

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

ON THE DEATH OF PROFESSOR EMERITUS REID BRYSON

Reid A. Bryson, professor emeritus of atmospheric science, passed away on June 11, 2008 in Madison at the age of 88.

Professor Bryson's University of Wisconsin career leaves a legacy from 62 years of pioneering achievements in academics, climate research, and interdisciplinary leadership. He founded the Department of Meteorology (now Atmospheric and Oceanic Sciences) in 1948, the Center for Climate Research in 1963, the Institute for Environmental Studies (now the Nelson Institute) on Earth Day (1970), and the endowed Climate, People, and Environment Program (1984). He was nationally known for broadening the developing field of climate science to include human-land- climate interactions. He was an influential teacher and mentor to several individuals who later distinguished themselves in academia.

Bryson's undergraduate interests in Geology and Archeology were interrupted by World War II, when he became part of a historical group of bright inductees who received meteorological training at the University of Chicago. He subsequently remained there to finish the PhD in 1946, when he came to our campus. His bold proposal to form the Meteorology Department was approved in 1948, and he was soon joined by Verner Suomi, his Chicago associate, who was another UW pioneer who later was considered the "Father of Weather Satellites." Their department remained small until 1962, when their research success and visions of a greatly expanded department and separate building (now the 16-story Atmospheric, Oceanic, and Space Sciences) were approved. Since then, the department has remained one of the strongest in the world.

From the beginning, Reid Bryson's research at Wisconsin became increasingly multi-disciplinary, often involving important collaborations with colleagues in other departments including geology, anthropology, geology, chemistry, physics, soil science, botany, history, and history of science. His first climate work produced a synthesis of the multivariate relationships between climate and vegetation. He then pioneered in describing how changes in climate could influence vegetation, food and water supply, and the course of cultures.

Reid Bryson was an individualist whose contributions were rooted in observations and woven into syntheses with broad implications. He believed that observations should drive theory, and his early years focused on field measurements ranging from the surface of Lake Mendota, to the Canadian tundra by air, and to wide-ranging interdisciplinary field studies in India and Peru. In mid-career, he developed historical data sets of climate and ecological variables, using tools ranging from instrumental records and phenological records, to the analysis of tree rings, pollen, soils, and cultural histories assessed from archeological studies, combined with accurate dating of events using radiocarbon analysis. He recognized stories to be shared in the data, and was a masterful integrator of knowledge which broadened the research scope of the Department of Meteorology. His meteorology students benefitted from his import of research into the classroom, and his early work on "March of the Seasons" introduced a dynamical framework for climatology based upon 'events' rather than conventional boundaries of months, decades, or millennia. His book "Climates of Hunger," a Book of the Month selection, illustrated his skills as an integrator of climate and human affairs. In later years, he expanded his approach of "quantitative paleoclimatology" to include physical-statistical models of temperature, winds, and rainfall relations to produce site-specific explanations of how climate had produced or influenced cultural changes – often with an emphasis on the role of abrupt events such as the role of volcanic

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eruptions in producing sudden, if relatively brief, climatic perturbations. This work brought to the fore the oft-ignored role of climate in cultural change, but debates about the relative importance of climate compared to other societal forces continue.

On the national level, Bryson's work was appreciated for its emphasis on the developing areas of interdisciplinary climate studies and the diverse impacts of climate change on societies. Nevertheless, his approach to research was that of a contrarian, always questioning the consensus views and skeptical of over-reliance on 'big science' as opposed to the insights of individuals. He was among the first to become convinced that humans had adversely affected regional climates by land misuse and to address this topic quantitatively. As a consequence, he conducted an active program of research in India in the 1960s, resulting in collaborations and assistance to younger Indian scientists. His work on impacts of climate was recognized internationally, for example by his designation as a UNEP Laureate.

Beginning in the late 1960s, Bryson extended his work on human impacts to the global scale. He rightly concluded that increasing industrial emissions of particulates could have a "dimming" effect on solar radiation. The earth was cooling in the mid-20th century, and this brought him considerable attention as a "global cooling" advocate, but more importantly, it helped establish academic and governmental programs aimed at reducing this cooling effect. Following these years, when it became apparent that the earth was definitely in a "global warming" phase, Bryson was more inclined to emphasize the importance of recognizing climate's strong natural variability, and the need to distinguish between natural warming and human-caused warming – and it is only in recent decades that international science panels have stated clearly that current global warming trends clearly exceed the warming that might be associated with natural variability.

On a personal level, Reid Bryson was an influential individual who believed in the "professing" element of being a professor. He cared about others, and believed in an "open door" policy within the department and university, enjoyed daily luncheons with faculty from throughout campus, and with his late wife Frannie created a "family" feeling for the entire department. There also was the private, creative Reid Bryson, who relieved the emotional pressures of his career by becoming an accomplished weaver and poet. He will be remembered by colleagues and former students as a "Renaissance Man" who created understanding and an institutional environment that has left lasting influence.

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