
The Central Ohio Scientific Association of Urbana (1874-78)¹

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ABSTRACT. The Central Ohio Scientific Association was founded at Urbana University on 20 October 1874 by local professors, physicians, and amateur scientists. Officers were chosen and objectives were established. Four sections were created for: (1) Natural History and Geology, (2) Pioneer History and Archaeology, (3) Anthropology, and (4) Physics. The most important objects assembled for a museum were artifacts from local Indian mounds, and nearly all members of the society participated in that project. Papers were read at monthly meetings and a single issue of Proceedings was published in which a few of the papers were published in full. Women were elected as "associate members," and several corresponding and honorary members were added to the roll. A cabinet and library were established. While the society was short lived, it stimulated considerable local activity, and gave an outlet for those in Central Ohio with an interest in science.

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INTRODUCTION

The State of Ohio has long been an active center for the development of naturalists, both professional and amateur (Dexter 1979). Meisel (1924-29) published a synopsis of American scientific societies over the period of 1769-1865, and Bates (1965) published a similar volume covering the period (1683-1965). Oleson and Brown (1976) presented a collection of in-depth essays of selected societies including the Western Academy of Natural Sciences of Cincinnati (1810-50) by Shapiro (1976). In his detailed account of the Western Academy of Natural Sciences of Cincinnati, Shapiro has shown that "popular interest in and support for science was widespread" (p. 220). He also pointed out that such an organization "existed for its own sake" (p. 221), which was true for most of the local scientific societies of the

19th century. However, these societies served to stimulate research interests among local professors, physicians, and amateur naturalists. The Central Ohio Scientific Association of Urbana was typical of such organizations. While it lasted only a few years, it was instrumental in fostering activity especially in the study of local Indian mounds and local natural history. Following is a brief account of the origin, objectives, organization, and major accomplishments of this small but dedicated group in Central Ohio.

THE CENTRAL OHIO SCIENTIFIC ASSOCIATION OF URBANA

ORIGIN. In the 19th century physicians were among the leading naturalists of their day. They were among the few to obtain a scientific education, and their curriculum included the study of botany and zoology as well as anatomy and physiology (Dexter 1972). They had a common interest with science teachers and local field naturalists, most of whom were self-trained. A common bond

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brought them together and the need for an outlet led them to form local societies in many communities.

On 20 October 1874, the following local physicians, professors at Urbana University, and amateur scientists of Central Ohio met in the office of Dr. R. H. Boal in Urbana to organize a scientific association: Dr. R. H. Boal, Dr. W. F. Leahy, Prof. T. F. Moses, J. F. Meyer, P. R. Bennett, Jr., Dr. L. C. Herrick, and T. N. Glover.

All members were residents of Urbana except Dr. Herrick and Mr. Glover who were from Woodstock. The following account is based upon the single publication issued by the association (1878).

For purposes of organization, Prof. Moses was selected chairman and Dr. Leahy secretary pro-tem. A committee of three immediately drafted a constitution and a set of by-laws. The first permanent officers were elected at that time as follows: President—Mr. Glover; Vice President—Mr. Bennett, Jr.; Recording and Corresponding Secretary—Dr. Leahy; and Treasurer—Prof. Moses.

At the second meeting a separate post for corresponding secretary was established with Prof. Moses appointed to the office; he was then replaced as treasurer by Mr. Meyer. Also, a new position as curator was created with Dr. Boal selected as the first to hold that office. Prof. Moses of Urbana University (chartered as a university, but actually an undergraduate college) had been a student of Louis Agassiz on Penikese Island (Anderson School of Natural History) in the summer of 1873 (Jordan 1892).

OBJECTIVES. The stated objectives of this scientific association were as follows: (1) cultivation of physical and historical sciences (i.e., natural and social sciences); (2) study of the local region and its inhabitants; (3) development of scientific taste in the community; and (4) to develop mutual acquaintance among scientific workers. Another objective not stated originally nor specified in the constitution was the development of a public museum.

ORGANIZATION. In March, 1875, four sections were established:

- (1) Natural history and geology
- (2) Pioneer history and archaeology
- (3) Anthropology
- (4) Physics

At first the collections assembled for study and exhibition were deposited in the U.S. Post Office building through the generosity of Postmaster W. A. Brand until a museum building could be obtained. Probably the most important items collected were artifacts from Indian mounds excavated by members. At that time some residents, especially local physicians, were active in exploring Indian mounds, cemeteries, earthworks, etc. in valleys of southern Ohio as well as making a general study of natural history (Dexter 1965, 1972, 1977). Research on the Indian mounds of Ohio have contributed much to our understanding of American archaeology (Willey and Sabloff 1974). The following is an account of the activities of the society:

Explorations and Field Work. Nearly all members of the society participated in the examination and exploration of Indian mounds, earthworks, and study of artifacts collected. Two years of field exploration (1876-78) were conducted toward the goal of eventually

mapping the ancient remains of Mad River Valley. The members planned initially to measure and map all mounds and earthworks in the area. This project had been stimulated by the Ohio archaeological exhibit at the Centennial Exposition (1876) held in Philadelphia and was supervised by Col. Charles Whittlesey and Matthew C. Read. The *Antiquities of Ohio* by Whittlesey and Read (1876) is based upon those exhibits and probably served as a guide for exploration and study of mounds in the Urbana area, as well using the pioneer monograph of Squier and Davis (1848). The former was later expanded and published in book form by Read (1888), although no mention is made of the work done by the Central Ohio Scientific Association in Mad River Valley. However, Mrs. Cyrus Thomas (1893, p. 77) listed the published works of Thomas Moses, principal archaeologist of the Urbana group, in her bibliography of the earthworks of Ohio compiled for the Smithsonian Institution. The group had also planned to open some of the mounds after measuring and mapping them, and place the artifacts in its museum. This work was the most original contribution of the section on archaeology.

Meetings. Monthly meetings were held in the rooms of Dr. Boal, and during the first four years, 25 scientific papers were presented. Some of these were published in volume 1, pt. 1, (1878) entitled *Proceedings Central Ohio Scientific Association of Urbana, Ohio*. [The author has not been able to find any further publication beyond this issue.] The following are some selected titles from papers read at the meetings:

- 1) *Report of Survey of Ancient Earthworks near Osborn, Ohio*, by Prof. J. E. Werren of Urbana University.
- 2) *Shell Mounds on the Coast of Maine; Geological Relations of Champaign County; Report of Roberts, Baldwin and Other Mounds Explored by the Association*, by Prof. T. F. Moses of Urbana University.
- 3) *The [Glacial] Drift of Champaign County (Ohio)*, by T. N. Glover.
- 4) *Stratigraphical Position of the Clinton Limestone at Osborn, Ohio*, by S. F. Woodward.
- 5) *Report of Meteorological Observations Made at Urbana, Ohio, from 1852-1878*, by Prof. M. G. Williams of Urbana University. Meteorology appears to be the only physical science included in the society's program.

Special Meetings. A special meeting was held in December, 1875, to examine microscope slides prepared by P. R. Bennett, Jr. Microscopes were borrowed from Dr. H. C. Pierce and Dr. W. F. Leahy of Urbana for that meeting. Another special meeting was held the following December to hear special remarks from Prof. E. S. Morse of the Peabody Academy of Science, Salem, Mass. The published report of that meeting (1878) reads, "After some interesting general remarks on the importance and surpassing interest of scientific research, he advised the Society to adopt some *special branch* of usefulness and devote its energies to that, rather than to dissipate their efforts in too wide a field." Also, "the usefulness of such an association was by no means dependent upon the size of the town in which it was located, but rather upon the enthusiasm and faithfulness of its members" (p. 10.). His advice for cooperation by all members on selected projects was prudent since only then could a significant contribution be made.

A third special meeting was held 3 January 1878, to inaugurate the new society room established in the Weaver Building. Prof. E. S. Morse, again the featured speaker, reported on his recent visit to Japan. Plans were then discussed for developing a public museum. Another special meeting was held in February of that year to appoint six trustees and to plan incorporation of the society. Articles of incorporation were filed on 10 May 1878, but before long the society seems to have waned without explanation.

Membership. Women were to be elected as "associate members" rather than regular members in keeping with common practice for scientific organizations in the 19th century. Shapiro (1976) has pointed out that in 1840 a new regulation of the Western Academy of Natural Science of Cincinnati "provided for the election of 'ladies of scientific tastes' as 'complimentary' members" (p. 233), but he noted there was no record of such an election (p. 245). Neither do we have a record of such taking place within the Urbana group. In recent years this trend has been reversed and much interest has been shown in the role of women in science (Rossiter 1974; Burstyn 1977; Kohlstedt 1978). By 1878, there were twenty-two regular members (all men); seventeen from Urbana and one each from Osborn (now incorporated as part of the city of Fairborn), Woodstock, Mingo, and Lima, Ohio, and one from Dowagiac, Michigan. There were five corresponding members including Prof. David Starr Jordan, Purdue University, Indiana, and Prof. E. S. Morse, Peabody Academy of Science, Salem, Massachusetts, and the University of Tokyo, Japan.

There were also two honorary members: Prof. Milo G. Williams of Urbana University and John H. Klippart of Columbus. Prof. Williams had been a member of the Western Academy of Natural Sciences (Cincinnati), where he organized the botanical collection, and the Cincinnati Society for the Promotion of Useful Knowledge (Shapiro 1976). Mr. Klippart had been curator of the Cleveland Academy of Natural Sciences and served as editor of the *Ohio Farmer*. In the first volume of the Ohio Archaeological and Historical Publications (1893), covering the period of June 1887 to March 1888, Prof. Thomas F. Moses and Gen. John H. Young of Urbana are listed as members (p. 393), the Central Ohio Scientific Association is listed as having a total of 10 members (p. 402), and Urbana University and Moses are both listed as possessing 200 archaeological specimens (p. 396). Unfortunately, no trace has yet been found of these collections.

Cabinet and Library. The cabinet included, as the nucleus, Indian and "moundbuilder" artifacts from local excavations. Also, it contained fossils, shells, and native woods contributed or loaned by the members.

The library included such works as the following:

- 1) Smithsonian Institution Miscellaneous Collections.
- 2) U.S. Geological and Geographical Survey of the Territories (Hayden Survey).
- 3) *Synopsis of the Acrididae of North America*, by Cyrus Thomas.
- 4) *Extinct Vertebrate Fauna*, by Joseph Leidy.
- 5) *Report on Cretaceous Flora*, by Leo Lesquereux.
- 6) *Birds of the Northwest*, by Elliott Coues.

7) *Prehistoric Remains, from Cincinnati*, by Robert Clarke.

8) *Report of Meteorological Observations, Urbana, Ohio, 1852-68*, by Milo G. Williams.

Noteworthy Articles. Volume 1 includes the belated "inaugural address" of President T. N. Glover given on 17 November 1878. In this he expounded on the four stated objectives of the Society which had been drawn up at its beginning. He also stressed the importance of historical sciences, of local scientific studies, and of the need for cooperation among scientists.

Some of the scientific papers published in this volume include the following (some had been read at the meetings as noted earlier):

- 1) "Report of the Antiquities of Mad River Valley," by Prof. Thomas F. Moses.
- 2) "Report of the Survey of Ancient Earthworks Near Osborn, Ohio," by Prof. J. E. Werren.
- 3) "Incidents Connected with the Early History of Champaign County [Ohio]," by Gen. John H. Young.
- 4) "Results of Meteorological Observations Made at Urbana, Ohio, for Twenty-Five Years," by Prof. Milo G. Williams. This report followed the format adopted by the Smithsonian Institution and included seasonal notes (phenology) of local plants and animals.

Of all of the papers published, the latter made the greatest contribution to physical science, since it was unique and included weather records of the area at a time when meteorological observations were few and far between. Milo Williams was recognized as a leading scientist in central Ohio through his teaching at Urbana University, his research in botany and meteorology, and his activity in scientific societies in Cincinnati and Urbana. The archaeological studies, while little known and neglected, remain as pioneering efforts for central Ohio.

The history and accomplishments of the Central Ohio Scientific Association of Urbana paralleled those of local societies such as the Lynn (Mass.) Natural History Society (1842-55), the Pottsville (Pa.) Scientific Association (1854-62), the Literary and Scientific Society of Madisonville, Ohio (1878-81), and the Scientific and Antiquarian Society of Garrettsville, Ohio (1881-87) (Dexter 1962, 1966, 1969, 1977).

CONCLUSION

Although the Central Ohio Scientific Association of Urbana remained small in size, was short-lived, did not make important discoveries, and did not produce professional scientists, it served to stimulate research and provided an outlet for teachers, physicians, and amateur naturalists in their pursuit of scientific studies. It filled a niche similar to many other small, local groups common in the 19th century, which existed primarily for their own sake.

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