In many ways, Charles R. Van Hise was an embodiment of "The Wisconsin Idea," a concept that he and others of the Progressive Era made a model for the country.

From humble roots in rural Rock County, he went on to become a scholar, geologist, researcher and university professor. He was also a pioneering conservationist and wrote a seminal work on the subject. "The Conservation of Natural Resources in the United States," published in 1910, remains on the list of the most important conservation books in history. Said to be the first textbook on conservation, it is studied and saluted to this day. It tackled conservation from every angle Van Hise could conceive of. Among its predictions: Global warming caused by the burning of fossil fuels.

"The Wisconsin Idea" held that the state's institutions should be of service to the largest number of people possible, and that access to halls of higher education should be made available to those who sought it. As president of the University of Wisconsin-Madison, Van Hise helped to shape that concept.

He certainly understood the value of education. His parents, Midwest pioneers William Henry and Mary Van Hise, were determined that their children should have as good an education as possible. Charles was born in Fulton, rural Rock County. His parents lived in a log home and farmed for the first several years of his life. They later moved to Milton, after his father had been injured by a runaway horse, ending the family's farming endeavors. In Milton, William Henry Van Hise operated a general store. Later the family would move again, to Evansville, to operate a general store there.

Charles Van Hise's boyhood recollections focus heavily on school, including his years at the Evansville Academy. He would go on to earn his degrees in geology at the university in Madison and serve on that institution's faculty before becoming president.

Van Hise wasn't all about books and lecture halls, either. As a geologist with the Wisconsin Geological Survey and the U.S. Geological Survey in the 1880s and 1890s, he did extensive field study, especially in the regions that held the ore-bearing deposits of the Upper Great Lakes. He formulated theories about geologic history, catalogued and analyzed specimens and filed reports that became part of the growing body of knowledge about the Earth and its elements. Van Hise was considered to be an expert on pre-Cambrian formations and a pioneer in metamorphic and structural geology. Biographer Maurice Vance, who wrote "Charles Richard Van Hise, Scientist Progressive" for The

State Historical Society of Wisconsin, evaluates his scientific contributions as "less the result of creative genius than an unusual combination of intelligence, energy and organizational ability." These traits would serve him well as he became UW-Madison president in 1903. He served until the year of his death, 1918.

Van Hise was a product of the Progressive Era, a political movement that produced the likes of Robert M. "Fight Bob: La Follette, a classmate at UW-Madison, and other stellar figures who believed it was possible and necessary to use government to bring about reform, sometimes radical. They targeted lumber, railroad and oil barons and a chummy political system that empowered the barons. Progressive reforms stretched from industry and commerce to government itself. Wisconsin historical researcher Dan Nerhaugen wrote this about Van Hise's contributions to the Wisconsin Idea as it relates to education: "Van Hise helped make Wisconsin Idea a reality...The Wisconsin Idea is often summarized, 'The boundaries of the campus extend to the boundaries of the state.' Put another way, the Wisconsin Idea advocates applying the University's best and brightest minds to the tasks of finding ways to improve the lives of ordinary people.

"Instrumental in bringing the Idea to life was Van Hise's persuasion of the legislature to fund the University of Wisconsin-Extension, an adjunct to the university as most people understand it, devoted to both academic and vocational adult education. From 1907 to 1914, funding for the Extension increased by a factor of more than 11. The Extension's current website characterizes it as a 'gateway to the University' and 'the people's University connection.' According to the site, 'Each year, more than one million Wisconsin residents participate in extension programs.' "

The Progressives of Van Hise's era also embraced the belief that resources should be used in accord with society's ability to guarantee their availability for future generations. It was a response to the rapacious consumption of resources in a country that believed the supply to be inexhaustible. Van Hise expressed it this way in his book: "Conservation means the greatest good to the greatest number for the longest time." Simple though the concept seems, it was novel and not altogether welcome in his time. Of his storied book on conservation, Van Hise wrote: "It is my hope that this book may serve a useful purpose in forwarding the great movement for conservation which, as it

seems to me from the point of view of the not distant future of the human race, is more important than all other movements now before the people."

The impact of his work can't be understated. Professor Bill Palmer at Northern Territory University, Darwin, Australia, recently summed up Van Hise's contribution this way: "This work was the most respected, influential and often-cited general survey of conservation issues published in this era....The Introduction sketches the background and scope of the conservation movement, defining it – in accordance with the prevalent usage of the word 'conservation' at this time – exclusively in utilitarian terms. Subsequent chapters present a thorough survey of the history and present state of different categories of natural resources (minerals, water, land, soil), analyses of wasteful practices in their current management, and detailed discussion of the range of pragmatic and legislative conservation efforts possible and desirable for each."

Another source, a UW-Madison biographical sketch, notes "His book on conservation, a pioneer effort, made students think. It was brought home to them that conservation was not a simple subject dealing with a single resource, but with many closely related ones. There was no undue optimism on the rapid spread of the movement. Well he knew that only the minority would grasp the full significance of the problem and that inherently there was tremendous difficulty in impressing the masses. It was a distant hope requiring many years of education and the efforts of many."

The book's impact was also noted in "The Evolution of the Conservation Movement, 1850-1920," produced by the U.S. Library of Congress: "This book documents the waste of natural resources, lays the blame on individualism, and calls for responsibility – living in a way that does not diminish the quality of life for unborn generations. Notably, this book sounds the alarm on excessive carbon dioxide emissions, and predicts global warming."

David Brower, often referred to the dean of American environmentalism until his death in 2000, knew well of Van Hise's contributions. Brower delivered a University of California Center for Forestry Horace M. Albright Conservation Lecture in 1981. His topic: Van Hise and his conservation message.

Brower noted that Van Hise "realized that 'we cannot hope that we shall be able to reverse the great law that energy is run down in transformation, or that we can reuse

indefinitely the resources of nature without loss.' " Van Hise, Brower added, "wondered what changes in social structure would result 'when people begin to feel pinched by meager soil and the lack of coal.' " Brower's lecture took note of another statement by Van Hise: "In a few thousand years man has risen from the level of the savage to the height of the great creations of science, literature, and art...It is in order that if humanity itself may be given an opportunity to develop through millions of years to come under the most advantageous conditions that we should conserve our natural resources, and thus make possible to billions of future human beings a godlike destiny.' "

Brower continued his analysis: "(Van Hise) foresaw, for example, that the burning of coal could cause trouble, and cited a physicist who had identified the greenhouse effect by 1896 and had predicted that if the carbon dioxide in the atmosphere increased by 2.5 to 3 times its 1896 value the temperature in the arctic regions must rise 8 to 9 degrees Centigrade and produce a climate as mild as that of the Eocene period (abundant vegetation existed in Greenland then). Van Hise suggested that 'the coal consumption may become so rapid as to accomplish this in 1000 years or less.' "

Ruefully, Brower added: "How quickly have we reduced that thousand to 200 or less!"

Van Hise's approach to conservation, as noted, was a practical one. His take on forestry: "Conservation does not demand that no tree shall be cut but that whenever a tree is cut, measures shall be in force which will produce another tree."

What of his book's lasting impact? In addition to being considered a conservation classic, a search of the Web shows that Van Hise's "Conservation" is still being used as a college-level textbook and is often cited by those reviewing the history of the conservation movement.

In another work, "The Future of Man in America," Van Hise explored interrelated conservation topics. He wrote: "There's a strongly developed opinion at the present time that the owners of great wealth, and especially those who control great natural resources, should act as trustees for the nation. This is easy to see; but every man who owns a farm is equally a trustee to the nation for his small property. If at the end of his life the farm goes to his son depleted in richness, he is as truly faithless to his trust as are the great interests, some of which think only of present gain, and wastefully exploit the natural

resources of the country. Each in proportion to his own responsibility is a traitor to the nation.

"I do not hesitate to assert that, from the point of view of our descendants, this question of conservation of our natural resources is more important than any political or social question, indeed, more important than all political or social questions upon the solution of which we are now engaged. Not only is it more important, but it is more pressing, for already our unnecessary losses are irremediable, and the situation is growing steadily worse."

Decades before the Dust Bowl Era, Van Hise had put his finger on the problem: "It is necessary that a great campaign of education be inaugurated at once with reference to the conservation of the soil, just as there has been a campaign of education with reference to the conservation of the forests. The task is an enormous one, indeed vastly greater than that carried on with reference to our other resources, because of the fact that the land holdings are so subdivided; but the campaign of education must be carried on, and, as a part of it, the laws must be developed, until we reach the situation where no man dares so to handle his land as to decrease its fertility. If present methods are allowed to continue, it is certain that in the not distant future this country will be able to support only a relatively sparse population. Only by the conservation of our soil, undiminished in its fertility, can we hope to be able to provide for the hundreds of millions of people who, in the near future in the United States, will be demanding food and clothing. The conservation of the soil is the conservation of the basal asset of the nation."

He added: "Similarly, the campaign of education in reference to the forests must be continued, and that with reference to the coal and mineral resources inaugurated; for only second in importance to the conservation of the soil is the economic mining and use of coal, the conservation of the forests, and the use of metals with the minimum waste."

He advocated government regulation on the consumption of mineral resources, arguing that "Many products required millions of years to form and but few to exhaust, Has any individual, or group of individuals, the right to exploit the resources as they see fit? No, these products must be held in trust for the people."

Van Hise's name adorns buildings and natural sites (Ableman's Gorge, Sauk County." He was named one of Wisconsin's top 10 historical figures in a Milwaukee

Journal-Sentinel poll of independent experts in 2000. Recognized as a scholar, scientist, university administrator and one of the nation's first great conservationists, Van Hise surely made good on the promise that would later come to define "The Wisconsin Idea."

Charles R. Van Hise
1857-1918

BIRTH:	May 29, 1857, Fulton, Wisconsin
DEATH:	1918, Madison, Wisconsin
EDUCATION:	High school and seminar, Evansville, Wisconsin. Bachelor's Degree, UW-Madison, 1880. Master's Degree, UW-Madison, 1882. Ph.D., UW-Madison, 1892, Metallurgical Engineering Course.

BIOGRAPHICAL HISTORY

EMPLOYMENT

School teacher, Evansville, Wisconsin, 1876-77.

Member of the faculty at UW-Madison 22 years. Instructor in chemistry and metallurgy 1879-1883; assistant professor of metallurgy, 1886-1888; professor of mineralogy and petrography, 1888-1892; professor of Archaean and applied geology, 1890-1892, and professor of geology, 1892-1901. Non-resident professor of structural geology in the University of Chicago.

President, UW-Madison, 1903-18.

Assistant, Wisconsin Geological Survey, 1881-1882.
Assistant, US Geologist, Lake Superior Division, US Geological Survey, 1883-1888.
Chief of Lake Superior Division US Geological Survey since 1888-?.

AUTHOR

"The Conservation of Natural Resources in the United States," 1910.

"Conservation and Regulation in the United States During the World War."

"The Future of Man in America."

Wrote numerous papers and research papers on geology and related topics.

AFFILIATIONS

Fellow of the American Association for the Advancement of Science.
Fellow, Geological Society of America.
Member of the Philosophical Society of Washington, D. C.
Member, National Geographic Society.