



canadian institute of ecology and evolution
institut canadien d'écologie et d'évolution

BIOS2 – Computational Biodiversity Science and Services

Invitation to propose a working group topic in biodiversity synthesis

Do you have a high quality and extensive biodiversity dataset in hand, and a research question in mind? Could a team of highly qualified graduate students from across Canada help you answer this question with a week of intense work?

We invite experienced biodiversity researchers from both academic (universities) and non-academic organizations (e.g. government departments, non-profit organizations, Indigenous organizations, community groups, industry) to submit proposals for a one week working group focused on a question in biodiversity science. Biodiversity science is interpreted broadly to be the fields of ecology and evolution including their commercial applications and conservation implications. Working groups would consist of a small group of researchers who meet in person in a single location, and work intensively and collaboratively on a research question, using best practices in team science and digital collaboration. We will provide funding for a working group consisting of 10 graduate students and one or two experienced biodiversity researchers to be held May 4-8, 2020 at the University of British Columbia. The 10 graduate students will be chosen through a separate national competition co-led by the Bios2- CREATE program and the Canadian Institute for Ecology and Evolution (CIEE), and will have skills in data synthesis and analyses relevant to biodiversity science. The one or two experienced biodiversity researcher(s) submitting the proposal are expected to coordinate the scientific aspects of the working group. In addition, a member of the CIEE will mentor all participants in working group organization and dynamics before and during the meeting. Travel, accommodation and meal costs will be covered for all participants.

Proposals will be evaluated according to the following criteria:

- (1) The research question will be of interest to graduate students in biodiversity science.
- (2) The organization and/or researchers will benefit from collaborating in a working group with early career researchers trained in analytic approaches to biodiversity science.
- (3) The graduate students will benefit from interacting with the experienced biodiversity researchers, especially through exposure to non-academic careers and applications of ecology and evolution theory.
- (4) The project will extract valuable information from an extensive, high-quality and well-organized dataset. The dataset should be ready for analysis.
- (5) The problem will offer high training potential for the students.



Proposals should include:

A description of the research question and its importance (max 200 words). We seek research questions of high importance to science or society that require the synthesis of existing data and concepts in biodiversity science. These questions should be answerable within a 5 day working group, and may be either conceptual or applied in nature.

A description of the data to be analysed (max 200 words). We require any biodiversity database, or combination of databases, that will be analysed in this working group to be in a format that allows immediate programmatic access. The emphasis of these working groups is in formulating and testing hypotheses, so it is imperative that participants do not spend working group time in building databases or navigating access. There is a preference for databases that are open access. The researcher(s) need not have been involved in the creation of the database, but should be familiar with it.

A description of the work plan for the data and conceptual synthesis, including goals (max 200 words). Provide a step-by-step plan for how the working group will collaboratively answer the research question. An important feature of working groups is that it can be broken into smaller subgroups that work on different aspects of the workflow during part of the day, which then collectively assemble later in the day to synthesize their work. Please specify any product you hope to achieve from the working group (e.g. report), and how production of this product will either be incorporated in the workplan, or will be finalized by the non-academic participants after the working group. We expect that graduate students that make a substantial contribution to publications would be included as co-authors.

A description of the benefits to graduate students for participation (max 200 words). Graduate students are often motivated by opportunities to learn about non-academic careers, to experience the application of biodiversity science beyond academia, to contribute to initiatives that have high societal value, and to have concrete products that can deepen their cv.

Please attach the cv of each experienced researcher (maximum of two) that will take part in this working group. Please highlight experience in co-ordinating research teams.

Complete applications must be emailed to Kelly Haller at ciee-icee@biodiversity.ubc.ca by **8 January 2020**.