

EMINENT ECOLOGIST AWARD



Charles J. Krebs

The Eminent Ecologist Award is given in recognition of an outstanding body of ecological work or of sustained contributions of extraordinary merit. It is the highest honor bestowed by the Ecological Society of America. The winner of the 2002 Eminent Ecologist award is Charles J. Krebs, Professor Emeritus of Zoology at the University of British Columbia. Professor Krebs is clearly an individual who has made sustained and substantial contributions, among these his leadership in transforming the field of ecology from a descriptive science to a rigorous experimental discipline.

Professor Krebs has worked continuously in British Columbia and the Canadian North for over 40 years on cyclic population dynamics of mammals, small and large. He pioneered the use of large enclosures to study small replicated populations in “near natural” conditions. Early in his career, he had the courage and imagination to implement a large-scale field experiment that involved (among other things) enclosing a square kilometer of boreal forest with electrified fence

and manipulating factors hypothesized to influence rodent population cycles. Some of the manipulations worked, others didn't, but population research in ecosystems with their predator community largely intact had been tried!

Krebs has led the debate on how behavioral, physiological, and genetic attributes of animals affect populations and eventually determine the size of the population. In particular, he discovered what is now known as the “Krebs Fence Effect,” from an experiment in which he demonstrated that preventing dispersal in small mammals causes the regulating mechanisms of populations to break down. This led the way to the broader consideration of the importance of dispersal in population dynamics.

Charley Krebs' research contributions include over 170 published papers, numerous book chapters, and three books, including his well-known textbook: *Ecology: The Experimental Analysis of Distribution and Abundance*, which has influenced thousands of ecologists (and their students) over the past 25 years. It was ahead of its time when it was first published in 1974 because of its emphasis on experimental analysis. More recently he has published *Ecological Methods*, a text often recognized as the definitive guide for how to measure and analyze ecological data. He also has been a leader in the development of computational tools for tracking and analyzing population cycles.

Charley Krebs has been recognized in Canada and internationally for his research contributions. He is a Fellow of the Royal Society of Canada and the Norwegian Academy of Sciences. Importantly, he is a warm and generous individual. He is a totally eminent ecologist and surely will continue to be one.

Eminent Ecologist Award Subcommittee: Katherine L. Gross (Chair), Deborah Goldberg, Robert Holt, Beatrice VanHorne, Paul Dayton, and Peter Groffman.