

Summer 2023 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on funded sustainability internship projects. Successful candidates work under the mentorship of a partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the application guide on the Apply page to confirm your eligibility before applying.

Applications close at midnight on Sunday January 29, 2023.

Project title: Research to understand the benefits of native plant gardening to restore ecological health and resilience in urban spaces

Project Background & Overview:

Native plants have rapidly grown in the collective consciousness of the conservation and activism world as tools to fight the multiple crises that face us: climate change, biodiversity loss and a deep disconnect between people and nature to name a few. As evidenced by the proliferation of educational materials, webinars, granting programs, conferences and symposia which mention and advocate for native plant gardening, it's clear that this concept has been taking off. Especially now, in the UN Decade on Ecosystem Restoration, it is important to understand how Nature-based Climate Solutions (including but not limited to planting regionally appropriate plants, especially trees, to capture atmospheric carbon) are being used and how effective they are in different ecological contexts.

It appears that the strategy of using native plants to restore ecosystems can be applied not only at large scale with plantings in the millions, billions or even trillions of individual plants, but also at a small scale in community gardens, backyards, on balconies and in urban and suburban parks. But, is this really the case, or have we taken this theoretical method too far from its conceptual origins? What is the actual state of the research and evidence, as of 2023, supporting the use of native plants in human-dominated landscapes like cities, towns and suburban or peri-urban landscape? What do we know, what have we learned and where are the gaps in our understanding?

Project description

The project is a literature review of the existing research into the benefits of native plant gardening. Geographically, we would like the focus to be on research in areas that WWF-Canada's prior research has identified as priority regions for restoration work. We would also like the scholar to explore knowledge outside of the western-academic system through conversations and interviews with native plant gardeners and other research means as possible and appropriate within the project scope.

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We would like the scholar to produce a detailed and annotated bibliography of all the work they can find relating to the topic of native planting to restore ecological health (including biodiversity, ecosystem function/services and connectivity) in landscapes that have been dramatically altered by colonization, industrialization and other recent intensive human activities. The ecosystems that interest us especially are those where people live in high densities: cities, towns, suburbs and peri-urban spaces. We suggest that this bibliography could be organized with sections which each address similar or related work and questions. This structure would also help in understanding where work is being done already and where there are research gaps and important unanswered questions.

WWF-Canada would use this bibliography for the following: as a research tool for supporters and community members who want to further educate themselves; to inform our communications, project development and provide citations of supporting/related work therein; to understand where further research is needed and look for partnerships and other ways to support knowledge expansion in this field.

Project scope

Geographically, we are most interested urban, suburban and peri-urban, densely populated landscapes across Canada, especially British Columbia Lower Mainland and Lower Vancouver Island. Other priority areas include southern Ontario and southern Quebec (the Windsor-Québec City corridor), and Atlantic Canada. Temporally, we are particularly interested in the most recent research (i.e., from the past 20 years) though citations from earlier work would be of secondary interest. We would expect the scholar to use all the research tools available to them including libraries, online journal searches and in-person discussion and interviews.

In terms of the different questions/areas/benefits we would like to know about, these would include climate change mitigation and adaptation benefits including decarbonizing (emissions reduction) and building ecosystem resilience. It should be noted that WWF-Canada is engaging in a separate line of research specifically to address the carbon sequestration and storage benefits of native plant gardening. We are also interested in biodiversity benefits which can be broken down by taxa (birds, insects, soil microorganisms, etc.)

Additional benefits of interest include ecosystem connectivity, human health (including physical, mental and spiritual well-being), Indigenous cultural resurgence and reconciliation, food security and food sovereignty.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing Scholars Project Library.
- An annotated bibliography of the research, organized into sections

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Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2023
- The Scholar is to complete 17 to 20 hours per week
- The Scholar can work flexible hours provided that they are available for scheduled meetings with their mentor
- A meeting schedule will be worked out between the scholar and the mentor. We suggest more frequent meetings in early May becoming less frequent (not less than 2/month) through June and July, then more frequent again near the completion of the project in August. Note that the Scholar's supervisor will be in the Eastern time zone.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with research methodologies and survey techniques
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Comfortable interacting with strangers to conduct public/in person surveys
- Design and layout skills, an asset

Additional information.

We are interested in having the scholar explore knowledge sources outside of the western-academic system. This may include interviews with Indigenous community members, provided that the requisite ethics standards for this type of work are being met. We realize that this type of research requires time in the establishment of trust and relationships, and that there would not be enough time in the scope of this project to develop those from scratch. Applicants who are already doing this type of work and are able to incorporate it into this research would be an asset to the project, but this requirement is not mandatory.

Applications close **midnight Sunday January 29, 2023**

Apply here: [Click here to apply](#)

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 23, 2023.

[Click here for details and to register.](#)

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.

<https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae>

<https://www.grad.ubc.ca/current-students/graduate-pathways-success>

<https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services>