Summer Field Assistant Job (Paid): Creating bee friendly cities – the effects of urban floral community structure on urban wild bee communities in Montreal

Project Background: Conversion of natural habitats to urban land is among the most irreversible and fastest growing forms of global change, with 70% of the world's population expected to live in cities by 2050. This unprecedented urban growth has affected biodiversity worldwide, resulting both in population declines in many species, as well as the homogenization of biodiversity, where different cities tend to harbor the same species. However, well-planned and managed urban green spaces can buffer some of these negative impacts on biological diversity, including providing a refuge for rare species, and species of conservation concern such as insect pollinators – including Montreal's >170 wild bee species. Nevertheless, we still largely lack the adequate scientific knowledge to inform and influence management of urban green spaces in such a way as to safeguard pollinator communities, and the critical benefits they provide to society (e.g., pollination, urban food production, aesthetics). **We will conduct an extensive survey of bee biodiversity in parks, community gardens, and cemeteries across Greater Montreal. As part of this survey, we will also conduct extensive fieldwork to measure the importance of different floral traits (e.g., flower morphology, bloom time, and nutritional content) for supporting diverse wild bee communities.** Results will contribute to better understanding of Montreal's urban biodiversity, and indicate potential design and management interventions that can be undertaken by citizens, communities, and municipal governments to support wild bee conservation in cities.

Outline of the student's role: The student will aid in collection of floral and/or insect data in urban green spaces, requiring efficiency and attention to detail. Data collection will include insect collection (using both nets and traps), flower identification, and measurement of floral traits in the field and lab. The student may aid in identifying and organizing insects in the lab. Additionally, the student will be in regular communication with landowners and project partners, requiring strong communication and outreach skills in a bilingual setting.

Required Skills and Experience:

- Comfortable speaking with project partners in both French and English
- Confortable around insects (including sacrificing insect specimens)
- Strong teamwork and communication skills
- Enthusiasm to work outdoors
- Interest in ecology/environmental challenges

Preferred Skills and Experience (but not required):

- Valid drivers license
- Fieldwork/outdoor experience
- Insect collection and/or identification skills
- Experience with GIS software

If interested, please contact Dr. Carly Ziter (carly.ziter@concordia.ca) by 3:00pm Tuesday, February 4th, and include your CV and (unofficial) transcript.

Please note that students who meet the eligibility for a Concordia Undergraduate Student Research Award (or NSERC Undergraduate Student Research Award) will be given priority for this position. If you are not sure whether you are eligible for a CUSRA, please check here.