dead pachyderm from a visiting circus, seemed almost a pygmy. Detailed accounts of the acquisition of the mastodon and beaver may be found in the following publications: Proceedings of the Indiana Academy of Science, Vol. 6, page 277 and 1900, page 171; Journal of the Cincinnati Society of Natural History, Oct. 1890; American Geologist, Vol. XII, Aug. 1893.

Joseph Moore died in July, 1905. At a meeting of the college Board of Trustees, held in October of the same year, it was agreed that the museum should be named in his honor.

Before the death of Joseph Moore, Allen D. Hole had been made professor of geology and curator of the museum. During his forty years of service, much valuable material was added, particularly minerals and fossils.

In 1924 occurred the disastrous fire which destroyed Lindley Hall, which housed the museum. The fire had gained so much headway before it was discovered that it was obviously impossible to save the building, so the efforts of the firemen were concentrated on the Registrar's office and the museum. The fire was kept from entering the former, so precious records were saved; but the breaking of a water-main cut off the supply of water at a critical moment, so the fire burned itself out.

Nevertheless, an astonishing proportion of the exhibits were saved. Gordon Bowles, '25, a senior, knowing the great value of the fossil beaver, then the only skeleton in existence in any museum, broke into the museum and carried the beaver to safety. The mastodon was, of course, too large to move, but a steel beam above it protected it from falling roof-slates and other objects from the burned-out chapel above. Mineral and fossil specimens were not combustible and could be restored by cleaning. Most of the bird-skins and mounted birds were in glass cases, protected by a balcony, which did not fall. The next day it seemed almost uncanny to look thru the windows of a gutted building and see undamaged bird-mounts, sitting in museum cases. Among them were those belonging to the collection presented to the college by the late Alden Hadley, a former student of David Worth Dennis and long on the staff of the National Audubon Society. His collection, consisting of large numbers of mounted birds and study-skins, now forms an important part of the ornithological equipment of the college. Also coming thru the fire were mounted specimens of the whooping crane, trumpeter swan and passenger pigeon.

Pending the erection of a science building, which was expected soon, but not realized until 1952, the material salvaged from the museum was stored in the attic of Carpenter Hall, built to replace the burned Lindley Hall. Facilities for display were lacking, so for sixteen years the museum was not available to the college community nor to the general public. The many inquiries about it indicated the high regard in which the museum had been held. During this period Allen Hole did much work in the restoration of specimens.

Following his graduation from Earlham College, Gordon Bowles returned during summer vacations to work on the restoration of the skeleton of the mastodon, patiently piecing together the broken bones, so that when 28 years later it was possible to assemble them in the new museum, they were in excellent condition.

During the early 1940's, working with limited funds, Millard Markle, '10, professor of biology, made a beginning in the arrangement of specimens, particularly those of birds, for display in the attic of Carpenter Hall, in anticipation of more suitable quarters in a wing of a new building, to be named David Worth Dennis Hall of Science. With the coming of James Cope as curator in 1947, restoration was vigorously carried forward, so that when the move to the new quarters was made in 1952, an excellent display of specimens was possible at once.

II. Later and Present History

JAMES B. COPE, Curator, Earlham College

When I was placed in charge of the museum in Carpenter Hall in 1947, I acquired the old accession books, which listed the items collected and given to the museum for many years. Some of these items had been lost in the fire, new things had been acquired, and so I started cataloging the museum contents by natural groups. Many of the old collections had to be cleaned and sorted.

Part of the sorting meant separating the natural history collections from the ethnological materials. Much of the biological material was put into condition for classroom use on a loan basis. I and several students expanded the collection of mammals, especially those of the Richmond area. Some mammals, including a pair of flying squirrels, were mounted and made into small habitat scenes. Additions to the Hadley collection of birds were also made.

A collection of live snakes was also begun. It has been increased with specimens given by townspeople, students and alumni. This exhibit is of great interest to all visitors to the museum. In the new museum in 1957, a large octagonal case, with places for seven aquaria, seven large and 14 small snake cages, was built.

The first of many visits by local school children was held by the museum in the form of an open house in 1949. With the museum in its present location, as a wing of Dennis Science Hall, visits by school and club groups are made easier. A staff of student guides is maintained by the museum, and as many as 120 school pupils have been taken on tours in a day. Many teachers prepare their pupils for the trip with a list of questions to be answered. Others combine the trip with a letter writing assignment. Depending upon the age and number of children in the visiting group, the student staff may prepare a program of museum tour, natural history games, and a motion picture or demonstration.

A typical letter from a youngster says "I thank you very much for letting our room to visit Earlham College. I liked the mastodon best of all. Then comes the snakes. I liked the green snake best. It's lots of fun to look at things that you never have seen before. Please let the assistants that showed us around read are (sic) letters and thank them very much."

In addition to tours, Saturday morning classes for children from third grade through junior high school have been popular. Topics range from astronomy through chemistry, Indian lore, bird study, physics and rock study to taxidermy. The program usually starts with a short talk or motion picture on a natural history topic, with the pupils then dividing into small groups. Each group is under the leadership of one or two Earlham students. Some of the Earlham students have been regular members of the museum staff and others have been recommended by their major departments as qualified for the teaching experience.

The museum staff which supplements me and my part-time assistant Gertrude Ward, consists of students who share in such tasks as making exhibits, taxidermy, conducting tours, caring for live animals, and greeting Sunday afternoon visitors to the museum. These students volunteer for an apprenticeship of one semester. During this time they are assigned various jobs in the museum, thereby becoming acquainted with the museum program, and often deciding on the special job for which they are best suited.

In 1952 the museum moved into the Joseph Moore museum wing of the new David Worth Dennis Science Hall. The dedication ceremony in October, 1952, was highlighted with talks by many outstanding scientists, including the late W. Clyde Allee, '08, from the University of Florida, C. Bertrand Schultz, director of the State Museum at Lincoln, Nebr., and Armand Spitz, originator of the Spitz Planetarium. An honorary degree was awarded to the late Karl P. Schmidt, chief curator of Zoology of the Chicago Natural History Museum.

The major accomplishment of the museum staff in the years from 1952 to 1955 was the erection of the mastodon skeleton. First, a large scaffold was built near the platform where the mastodon was to stand. Metal supports for the leg, hip bones and shoulder blades were bent and welded into place as patient student workers fitted and refitted the pieces. Then the vertebrae were strung onto a curved iron rod, and fitted into position. The bones had been moved so many times that the ribs were no longer in their natural order, so they were fitted onto the vertebrae after observation of other mastodons and of photographs.

Placing the skull in position was a milestone, but it raised the problem of tusks. The original ivory was in much too poor condition to put in place, and a plaster substitute would require supports. By this time there were two major support rods under the skeleton, so the staff wanted no more "plumbing" than necessary. Several substitutes were tried, without success, until Laurence Strong of the Chemistry department suggested styrofoam plastic be tried. Short columns of this lightweight plastic were carefully shaped, then glued together to form curving tusks. One plastic tusk weighs only four pounds, compared with a plaster tusk of 30 pounds. Finally, with a coat of paint, and an oak platform beneath it, the mastodon was completed in time for Commencement, 1955.

Although exhibits are spectacular, the real backbone of any respected museum lies behind the scenes which the public normally views. These consist of the valuable study collections which museum curators protect in fireproof, verminproof cabinets.

The Joseph Moore Museum is no exception in this respect. It has been a tradition since the days of Joseph Moore's influence to have collections for study by faculty, students and interested townspeople, as well as for exchange with authorities at other institutions.

Major collections of the college museum are of mammals, birds, birds' eggs, reptiles, amphibians, fish, shells, insects, other invertebrates, and plants. These collections are continually growing as former students and other friends, one in particular, Russell Mumford, of the college

contribute specimens. Especially generous among students have been James Fowler, Robert Lewis, Richard Myers, and Nixon Wilson, all of the Class of '52, Carl Isenberg and Charles Thaeler of the Class of '54, Fay Schnell and Cam Tiford, class of '55 and John Bowles, '56.