

A continental theory of biogeography: predicting geographic variation in species richness and range size

Prof. David Curry, 2016

During the eight years since my last sabbatical from the University of Ottawa (they apparently missed the etymology of "sabbatical"), I spent a great deal of time teaching undergraduates (≈ 120 contact hours/year), serving on university committees and editing *Global Ecology and Biogeography*. That was all rewarding, but my own research slipped onto the back burner. For this sabbatical, I was anxious 1) to finish a project assessing the (lack of) impact of climate change on North American bird distributions that I started with a gifted honours student, Simon Venne; 2) to write a philosophical piece on the complimentary roles of experimental ecology and macroecology, and 3) to develop a spatially-explicit, predictive model of the continental variation of species richness -- a sort of continental biogeography, inspired by MacArthur and Wilson's island biogeography. At the 2015 IBS meeting, Marten Winter tried to persuade me that sDiv could provide good surroundings to think, and talk, and write about geographic patterns of richness. He was absolutely right. Interactions with the students and post-docs in sDiv has been continuous, fun, and stimulating. My hosts Jon Chase and Marten Winter are busy folk, understandably; they have nonetheless been exceptionally welcoming and inclusive. I am also extremely grateful to many people at iDiv and Leipzig University who have made the logistics of a sabbatical overseas so painless. While here, I had the opportunity to host a small working group that is attempting to reconcile historical and contemporary hypotheses about geographic patterns of diversity. My philosophical piece is nearly done. And, Petr Keil agreed to help me get the coding started on my continental biogeography project (bravo Petr!). *Nach Feierabend*, I have discovered that Leipzig and Saxony are a remarkably interesting place to live and work. Farmers' markets, the Lichtfest, the Christmas Market, and abundant music and history have been literally at the doorstep of my flat near the Nikolaikirche. It is truly amazing. And, there are occasionally days in Leipzig when it does not rain! I will be sad to leave in December.