IsoEcol Appreciation Lecture

Dr. Keith A. Hobson (Introduction by Dr. Len Wassenaar)

Keith is a distinguished Professor of Biology at the University of Western Ontario and a Senior Research Scientist for Environment Canada. Keith is renowned internationally for his groundbreaking work in stable isotope ecology, focusing on avian and insect conservation, aquatic, arctic and boreal forest ecology. His prolific research output includes over 600 peer-reviewed papers, earning him an incredible h-index of 122 and widespread recognition in the scientific and isotopic community. He has been honored with numerous prestigious ornithological awards such as the Loye and Alden Miller Research Award, the Elliott Coues Memorial Award, and by fellowships into both the Royal Society of Canada and the American Ornithological Union.

Keith's influential publications, such as his pioneering isoscape work on the migratory patterns of birds, butterflies and dragonflies, underscore his contributions to understanding global ecological and environmental dynamics. His leadership extends to being a co-founder of ISOECOL in Saskatoon back in 1998. Keith's innovative isotopic research continues to shape the field of ecological studies, making significant foundational impacts on both theoretical and applied environmental sciences.

Abstract:
A tradition seems to have emerged within our Isoecology conference community to now "wheel out" a local senior (near dead?) member at our bi-annual meetings to provide some sort of "swan song" reflection on the field. I am happy to continue this tradition from a Canadian perspective (although there are others as qualified) and better now than any later as the field of isotopic applications is clearly being led by a very talented group of young researchers savvy in all sorts of things and I am not getting any younger. Regardless, I will provide a perspective that goes back to the 1980s when ecologists really started getting serious about isotopic applications to answer previously intractable questions. Since then, it has been a fascinating road that has resulted in ecological applications far exceeding previous domination by paleoecologists, plant physiologists and atmospheric scientists. Obviously, key milestones have been the introduction of refined analytical techniques such as CFIRMS and more, recently, laser vs. mass spectrometric technology and the Renaissance of compound specific approaches that has changed everything. I will attempt a brief ramble through some of this and let you know that the discipline is very much alive and kicking. If you miss this, my key take home message is that stable isotope mass spectrometry together with its vast applications represent a truly exquisite and elegant set of principles and that is enriching. Stable isotope measurements in biota are not just numbers but represent an integration of tens to thousands of individual events and this is their true power. Oh yes, and "isotopes never lie".