

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

ON THE DEATH OF PROFESSOR EMERITUS STANLEY IVAN DODSON

Stanley Dodson (1944 -2009) was a professor at the UW-Madison for his entire professional career of 39 years until his retirement. He was born in Illinois and grew up in Grand Junction, Colorado. It was in Colorado where Stanley developed his interests in nature, in general, and in aquatic biota and systems, in particular. He received a BA from Yale University in 1966 and a PhD from the University of Washington in Seattle in 1970, and joined the faculty in zoology at the University of Wisconsin-Madison in 1970. He became an associate professor in 1975, full professor in 1982, and emeritus professor on his retirement in 2009. His colleagues and friends at the university were deeply saddened and stunned by his death in a bicycle accident at the Colorado National Monument only several months after he retired.

Stanley leaves a legacy of important, even classic, scientific papers in aquatic ecology, two textbooks (*Ecology* (1998) and *Introduction to Limnology* (2005)), 22 PhD and 24 master's students, and unnumbered undergraduates who took his courses or were mentored in individual projects.

Those students he touched remember him as a gentle, creative, and caring mentor and teacher. D. Carolina Peñalva-Arana and Kenneth J. Forshay write in an obituary published in the *Journal of Limnology* ("2010 Stanley Ivan Dodson: Distinguished Ecologist and Mentor and Friend"): "From the moment you entered his life, you realized Stanley would help you reach your potential, and would allow you to follow your passion without ever imposing his own. He treated our ideas with respect and helped us clarify our goals, in and outside the laboratory."

Stanley is best known for a paper published with John Brooks as an undergraduate at Yale (Brooks and Dodson, 1965. "Predation, body size, and composition of plankton." *Science*). This paper has been cited according to the Web of Science 1,812 times. John Havel writes in an obituary published in *Hydrobiology* (2009. "Stanley Ivan Dodson: a distinguished ecologist, naturalist, and teacher"): "Stanley is widely known by limnologists and ecologists for his groundbreaking work on the effects of size-selective predation on the structure of zooplankton communities, early studies on inducible anti-predator defenses, analyses of factors influencing species richness in lakes, and patient studies of cladoceran and copepod systematics."

Unusually interesting findings by him and his students revealed that changes in the morphology of crustacean zooplankton occur in the presence of invertebrate predators that make it more difficult for the predator to capture and ingest the potential prey. The mechanism was that the predators release chemicals into the water (kairomones) that induce the morphological changes.

In studies of biodiversity, he and graduate students found from a large database that species richness was strongly influenced by the productivity of the lake, not only by lake area. Species richness was greatest in lakes with intermediate levels of productivity. This was a general finding in that it was apparent for phytoplankton, rotifers, cladocerans, copepods, rooted plants and fishes.

He had a passion for using small lakes and ponds to analyze the influence the role of land use has on water quality. Studies on contaminants led to his development of a patent using zooplankton bioassay.

Stanley taught limnology, plankton ecology, ecology, and biology of crustacea. He team taught or coordinated non-major introductions to zoology, ecology, biology, population biology, and biological diversity. Importantly he mentored undergraduates through ecology internships where students had the opportunity to work in various conservation agencies and groups. He also taught off campus during some summers: biology of aquatic populations at the Rocky Mountain Biological Laboratory; ecology at the Experimental Lake Area near Kenora, Ontario; and limnology at Flathead Lake Biological Station in Montana.

Stanley contributed to the department and the campus. He was the chair of the Department of Zoology from 1991 to 1993 and associate chair both before and after that. His service included the Biology Library Committee, the university Library Committee, and the Undergraduate Advising Committee in Zoology. He was a member of the Limnology and Oceanography Graduate Program, the Water Resources Management Program, the Environmental Toxicology Center, and an affiliate faculty of the Institute for Environmental Studies.

Stanley met his future wife, Virginia (Ginny), when they were undergraduates at Yale. They coauthored a scientific paper on the diet of aquatic larvae of the tiger salamander in the Rocky Mountains. They were both PhD candidates at the University of Washington. They have a daughter, Sarah, and two grandchildren.

He loved the waters he studied. He loved the waters of the Rocky Mountain Biological Laboratory. He loved Lake Mendota, where he often taught summer limnology. He loved science – its history, its ideas, its intricacies, its search for generality, and the discoveries yet to be made.

In celebration of Stanley's life and legacy, a special Dodson tribute session was held at the joint annual meetings of the American Society of Limnology and Oceanography and the North American Benthological Society in June 2010 in Santa Fe, New Mexico.

MEMORIAL COMMITTEE
John J. Magnuson