

# EVENET SEMINAR



## Distance, Time and Toads: a new look at dispersal

April 24<sup>th</sup> 2025 - IPM - Ghent University  
Campus Ledeganck - Lecture room 0.2

### Abstract



The dispersal of organisms is standardly considered to be an essential, complex, and adaptive trait, with a large body of associated theory that has far outpaced the ability of empirical investigations to anchor it to reality and test its many fundamental assumptions. Analysis of a data set of nearly 22,000 movement distances amassed over 20 years derived from GPS geo-located captures and recaptures of a small amphibian and assorted by elapsed time has enabled long-held assumptions about dispersal to be assessed and tested in an evolutionary context. The results indicate that dispersal in these animals cannot be distinguished from a purely stochastic movement process that is inconsistent with a hypothesis of dispersal as a heritable trait and that perceived differences in dispersal kernel shapes can be attributed to sampling regime with respect to time.

### The speaker

David M. Green is a professor emeritus of Biology at McGill University in Montreal. He received his B.Sc. in Zoology (1976) from the University of British Columbia and both an M.Sc. (1979) and a Ph.D. (1981) from the University of Guelph. Following postdoctoral research at the University of California, Berkeley, and McMaster University, he joined the faculty at McGill University in 1986 and served as the Director of the Redpath Museum for 10 years (2005 – 2015). Among his many editorial and service appointments, he has been Chair of Committee on the Status of Endangered Wildlife in Canada, founding co-President of the Canadian Herpetological Society, and President of both the Society for the Study of Amphibians and Reptiles and the Herpetologists' League. David's research primarily concerns the ecology, conservation and evolution of amphibians. Few of his many publications, which include over 170 refereed publications and book chapters, 9 books and edited journal issues, and ca. 140 miscellaneous other publications and reports, fail to mention frogs or toads in one way or another.

