

IN MEMORIAM

Jefferies was renowned Arctic scientist

BY AILSA FERGUSON

Professor Emeritus Robert

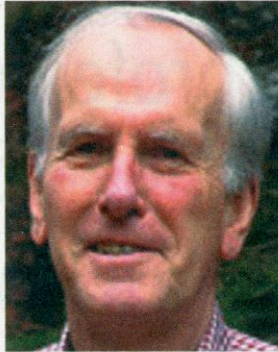
Jefferies of ecology and evolutionary biology, one of the world's leading Arctic scientists and global change biologists, died July 8 of a cerebral hemorrhage. He was 73 years old.

Jefferies grew up in Somerset in western England. He majored in botany with subspecialties in chemistry and microbiology at the University of Bristol, graduating in 1958. He went on to doctoral work, completing his PhD in plant ecology at Bristol in 1962. He then went to the University of California at Davis for two years on a fellowship before returning to the U.K.'s new University of East Anglia in Norwich. At this stage in his career he was studying ion transport and mineral nutrition of plants in relation to salinity.

He joined U of T in 1975 and was invited to go to La Pérouse Bay to study goose-plant interactions in the salt marshes of Hudson Bay. This was the start of an odyssey that continued until his death. Each year he spent the summer with graduate students on the Hudson Bay coast studying the effects of large populations of snow geese on the landscape.

Jefferies' ecological research centred on the Hudson-James Bay system, especially the region surrounding Churchill, Man., where his studies of nesting snow geese helped to make this one of the best-understood northern ecosystems worldwide. While he had a wide range of interests Jefferies was recognized internationally as the dean of goose-plant interactions in Arctic environments, a field of study he almost single-handedly created.

His research documented the consequences of changing climate and wildlife populations on the region and his efforts played a central role in setting North American wildlife management policy and in the establishment of Wapusk National Park. His work on goose populations at high latitude was instrumental in demonstrating long-distance consequences of modern human activity in a biological world.



Because of the importance of his work, Jefferies was nominated to serve as one of the Canadian representatives to the Intergovernmental Panel on Climate Change (IPCC). With the other panel members, he shared the Nobel Peace Prize awarded to IPCC in 2007.

In his more than 50 years of professional activity, Jefferies published more than 100 scholarly articles and delivered hundreds of lectures

on his research to university audiences, research conferences and colloquia.

Jefferies had a real passion for teaching and his enthusiasm never waned. And although he retired in 2001, he continued to teach. "I enjoy teaching first-year biology and have done so ever since I arrived in Toronto," Jefferies said in his profile online. Perhaps one of his most lasting achievements was in helping create BIO150 — Organisms in Their Environment — in 1990, a course required by most science students, with classes ranging from 1,600 to 1,800 students. He was the only professor in BIO150 who had taught in the course every year since its inception. He was slated to teach in the course again this September.

As a testament to his commitment to education and research his former graduate students now occupy positions of influence throughout the Canadian ecological establishment where they play instrumental roles in developing national policy in ecology and environmental sciences.

"To his students and colleagues, he stood out as a gentleman of unusual grace and generosity. Gentlemen have become rare enough in modern life that whenever one has the pleasure of an encounter one is refreshed by the experience," said Professor Rowan Sage, a colleague in ecology and environmental biology.

"With his death, Canada has lost one of our most important northern researchers at a time when such expertise is increasingly vital and increasingly scarce."

A celebration of his life will be held Nov. 9 at the Great Hall, Hart House from 2 to 5 p.m. All are welcome.