



SIMON FRASER UNIVERSITY

Honorary Degree Citations The degree of Doctor of Science, *honoris causa*, conferred on Dr. Holling Friday, October 7, 2011

Madam Chancellor, discovering solutions to the world's environmental problems is among the central challenges of our time. Fortunately we are well poised to confront this challenge, thanks in large part to Dr. C.S. "Buzz" Holling, one of the most influential Canadian scientists of the last century. A renegade ecologist with a contrarian approach, Dr. Holling has transformed the way we think about both the environment that sustains us and the welfare of society.

Dr. Holling's pioneering research has helped lay the foundations of modern ecology. He introduced the concept of "resilience" in ecological systems to describe their ability to resist and recover from natural and human-made disturbances. This body of research has fundamentally reshaped our understanding of the dynamics of ecological systems. Almost four decades later, the rich legacy of this work informs contemporary discussions and debates over non-linear dynamics, tipping points and adaptation to global change.

As the author of several highly influential books and papers, Dr. Holling helped stimulate a new paradigm of natural resource management that explicitly recognizes our uncertain knowledge of ecological systems. His work has highlighted the "pathology" of command and control approaches to resource management, where well-intentioned policies can have unintended consequences. Dr. Holling was one of the first ecologists to recognize the strong connections between social and ecological systems and to argue that they need to be analyzed and understood as coupled components of a single larger system. This integrative thinking has illuminated our understanding of the growth, collapse and regeneration of coupled human-ecological systems. Dr. Holling's work has not only been transformative in the ecological sciences, but has penetrated and catalyzed many other disciplines including the field of ecological economics.

As director of the Institute of Animal Resource Ecology at UBC and the International Institute for Applied Systems Analysis in Vienna, Dr. Holling has a long history of fostering novel, cross-disciplinary collaborations.

While his contributions have been recognized with many prestigious honours including the Order of Canada, the magnitude of his influence is perhaps best measured by the collective impact of students, researchers, and practitioners who have been profoundly influenced by his work.

Today, we pay tribute to a luminary and a renegade whose lifetime of research will help us solve some of the biggest environmental challenges facing our planet. Madam Chancellor, on behalf of the Senate of this University, I ask that you confer upon Dr. C.S. (Buzz) Holling the degree Doctor of Science, *honoris causa*.