

May 21-22, 2015

ITEM 167-2005-R0515

Authorization to Confer the Title of Professor Emeritus of Ecology upon Professor Billie Kerans, Montana State University

THAT

Upon the occasion of the retirement of Billie Kerans from the faculty of Montana State University, the faculty wishes to express its deep appreciation for her years of dedicated and valued service to the University and the state of Montana by requesting that the rank of Professor Emeritus be conferred upon her by the Board of Regents of the Montana University System.

EXPLANATION

Professor Billie Kerans was hired as an Assistant Professor of Biology at Montana State University in 1996, tenured and promoted to Associate Professor of Ecology in 2001, and promoted to Full Professor in 2012. Dr. Kerans' research focused on invertebrates in freshwater ecosystems primarily throughout the West. Dr. Kerans has worked on a wide range of topics related to stream health, including work on exotic diseases and invasive species of considerable interest to fisheries managers of Montana and the region. Her work was pivotal in understanding the disease dynamics of whirling disease in trout, and the role of the pathogen's alternate host (a worm called *Tubifex tubifex*) in disease transmission. As part of a dedicated team of scientists Dr. Kerans worked to provide a detailed understanding of how stream habitat affected the density and infection rate of the alternate host, and how that understanding could be used in effective management of the disease. In addition, she worked extensively on New Zealand mud snails and their impact on native species of stream invertebrates providing valuable scientific information in the effort to minimize the invasion of the snails into Montana and the Greater Yellowstone and to manage their impacts when present. Her research is highly regarded as reflected by her funding for applied research from Montana Fish, Wildlife and Parks and the US Fish and Wildlife Service as well as funding for basic research from the National Science Foundation.

Dr. Kerans taught extensively at MSU, teaching Freshman Biology to thousands of students, and serving as the cornerstone for education in Freshwater Ecology for almost two decades. In all, Dr. Kerans taught seven different classes during her tenure at MSU and received excellent student evaluations reflecting her deep concern for students and her ability to make her material accessible to students. In addition, Dr. Kerans mentored a cohort of highly successful graduate students, including four PhD students and six MS. Dr. Kerans was particularly successful in mentoring female graduate students significantly increasing the gender diversity of professional freshwater ecologists. In addition, Dr. Kerans served on an impressive number of graduate committees in collaboration with colleagues in and beyond her own department.

Finally, as a pioneer woman scientist in a scientific discipline, Dr. Kerans was called upon to serve on an extraordinary number of university committees. She chaired or served on faculty search committees in several departments, numerous tenure and promotion reviews, and helped MSU cross the threshold to a more diverse faculty and staff. Her contributions to MSU were many and lasting, and she continues to work on her research despite her retirement.

ATTACHMENTS: None