ONE HUNDRED YEARS OF EARTH SCIENCE AT MILWAUKEE–DOWNER COLLEGE

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In March, 1951, Milwaukee–Downer College celebrated the one-hundredth anniversary of the granting of the charter which gives it the right to operate as an institution of higher learning and to grant degrees. A month later, the Wisconsin Academy of Sciences, Arts and Letters met on the campus, and it seemed to be an appropriate time to take stock of the role science has played at the college in that time. To cover the role of all the sciences over a period of a hundred years, however, seemed too broad a subject for a limited paper, and so the author has confined her investigation to her own fields of Geology and Geography.

This bit of research was really started in order to answer a questionnaire from the Association of Geology Teachers, which asked—among other things—when geology was first taught at the college. As the files in the Museum did not reveal this information, the old catalogues of both Milwaukee Female College and Wisconsin Female College were investigated. Surprisingly enough, both colleges list geology in their earliest catalogues, and the teaching of it has been almost continuous throughout the century. It must be admitted that at times this continuity was maintained through close affiliation with a preparatory department, which is no longer a part of the college. But if we acknowledge that early relationship between the college and the seminary, Milwaukee–Downer can trace the history of the teaching of the earth sciences back more than a hundred years.

The very first announcement of the new school that was to open in the young city of Milwaukee, Wisconsin, on September 14, 1848—Milwaukee Female Seminary—lists Geology among the Middle Class studies. Geography was considered a preparatory study.

Three years later, under the influence of Catherine Beecher, the Seminary was expanded and the advanced classes were known as the Normal Institute, and a little later as Milwaukee Female College. The college course was divided into three Departments, each with a principal teacher. These were:
1. Mathematics and Natural Science.
2. Geography, History and Mental Science.
3. Language, Belles Lettres and Composition.

Geography was taught in all classes, and was under the supervision of Mrs. Lucy Parsons, who had started the Seminary in 1848. Geology was taught by Mrs. Wilson, in the Department of Mathematics and Natural Science. It was commenced in the third term of the Middle Class, and continued in the Senior Class.

The course listings are the same for several years, although the teachers changed frequently. Additional interest in the earth sciences is evidenced in the catalogue for 1852–1853, which announced that a Cabinet of Natural History had been commenced. That marked the founding of the Museum. In order to add to this Cabinet, as well as to the Library, there was organized in November, 1855, the “Curious Society.” It was divided into sections, and the one interested in geology was called the “Rockites.” They learned about geology from Increase Lapham, engineer and early investigator of Wisconsin’s geology and archeology, who was the first president of the Board of Trustees of Milwaukee Female College.

In 1863, S. S. Sherman became principal of the college, and he took over the lectures on geology, which for many years continued to be taught in the second term of the third or junior year. Sherman put his own cabinet of minerals, fossils and shells at the disposal of the class, and ordered Hall’s Great Geological Charts and Guyot’s Mineral Charts. Dr. Lapham’s cabinet was also available to the class, and continued to be so after Mr. Sherman left the college, apparently taking his cabinet with him.

The catalogue of 1872–1873 states that a valuable cabinet of Natural History was added that year. The next year Miss Harriet E. Ohlen was teaching physical geography and geology, and a half year of each was required. That is the year when Mrs. Thomas A. Greene was first listed as a trustee. Her husband’s geological collection was a valuable addition to the college much later.

From 1874 on, physical geography was taught only in the Seminary. The College continued to teach geology in the junior year. The text listed in the 1874–1875 catalogue is Dana’s Manual. This book, in its Fifteenth Edition, Revised, was being used as the text in Mineralogy in 1951, Milwaukee–Downer’s centennial year. The same catalogue notes two important occurrences: the transfer of the Museum of Natural History to a

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special room; and the introduction by President Farrar of a course for women patrons. A year later this became the Ladies' Art and Science Class, which not only attended series of lectures at the college, but which donated many valuable books to the Library, and bought some of the early specimens, casts and models for the Museum. Mrs. Greene was a member of this class.

The catalogues of these years note additions of ores to the mineral collection. Field excursions, in connection with the science course, are mentioned.

William S. Barnard, Ph.D., held the position of Professor of Natural History in 1877–1878. At this time, five cabinets were purchased from Professor Henry A. Ward of New York, for instruction in Lithology, Mineralogy, Geology, Osteology and Zoology.

Beginning in 1880, geology was no longer required of all students, but was considered an elective.

A drawing of the Natural History Room, in the catalogue of 1885–1886, is surprisingly similar to the ground-floor exhibit room of the Museum today. The cases are the same, and some of the specimens can be recognized. The resemblance is even more striking in the photograph in the 1891 catalogue. These catalogues state that there are optical lanterns for use in Geography, History, Geology and Art lectures. The number of views for the lanterns increased from 5,000 in 1886 to 10,000 the following year.

Meanwhile, another college had been established at Fox Lake, in 1855. This was known for many years as Wisconsin Female College, but in 1889 the name was changed to Downer College, out of gratitude to its benefactor, Judge Jason Downer. (It is interesting to note that his wife was a member of the Ladies’ Art and Science Class of Milwaukee College.) Downer’s offerings and requirements in regard to the earth sciences were similar to those of Milwaukee College. Geography was taught in the Junior or High School Division, and geology in the College or Senior Division. Geology, known as Science 4, was taught in the first semester of the senior year. There were four recitations a week. Downer’s science club was called the Agassiz Society.

Miss Ellen Sabin, as president of Downer College, had been so successful that the trustees of Milwaukee College approached her with an offer. In 1895, the two colleges were combined. The Downer faculty, students and equipment were moved to the Milwaukee campus, and the institution became Milwaukee–Downer College. President Sabin, herself, was interested in the teaching of geography, and her large globe of the world is now housed in
the Greene Memorial Museum. Sabin Science Hall is named in her honor.

At Milwaukee–Downer College, geology continued as an offering in the first semester of the senior year. It was required in the science course, and was an elective in the other courses. The Agassiz Club continued for several years. The catalogue of 1896–1897 stresses the importance that laboratory work and field trips played in all the science classes. Trips to the Public Museum as well as to the college museum are mentioned.

The college was moved to its present location in 1899. The science classrooms and the museum were located on the third floor of Merrill Hall. From 1900 to 1912, the catalogues continue to describe the museum and its collections of minerals and fossils, but apparently geology was not taught in the college during those years. Until 1911, however, the year in which the Seminary and the College were separated, the high-school courses were described in the college catalogue, and physical geography was taught continuously there. It included a bit of physiography, meteorology, mineralogy, astronomy and visits to the Public Museum and to the Weather Bureau. In the later years of this period, a study of the geology of Wisconsin formed a unit of this inclusive course in earth science.

The years 1912–1913 mark the beginning of a new era for earth science at Milwaukee–Downer. Thomas A. Greene, whose wife had been one of Milwaukee College’s first women trustees, and whose daughter, son and grandson have served as trustees of Milwaukee–Downer, had accumulated one of the finest collections of minerals and fossils in the middle west. Following his death, the collection awaited disposal for several years. Then, in 1912, his daughter, Mrs. Horace A. J. Upham and his son, Colonel Howard Greene, gave the collection to Milwaukee–Downer College. Mrs. Upham also gave $10,000 toward building a museum to house the collection. The Greene Memorial Museum was completed in 1913, and dedicated that year, with Rollin D. Salisbury as the principal speaker on the occasion. While the Greene Collection occupied the main or upstairs floor of the new building, the other specimens and cabinets of the college were placed in a large room on the ground floor. A classroom was provided for the new Department of Geology.

The story of the Museum and its additional collections is another one from this brief history of the teaching of the earth sciences at the college. The history of the departments of Geology and Geography since 1913 is much more complete than the earlier development. This paper can only skim briefly over the
years in which these departments have been staffed by Margaret Louise Campbell, Olive J. Thomas, Carol Y. Mason, Esther Aberdeen, Elmer R. Nelson and Katherine F. Greacen, now Mrs. Frank H. Nelson. Under their direction the courses offered in both geology and geography have been enlarged and multiplied, and the exhibits in the Museum have been made available to many. Neither geology nor geography is a required course today, but a good number of students continue to elect both. There are not a great many girls who major in either at any college, but the equipment and instruction are available at Milwaukee–Downer for those who choose the earth sciences as their field.

BIBLIOGRAPHY


3. Catalogues of:
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