



John Rodgers

1914–2004

BIOGRAPHICAL

Memoirs

*A Biographical Memoir by
John F. Dewey*

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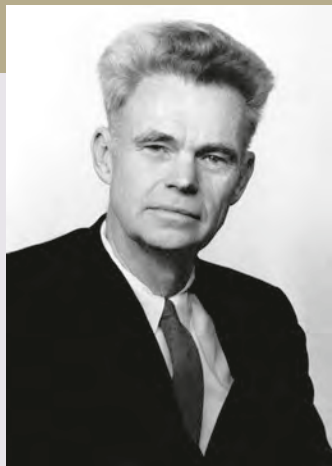
JOHN RODGERS

July 11, 1914–March 7, 2004

Elected to the NAS, 1969

John Rodgers, Silliman Professor of Geology Emeritus at Yale University, was a master of Appalachian geology with an encyclopedic knowledge of global geology, most of which he had seen first-hand in the field. He was a fine pianist, a gifted linguist, and fun to be with in the field or over a glass of beer discussing almost any geologic topic. He believed that geology is best done in the field, argued about on the outcrop, and that little can be done without a geologic map. He was a thoughtful and considerate friend to many geologists worldwide and was a man of impeccable manners, taste, and honesty who was loved and admired by his students, colleagues, and friends.

John's geological and scholarly prowess was recognized by way of numerous honors, awards, and medals he received, including membership in the NAS (elected in 1969), the Connecticut Academy of Arts and Sciences, the American Academy of Arts and Sciences, the Geological Society of America (which he served as its president and which awarded him its Penrose Medal in 1981), the Geological Society of London (Foreign Fellow 1970), the Geological Society of France (Prix Gaudry, 1987), the Belgian Academy (Fourmarier Medal, 1987), the Russian Academy of Sciences (Foreign Member), the College de France (1957), Kappa Phi, Sigma Xi, and Phi Beta Kappa. He published 68 geological articles and papers, 6 non-geological articles, and 7 biographical memoirs. After a happy, rich, and unstinting life in the service of geology, he died on March 7, 2004, at the age of 89.



John Rodgers

By John F. Dewey

John was born in Albany, New York, on July 11 1914, the third of four children, to Henry and Louise (Allen) Rodgers. He had an idyllic childhood in a loving family, surrounded and immersed in books and music and on family vacations in their holiday home on Eagle Lake in the Adirondacks. He attended Albany Academy, then and now one of the finest college preparatory schools in America, and was a scholarly, bookish boy, excelling intellectually with little interest in sports. His early interest in the geography of

the world was evident in his poring for hours over atlases in the Rodgers household, and he came to love maps of all kinds. His secondary education was strongly in the classical tradition of mathematics, Ancient Greek, and Latin, along with history, English, geography, and modern languages. Ironically, however, it was weak in the sciences. Despite this drawback John graduated Head of Class from Albany Academy with a firm determination to study geology in college.

That determination was the result of the fortuitous location of the Rodgers house and Albany Academy. Both were close to the New York State Museum, where John became a regular teenage visitor studying the public exhibits. Dr. Christopher Hartnagel, the assistant state geologist, took him under his wing and gave him weekly lessons in geology. In particular, he sent John out into the museum's public spaces to learn how to make accurate drawings from the fossils on display. They also took field trips into some of the local geology of New York State in the Helderbergs, the Mohawk Valley, and the Taconics.

While in his tenth-grade year, John was given the task of constructing a detailed stratigraphy based on drill chippings from the Corfu well in western New York. Succeeding at this challenge, John was later assigned other wells in western New York, from which he made a structure contour map of the top of the Medina Sandstone, which was being explored for natural gas, and learned to draw cross-sections. New York State Geologist Dr. David Newland also took John on field trips to the Adirondacks, gave him geologic books and papers to read, and introduced him to Winifred Goldring and Rudolf Ruedemann, assistant and state paleontologists, who were known for their research on crinoids and graptolites, respectively. Thus, by the time that John was ready for college, he already knew a very great deal of geology. Given his advanced knowledge and breadth of interests, he decided that his student days would have to be at an Ivy League university, and he narrowed his choices down to two.

Would it be Cornell or Yale? Apparently for no special reason, John listed Cornell first, which turned out to be a good choice. Yale was known for its somewhat boisterous undergraduate fraternity-centered life in which sports were very important. This kind of student lifestyle was less prevalent at Cornell, where John quickly entered the geologic, humanities, linguistic, and musical life of the university. Professor of Structural Geology Nevin was John's special mentor. In his sophomore year John began mapping the southern Champlain Valley, a project that would form the basis of his master's degree work.



Rodgers, late career.

John was a student in the years of the Great Depression, so money was tight. Throughout his life, however, money was only important to him for allowing him the freedom to travel and study geology. These were also the years of vehement objection in American geological circles—including at Cornell—to the novel ideas of continental drift espoused by Alfred Wegener and Alexander Du Toit, but John was taught, at Cornell, to keep an open mind. From this, he learned to ignore such intellectual tempests and simply get on with his work.

While at Cornell he attended a course of lectures by Lawrence Bragg on structural mineralogy. He also attended his first Geological Society of America meeting in Rochester, New York, and published his first two papers. In Rochester he was thrilled to be introduced to Charles Schuchert and, briefly, to hold Schuchert's Penrose Medal.

John graduated from Cornell with a B.A. in 1936 and an M.S. a year

later. By now he was a knowledgeable geologist and a man with a deep thirst for further learning about mountain chains and an ambitious desire to make his mark.

In 1938 John performed superbly on the Federal Civil Service Examination, won appointment to a summer mapping position with the U.S. Geological Survey in California, and enrolled as a Ph.D. student at Yale. He bought a car and spent three days driving, almost non-stop, to California with a friend. Unfortunately, that year a dispute between President Roosevelt and Congress over his attempt to increase the number of Supreme Court justices from nine to fifteen caused a holdup in passage of the Appropriations Bill, and no money was approved for USGS summer positions. Unfazed, John drove back to New Haven and spent two years at Yale studying with Dunbar, Knopf, and Longwell and beginning a study of the stratigraphy and structure of eastern Tennessee.

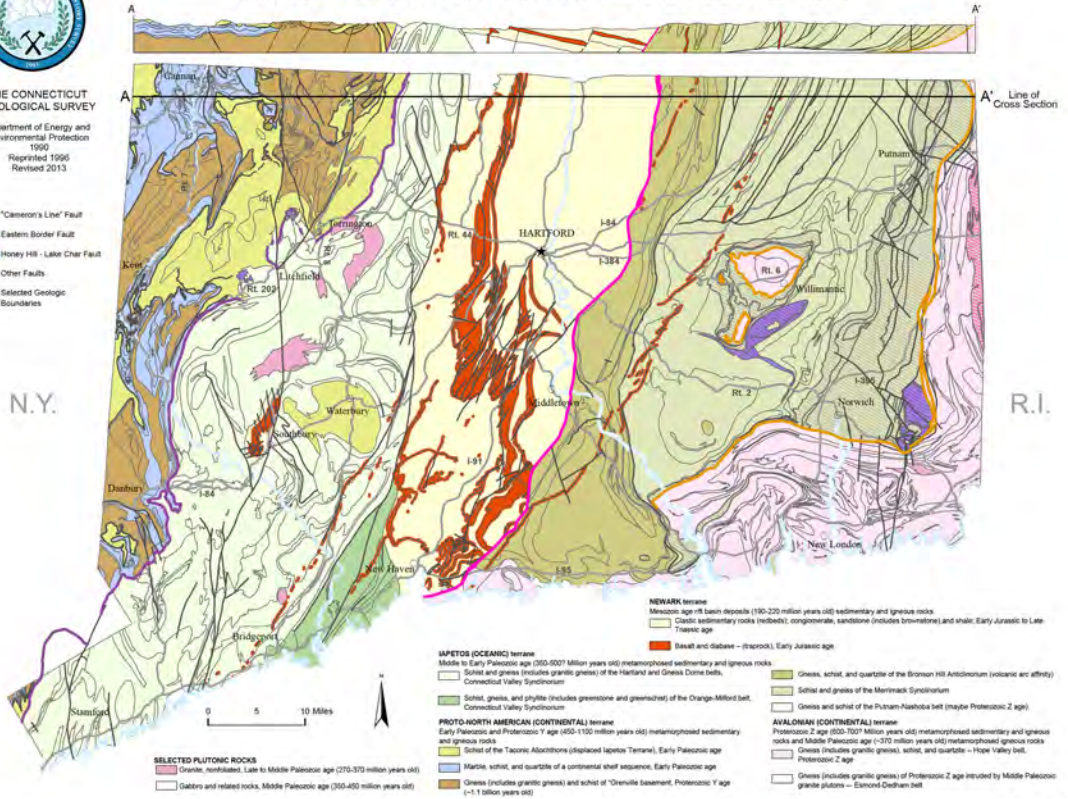
By 1940 John felt a need to be out in the field doing practical geology, so he took a full-time position with the USGS. From 1940 to 1944 he continued to map in eastern Tennessee and prepared a report on its geology, with special reference to strategic mineral deposits, mainly manganese and zinc. This work formed the basis of his doctoral dissertation. With his Ph.D. in his pocket in 1944, he was appointed to the USGS Branch of Military Geology and spent two years in the Pacific theater of war studying beachhead landing sites. In 1946 he returned home and joined the faculty at Yale, his home for the rest of his life. During the 1950s John was back working in the Champlain Valley and



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Environmental Protection
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- *Cameron's Line* Fault
- Eastern Border Fault
- Honey Hill - Lake Char Fault
- Other Faults
- Selected Geologic Boundaries

GENERALIZED BEDROCK GEOLOGIC MAP OF CONNECTICUT



Rodgers' Generalized Bedrock Geologic Map of Connecticut.
(Courtesy Connecticut Geological Survey, Connecticut
Department of Energy and Environmental Protection.)

beginning to develop a deep knowledge and understanding of the whole Appalachian Mountain belt, work that culminated in his *Tectonics of the Appalachians*, published in 1970. Much of his research throughout his life at Yale was on the geology of Connecticut and the Geological Map of Connecticut, which was published in 1984.

In the later 1950s and the 1960's John came to know and work with a new generation of Appalachian geologists, especially E-an Zen and Jack Bird, who were working on "the Taconic problem" in Vermont and New York, respectively. John greatly admired their intellects and open-minded enthusiasm and their brilliantly detailed mapping, through which they solved the "Taconic Problem." They showed that the rocks of the Taconic Ranges are the allochthonous, off-shelf clastic equivalent of the Cambro-Ordovician shelf-facies strata upon which they were thrust in the mid-Ordovician Period, as Lucien Platt showed for the Hamburg Klippe in Pennsylvania. John embraced the concept enthusiastically and discovered, with Warde Neale, the equivalent Ordovician nappe in western Newfoundland. He produced a major Taconic synthesis as the theme of his Geologic Society of America presidential address in 1970.

John had many graduate students at Yale of whom he was very proud, but he constantly talked about three. Clark Burchfiel made great inroads in mapping and understanding Laramide structure in Nevada; Ed Hansen did innovative work on rock strain in Norway; and Dick Armstrong discovered extensional detachments and core complexes in the Great Basin.

Apart from his military geology work in the western Pacific, John began his foreign geological travels in 1948 by attending the International Geological Congress (IGC) in London. He participated in an IGS field excursion to the northwest highlands of Scotland and to south Wales. There he met many of the distinguished geologists of the time, such as O. T. Jones, W. J. Pugh, and L. U. De Sitter, and became lifelong friends with many young geologists, especially Alwyn Williams and David Evans.

From 1948 on he attended every IGC and participated in all of its field excursions through 1992. He became a continual world geo-traveler to conferences, field trips, and other opportunities to learn from and share experiences with geologists in every continent. His closest foreign friends were Paul Fallot, Bernard Geze, Olaf Holtedahl, Rudolf Trumphy, Livio Trevisan, and Alexsandr Peyve. He probably saw, learned, and understood more world geology and had more friends than any geologist in history, yet his output was only the 68 papers and 2 books. Like another great geologist, Robert Shackleton, he published only when he felt that he had something important and interesting to communicate. When he did write, he wrote concisely and elegantly.

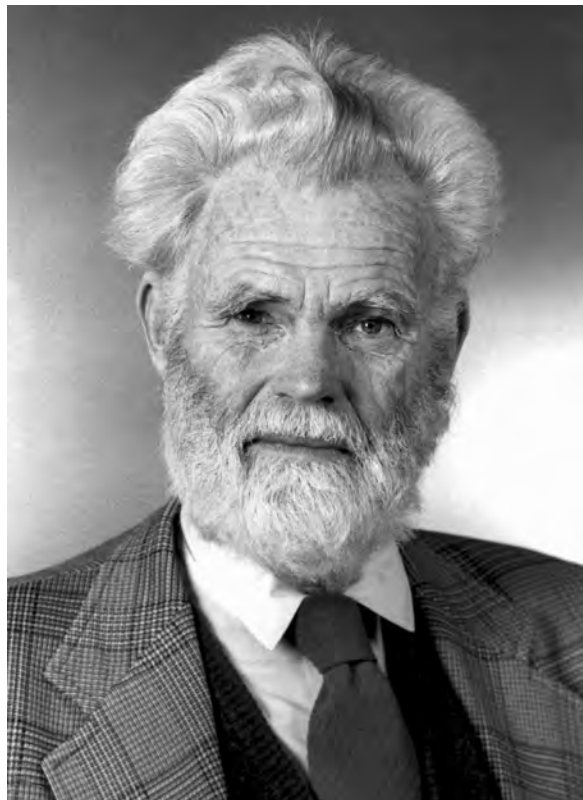
I first met John in the summer of 1964 when I was part of a team mapping on the Arisaig Silurian section in Nova Scotia. We hit it off immediately and were good friends until his death 40 years later. He stayed with me in Albany and Oxford and took sabbat-

icals with me in Cambridge and Durham. We spent many happy hours in the field together in Newfoundland, New England, Ireland, Scotland, and the Alps. John's main advice to the young was to travel the globe to see as much geology as possible, ignore the fashionable, refuse to work in large groups run by senior people, and do the research that one wanted to do. He did as he preached.

I mention my close personal relationship with John because I owe him an enormous debt of gratitude. It was John and his sterling character that introduced me to an America that I have grown to cherish—namely its old-fashioned and deeply civilized high intellectual standards, hard work, genuine delight in and admiration of success, and love of and kindness to family, friends, and colleagues.

Yet John was no puritan; he was a raconteur of great skill with a sharp wit. His tales of Marland P. Billings in the field in Tennessee and New Hampshire were legion. He had a good line in side-splitting, racy, off-color stories and jokes. He was riled only by pomposity and dishonesty. He disliked and avoided running things and being responsible for operations, preferring to concentrate on research and teaching.

John's thirst for knowledge and understanding in geology, music, literature, and languages was profound and intense. He experienced the continuum from the gracious pre-war days of Chamberlain and Schuchert, through the swashbuckling days of Jim Gilluly and Phil King, to the modern world of geology—in all of which he was completely at ease. His influence on his students, colleagues, and friends was powerful. He was a great American who simply loved people and geology.



Rodgers, circa 1980.

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