

A. B. Ulrey: Pioneer Biology Teacher at Manchester College 1894-1900

WILLIAM R. EBERLY
Department of Biology
Manchester College, North Manchester, Indiana 46962

Abstract

Albert Brennus Ulrey, long known as A. B. Ulrey, established the first biology department at Manchester College in 1894 when the college was only 5 years old. Ulrey studied at Indiana University under Jordan and Eigenmann. As might have been expected, his major interest was ichthyology. He studied at some of the major marine laboratories in Europe as well as at Woods Hole. After leaving Manchester College in 1900, he attended Rush Medical School for a year and then took up work at the University of Southern California until his retirement in 1929. He founded the Venice Marine Biological Station and served as its director for many years. Because of his early leadership, the biology department at Manchester College continues strong in the tradition of research, field work and medical preparation.



FIGURE 1. *Left—A. B. Ulrey in 1892 while a student at Indiana University. Right—A. B. Ulrey in 1920 at the height of his career at the University of Southern California.*

Albert Brennus Ulrey, first biology instructor at Manchester College, was born in North Manchester, Indiana, December 31, 1860. After a short course at the Central Normal College, Danville, Indiana, and a graduate course at the State Normal School, he spent 2 years teaching in the public schools. Then at Indiana University he received both the Bachelors degree (1892) and the Masters of Arts degree (1894). He was on the staff at Indiana University as a zoology instructor from 1892-1894. In the summer of 1894 he traveled extensively in Europe, visiting many educational and scientific institutions, including the well-known zoological station at Naples (1).

In 1894 A. B. Ulrey joined the faculty of Manchester College as the science instructor. Manchester College as an institution had its beginning *ca.* 1860 in Roanoke, Indiana, as the Roanoke Classical Sem-

inary, sponsored by the United Brethren church. In 1889 the institution moved to North Manchester and became Manchester College. The Church of the Brethren bought the facilities from the United Brethren in 1895 and has operated Manchester College since that date.

Professor Ulrey remained with the faculty for several years after the college ownership changed hands. Though Professor Ulrey was a member of the United Brethren church, his parents were members of the (then) German Baptist Brethren, the name changing to the Church of the Brethren in 1908. In 1895 the college faculty consisted of about 10 persons, with Ulrey teaching all the science. During his tenure at Manchester College, Ulrey served as secretary of the faculty.

A. B. Ulrey was a member of the Indiana Academy of Science from 1891 to 1905, publishing 11 papers and abstracts in the *Proceedings of the Indiana Academy of Science*. He made extensive collections of the flora and fauna of Wabash County and surrounding areas. Much of this material was used in his teaching and some is still extant. In the herbarium at Manchester College are 275 specimens collected and prepared by A. B. Ulrey, mostly from Wabash and Kosciusko counties in Indiana but also including 11 specimens from Woods Hole, Mass., two from Niagara Falls and one from Oswego, N.Y. A large collection of bird study skins is now on indefinite loan to Purdue University.

In 1891 he published a prospectus for the establishment of a "Wabash County Science Club". Section 2 of the proposed constitution states that "The objects of the Club shall be: (a) Scientific research with special reference to Wabash County; (b) To stimulate an interest in the study of nature." The roster of membership lists 21 persons, including L. O. Dale, county superintendent of schools, and D. N. Howe, first president of Manchester College. A meeting of November 29, 1890, reported in the flyer lists papers on the Venus's fly-trap, the finches (*Fringillidae*) of Wabash County, the Coddling Moth, Types of the Sternum of Birds, and Reproduction of Mosses, among others. On January 10, 1891, President David Starr Jordan of Indiana University presented an "informal address" to the club. To the best of my knowledge, the Science Club never became a "going" organization and apparently was highly dependent on the personal involvement of Professor Ulrey.

Professor Ulrey was a very well-liked teacher, popular with the students and quite capable as a speaker. The titles of at least three of his addresses are known. On June 13, 1894, he addressed the Young Men's Christian Association (while he was still at Indiana University) on the theme, "Carnal Mindedness". In the spring of 1897 he addressed the Manchester College chapel session on "Health and Diseases". Later he talked to the Bible Society on the subject, "The Value of Scientific Study to Religion".

In his ordinary contacts with students, he was quiet and unassuming. Edward Kintner, long-time teacher at Manchester College and a student of A. B. Ulrey in 1899, recalls that "he was not especially

talkative . . . his voice was rather quiet, he rarely raised it to any extent at all . . . he would give you the impression of somebody who wasn't at all in rugged health". He suffered from T.B. and had had a lung removed. Otho Winger, president of Manchester College for 30 years, says that Ulrey almost quit school in his early days because of his health problem (2).

With his excellent scientific training at Indiana University under David Starr Jordan, Carl Eigenmann, and others, he brought the best of the modern scientific research and teaching to Manchester College in 1894. He offered courses in Geography, Physiology, Geology, Physics, Chemistry, Elementary Zoology, Morphology of Vertebrates, Histology and Microscopical Technique, Embryology, Elementary Botany, Morphology and Classification of Phanerograms, Plant Histology and Microscopical Technique, and a Biological Seminary (=Seminar). Quite an achievement for a one-man department. The following description of the biological laboratory, taken from the catalog of Manchester College for 1895, illustrates the extent of equipment and range of specimens he used in his teaching:

The Biological Laboratory is equipped with all the necessary apparatus and reagents for carrying on advanced work as well as the more elementary. The ordinary reagents for work in histology and embryology are supplied to the student. The department is furnished with a Minot microtome; a good grade of microscopes, one of Bausch and Lomb's C C 4 latest continental pattern with Abbe substage condenser and accessories; Abbe camera lucida, stage and ocular micrometer; apparatus for photomicrography, including camera, photographic outfit, bulls-eye condenser, etc.

The laboratory is supplied with an abundance of alcoholic material for dissection and study (both plants and animals) covering all the marine forms in the courses besides a considerable number for comparative study. For purposes of microscopic demonstrations and study, there are about 500 slides prepared illustrating a wide range of subjects of histology, embryology and general morphology.

There are over a thousand skins of mammals and birds, about two hundred of which are mounted specimens. . . . The fishes are represented by about twelve hundred alcoholic specimens. The Batrachians and Reptiles by about five hundred. Among the less common fishes are the shark, flounder, lancet, lamphey, (sic) etc.

The herbarium contains about twelve hundred specimens. A considerable number of the rarer plants are represented. The sea weeds are represented by alcoholic material. A fairly complete collection of the vertebrates and flowering plants of Wabash County has been arranged in systematic order.

For four summers while he was at North Manchester (1895-98), Ulrey taught in the summer school of Indiana University at their Biology Station at Winona Lake, Indiana, just 20 miles from Manchester College. In 1900 he left Manchester College and studied at Rush Medical College, Chicago, for a year. He also had work at the Northern Illinois College of Ophthalmology. In the fall of 1901 he assumed a position at the University of Southern California where he remained until his retirement in 1929.

His major work in California was in zoology with special emphasis on ichthyology and marine biology. He founded the Venice Marine Biological Station in 1910 and was its director for some time. Major

laboratory and aquarium facilities were dedicated in 1911. Ulrey designed and had built a research launch, the *Anton Dohrn*, which was 35 feet long. The laboratory and aquarium facilities were completely destroyed in a disastrous fire on December 21, 1920. The program of the Venice Biology Station has been continued as the Allan Hancock Foundation.

In California, Ulrey continued his research on marine fishes, starfishes of the California coast, and on the embryology of certain marine worms. At least 22 titles are known to have been published by him. Besides his early membership in the Indiana Academy of Science, he was a member of the American Association for the Advancement of Science, the Southern California Academy of Science, American Eugenics Society, Sigma Xi, and Phi Kappa Phi. He died in 1932.

It is indeed significant that at a time when most of the teachers at Manchester College had little advanced training, Ulrey, the science teacher, should have had such an extensive training and experience with the outstanding scientists of his day. This had a considerable impact on his students. Jerome Isenbarger says, "I consider him one of the most forceful teachers I have ever had. I consider him in the same class with John M. Coulter and David Starr Jordan." E. E. Frantz said, "He was an ardent disciple of the Agassiz-Jordan-Coulter field and laboratory methods of Biological study and research, all of which was so dominant in his service at M.C. Very few small college and academies in the 1890s were so fortunate as to have so well prepared and capable a biology instructor as M.C. had in the life, character and service of A. B. Ulrey." Kintner said, "He was very well liked by his students . . . some were quite devoted followers of his". Besides these three Ulrey students who became biology teachers, one could mention also George W. Tannreuther, who received his A. B. from Manchester College in 1900 with advanced degrees from Antioch College and the University of Chicago, who was for years Professor of Zoology at the University of Missouri. Tannreuther was also a research zoologist with a number of published papers to his credit.

The scientific traditions of Ulrey have been continued at Manchester College, chiefly through one of his students, Edward Kintner, professor of science and biology at Manchester College from 1911 to 1951. During much of this period Kintner was joined by Oscar W. Neher. The scientific tradition could be characterized by a strong emphasis on direct study of actual specimens, field study experiences, involvement in research and publication and participation in scientific organizations and meetings, a heavy emphasis on the health sciences and pre-medical training, and a unique way of relating scientific training and one's religious involvement and commitments. The present biology faculty at Manchester College continues to have a high interest and commitment to these principles and traditions.

Literature Cited

1. Anon. 1909. University Courier. Vol.5 (23):3-4. Publ. by Univ. S. California, Los Angeles.
2. WINGER, OTHO. 1940. Memories of Manchester. The Elgin Press, Elgin, Illinois, 229 p.

APPENDIX 1.

Publications of Albert Brennus Ulrey

-
-
1. 1891. A review of the Embiotocidae. Proc. Indiana Acad. Science for 1891, p. 176 (abstr.).
 2. 1892. Notes on the American Bittern (*Botaurus lentiginosus*). Ornithologist and Oologist 17:76-77.
 3. 1893. On the fishes of Wabash County. Proc. Indiana Acad. Science for 1893, p. 229-231.
 4. 1893. On some South American Characinidae. Proc. Indiana Academy Science for 1893, p. 226 (abstr.).
 5. 1893. On the occurrence of Kirtland's warbler (*Dendroica kirtlandi* Baird) in Indiana. Proc. Indiana Acad. Science for 1893, p. 224-225.
 6. 1894. Preliminary descriptions of some new South American Characinidae. Amer. Natur., July 1, 1894, p. 610-611.
 7. 1894. Birds of Wabash County. Proc. Indiana Acad. Science for 1894, p. 80 (title only). (with W. O. WALLACE).
 8. 1894. On the occurrence of the whistling swan in Wabash County. Proc. Indiana Acad. Science for 1894, p. 80 (title only).
 9. 1894. The flowering plants of Wabash County. Proc. Indiana Acad. Science for 1894, p. 66 (title only). (with J. N. JENKINS).
 10. 1894. Preliminary account of the development of Etheostoma. Proc. Indiana Acad. Science for 1894, p. 135 (title only).
 11. 1895. Contributions to the biological survey of Wabash County. Proc. Indiana Acad. Science for 1895, p. 147-148.
 12. 1895. Birds of Wabash County. Proc. Indiana Acad. Science for 1895, p. 148-159 (with WILLIAM O. WALLACE).
 13. 1896. On the occurrence of the Russian thistle (*Salsola Kali Tragus*) in Wabash County. Proc. Indiana Acad. Science for 1896, p. 224 (abstr.).
 14. 1896. The increasing abundance of the Opossum (*Didelphis virginiana* Shaw) in Northern Indiana. Proc. Indiana Acad. Science for 1896, p. 279 (abstr.).
 15. 1897. Notes on the embryology of *Paragordius* (*Gordius*) *varius* (Leidy). Proc. Indiana Acad. Science for 1897, p. 232-233.
 16. 1911. The Venice aquarium and marine station of the University of Southern California. Internat. Rev. gesamen Hydrographie u. Hydrogr., Bd. IV, H. 3 u 4, s. 401-2.
 17. 1917. The operations of the Anton Dohrn in Southern California waters. Bull. S. Cal. Acad. Sci., January, 1917. p. 23-27.
 18. 1924. Key to the families of marine fishes (Teleostei) of Southern California. Bull. S. Cal. Acad. Sci., March-April 1924. p. 1-11.
 19. 1928. A list of the marine fishes (Teleostei) of Southern California with their distribution. Bull. S. Cal. Acad. Sci. XXVIII(1):1-53 (with PAUL O. GREELEY).
 20. 1929. A check-list of the fishes of southern California and lower California. J. Pan-Pacific Res. Inst. IV(4):2-11.
 21. (citation unclear). A review of the Embiotocidae. Bull. U.S. Fish Comm.
 22. n.d. The biologist in relation to the problem of eugenics. n.p. 8 p.
-
-

Note. In addition to the above, numerous reports of the work of the Venice Marine Biological Station were written by A. B. Ulrey and appeared in various numbers of the *Bulletin of the University of Southern California* between 1910 and 1920. Other publications of Ulrey may come to light with further study. The writer would appreciate knowing of any not included in the above listing.

