

**MEMORIAL RESOLUTION OF THE FACULTY
OF THE UNIVERSITY OF WISCONSIN-MADISON**

ON THE DEATH OF PROFESSOR EMERITUS JAMES C. KNOX

James C. Knox, Evjue-Bascom professor emeritus of geography, died at his home in Madison on October 6, 2012, at the age of 70. During his 43 years as a faculty member at the UW-Madison, Jim Knox was a pioneer in research on the response of streams to climate change and human activity. To tens of thousands of UW students, Jim was a much-loved teacher who could explain not only how streams and soils work, but also why we should care about them. His colleagues knew him as a model citizen of his department, university, and profession, always willing to dedicate his time, good nature, and common sense to work for the greater good. Jim Knox is survived by his wife Kathy and his daughters Sara and Lezlie, all dedicated educators like Jim himself.

Jim Knox was born in Platteville, Wisconsin, on November 29, 1941, and grew up on his family's farm in Grant County. Jim often returned to the hills and valleys of Wisconsin's Driftless Area, a landscape he sometimes called his "laboratory," where his best-known research was carried out. At a gathering in 2011 to commemorate Jim's career, stories from former graduate students often turned to descriptions of Jim enthusiastically surveying stream channels in the Driftless Area in cold, wet weather or fading light. In recent decades, Jim often helped his brother with work on the family farm, once noting that he had gone from putting up hay one afternoon to sitting on a National Science Foundation advisory panel in Washington the next day. Jim's early experience made him a firm believer in the Wisconsin Idea and in the value of research and teaching at the University of Wisconsin to the people of the state.

Jim earned a bachelor's degree from the UW-Platteville in 1963 and a PhD from the University of Iowa in 1970. He came home to Wisconsin to take a faculty position in geography at UW-Madison in 1968, and although he retired in 2011, he continued to work in Science Hall until a few days before his death. In 1997, he was honored with the title of Evjue-Bascom Professor-At Large, recognizing his research, teaching, and service to the university.

Jim's best-known research was on the sometimes dramatic changes in the magnitude and frequency of floods and the behavior of streams in general when they are affected by even small changes in climate or by land-use changes such as the conversion of natural vegetation to farmland in nineteenth-century Wisconsin. His widely cited 1993 paper in the journal *Nature* demonstrated that over the past several thousand years, even modest changes in climate caused large changes in the frequency of large floods along Driftless Area streams. To detect the effects of land use change, Knox used metal contamination from nineteenth-century lead and zinc mining as a tracer, which allowed him to show that the rates of soil erosion and sedimentation on floodplains increased dramatically as forest or prairie was turned into farmland.

This research used Driftless Area streams as case studies, but it is recognized internationally as a model for work on these topics. In many respects, Jim's research transformed the field of fluvial geomorphology (the study of streams and the landforms they produce), opening up new avenues for linking this field to broader environmental issues which are still being actively explored in many parts of the world. Jim was also deeply interested in the great changes in climate and environment experienced by the Earth during the Quaternary Period, the most recent part of geologic time, when glaciers repeatedly advanced into Wisconsin. His research was supported by numerous grants from the National Science Foundation and was recognized by the Association of American Geographers through its Lifetime Achievement Award (2012), Presidential Achievement Award (2007), M.G. Marcus Distinguished Career Award (2001), G.K. Gilbert Award for Excellence in Geomorphological Research (1996), and the Geological Society of America through its Don J. Easterbrook Distinguished Scientist Award (2006).

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Throughout his career at UW-Madison, Jim Knox taught large lecture courses in physical geography with enthusiasm and skill, often illustrating his lectures with examples from his research. His popular course on fluvial geomorphology was taken by students from a wide range of disciplines, and he also frequently taught a course on field methods in physical geography (which, not surprisingly, included trips to the Driftless Area to survey and sample study sites). He was also happy to explain his work to the public in other venues, including a featured role in a PBS program on floods in the Mississippi River basin. Knox served as an advisor for 30 students who earned PhDs at UW-Madison and also advised 55 MS students. To all of these students, not only was Jim a career-long source of advice and support, he also made sure to convey his philosophies of science and teaching and the need to be a good citizen of academia. Not surprisingly, his students have gone on to distinguished careers as university faculty members or as scientists in federal and state agencies.

Despite the time he spent on research and teaching, Jim Knox rarely if ever turned down requests for service to his department, university, or profession. He served as chair of the Department of Geography and of the Physical Sciences Divisional Executive Committee, and as a chair or member of innumerable departmental and university committees. Jim was a national councilor of the Association of American Geographers and the American Quaternary Association, chair of Section E (Geology and Geography) of the American Association for the Advancement of Science, and chair of the Quaternary Geology and Geomorphology Division of the Geological Society of America. He was a member of numerous panels and advisory boards of the National Science Foundation and an associate editor of several leading journals in geography and earth science.

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