Summer Field Assistant Job (Paid): Contributions of private land to urban forest biodiversity and ecosystem service provision in Montreal

Project Background: Unprecedented urban growth has altered ecosystem structure, function, and biodiversity, and consequently the ecosystem services (ES, or benefits from nature) we depend on. To create sustainable cities, we must identify opportunities to enhance biodiversity conservation and ES provision. In Canada, where >80% of the population lives in urban areas, perhaps no component of urban green space contributes more to biodiversity and human wellbeing than the urban forest. Made up of trees and associated vegetation in streets, parks, private land, and urban natural areas, the urban forest provides multiple ecological, social, economic, and health benefits. Yet, even as consensus grows that healthy urban forests are a critical resource for nature and people, urban forests and their benefits are threatened by global change (e.g., climate change, invasive species). To plan and manage for resilient future forests, we must first understand the extent, composition, and structure of today's urban forests at a citywide scale. This requires understanding how the governance and landscape structure of our cities affects the number and diversity of urban trees. **We will work with private landowners in Montreal to conduct a field inventory of urban forest attributes (e.g., species ID, size, functional traits related to ES) on private land, which makes up a significant percentage of tree cover in most cities.** We will use this data to compare private tree biodiversity and ES to Montreal's public tree inventory to assess how representative it is of the citywide urban forest. Rigorous comparison of public and private tree diversity, and quantification of urban ES based on a more comprehensive tree inventory will help inform urban forest management, and increase the agency of urban dwellers in creating more sustainable cities.

Outline of the student's role: The student will aid in collection of biodiversity and ecosystem service data in private yards, requiring efficiency and attention to detail. Data collection will include tree/shrub identification, measurement of tree characteristics, and site characterization. The student will also aid in entering and organizing field data. Additionally, the student will be in regular communication with individual landowners and project partners, requiring strong communication and outreach skills in a bilingual setting.

Required Skills and Experience:
- Comfortable speaking with landowners in both French and English
- 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
- Tree/plant 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](#).