



Samuel Calvin (*Iowa*)

Robert D. Libra (*Iowa Geological Survey*)

Samuel Calvin was born in Wigtonshire, Scotland, on February 2, 1840. He and his parents came to America when he was 11 years old. For 3 years the family lived on a farm near Saratoga, N.Y., before relocating to a farm in Buchanan County in eastern Iowa. While little is recorded from his youth, his devotion to knowledge and teaching showed itself early; at the age of 16 he was hired to teach in a one-room schoolhouse near the town of Quasqueton.

He received his college education at Lenox College, in Hopkinton, Iowa, and later received an M.A. from Cornell College in Mount Vernon, Iowa, and a Ph.D. from Lenox.

When he was 24 years old he enlisted in the army and served for a few months in the Civil War. After returning from the war, he held a teacher of science position at Lenox College for 4 years. While there, he met and married Mary Louise Jackson, the daughter of one of the college's founders. They had two children, Alice and John William.

In 1869, Calvin resigned from Lenox to become principal of a school in Dubuque, Iowa, where he taught science and gave public lectures in geology. In 1874, he was elected to a professorship of natural science in the University of Iowa in Iowa City. Here, at first, he had charge of botany, zoology, geology, and physiology. Later, he was made professor of geology, a position he filled with distinction until his death in 1911. While at the university, Calvin gained a national reputation as a scientist and writer. His main focus was invertebrate paleontology, and in the course of his work he named some 30 species of fossils and had 11 species named for him. He also discovered the fossil remains of fish in the nearby Devonian strata, and a remarkable interglacial fauna containing horse, mastodon, camel, giant stag, and giant ground sloth remains.

In 1892, Dr. Calvin was elected state geologist of Iowa, and held that position, with a 2-year hiatus, until his death. The Iowa Geological Survey

under his directorship published about 20 volumes of reports dealing with the geology and mineral resources of the state, covering all but nine Iowa counties by 1909. The findings of his Survey were published in the annual reports, and the quality of the Survey enabled important industrial development in the state. Although Calvin understood the utilitarian application of his work, and heartily cooperated in its material application, his sensitivity to the cultural value of his science was never subordinated. He gladly joined his skill and wisdom to the rising crusade calling for conservation and was invited to, and attended, Theodore Roosevelt's conservation conference at the White House in 1908.

Calvin contributed over 70 scientific articles that were published in Iowa Geological Survey annual reports, the *Bulletin from the Laboratories of Natural History from the State University of Iowa*, *American Journal of Science*, *Journal of Geology*, and many others. Calvin was one of the founders of the Baconian Club, formed for the mutual interchange of thought and the discussion of scientific topics. He was also an active member of the Geological Society of America (of which he became president in 1908), the Paleontological Society of America, the American Association for the Advancement of Science, the National Geographic Society, the Iowa Academy of Sciences, and the Davenport Academy of Sciences. He was one of the founders and editors of *The American Geologist*.

Samuel Calvin's legacy of accomplishments has influenced generations of Iowa geologists. Even today, he is regarded as Iowa's premier geologist among the many scientists to have worked in the state. Calvin was recognized by the Iowa Academy of Sciences (1911) for having given shape, proportion, and character to the work of the Iowa Geological Survey and for having effectively combined its scientific and economic aspects. His colleagues found in his example of service to the state, to education, and to science "the purest inspiration for future effort and devotion." Dr. Calvin died in the early morning of April 17, 1911. The university suspended classes the day of his funeral service. He is buried in Oakland Cemetery in Iowa City, about a mile from the center of the university and the Iowa Geological Survey offices, where his influence and philosophy are a continuing presence.

Biography adapted from Kay (1911), Thornton (1947), and Witzke (1992).