

Graduate positions in pop/commun/evol ecology, Univ of Calgary

I'm currently seeking 2 graduate students (M.Sc. or Ph.D.) to start in my lab Fall 2015 or Winter 2015.

My work addresses fundamental questions in population, community, and evolutionary ecology, through a combination of mathematical modeling and experiments. I'm open to inquiries from students with a broad range of interests, but I'm particularly keen to hear from students interested in the following ongoing or planned projects:

- Causes and consequences of spatial synchrony of population cycles. This project uses protist microcosms to conduct experiments that would be impossible to conduct in nature at the relevant spatial and temporal scales.

- Local adaptation in space and time. This project involves using a -80 C freezer as a 'time machine' to reciprocally transplant lake bacteria forwards and backwards in time (as well as in space) to test for local adaptation to spatial and temporal environmental variation. One big question is whether temporal or spatial variation is more effective at generating local adaptation and so maintaining diversity. The simplest theory says that spatial variation should be much more effective, but nature may not be that simple...

- Local adaptation, species interactions, and elevational range limits of alpine plants. This project combines reciprocal transplant experiments within and beyond species' elevational range limits with neighbor removal experiments to address several questions about how local adaptation and species interactions shape, and are shaped by, species distributions along steep environmental gradients.

For more on my lab, please visit my homepage: <http://homepages.ucalgary.ca/~jefox/Home.htm>

The University of Calgary is one of Canada's top research universities. The Dept. of Biological Sciences (<http://bio.ucalgary.ca>) has ~60 faculty. We have ~180 graduate students, of whom ~1/3 are in ecology and evolution.

Guaranteed funding of at least \$21,000/year (more than that in practice) is available for 2 years (M.Sc.) or 4 years (Ph.D.) (note that Canadian graduate programs are a bit shorter than in the US). Funding is provided through a combination of TAs, RAships, and scholarships. Applications are evaluated as they are received.

Calgary is a safe, vibrant city of over 1 million people, located close to the Canadian Rockies with all the opportunities for research and recreation that implies.

If you are interested, please email me an introductory note, along with a cv, transcripts (unofficial is fine), and contact details for 3 references.

-Jeremy Fox (jefox@ucalgary.ca)