

Key Goals of the UBC Botanical Gardens Climate Adaptation project

Goal 1: Adaptation Planning - Accelerate Climate Action for Plants and Landscapes along the Pacific Northwest

An Adaptation Action Team will be established as the Garden’s working group. The team will ensure curated collections are resilient to future climates by using databases (e.g. IrisBG – Garden Explorer) to monitor how collections change. Collaborating with established and emerging networks (gardens, universities and local governments), the Garden will develop community-driven solutions for adapting plants and landscapes through:

- (1) a regional adaptation plan for the Pacific Northwest; and,
 - (2) plant-specific case studies for plant groups such crop wild relatives, alpine plants, and native plants.
- Climate and conservation planning will enable networks to understand future climate risks, prioritize adaptation options and build on regional strengths to drive climate action and plant conservation.

Goal 2: Biodiversity Atlas Design – Develop a digital tool to monitor, track and manage plants and biodiversity in a changing climate.

Designing a Biodiversity Atlas will engage citizen scientists and researchers to monitor and track how genes, species and ecosystems respond in future climates. This digital resource will integrate datasets (maps, citizen science data, climate science, research data, etc.) to benefit gardens, universities and local governments in making informed decisions.

Goal 3: Climate Education - Deliver inclusive sustainability educational experiences.

Team Building Experience: Guided by a back-to-market strategy, a Climate and Conservation Engagement Coordinator and Field School team will engage businesses, organizations and youth in nature-based education at the Garden. Previous Field School learning modules (established 2015-2020), will be updated to reflect local and global priorities with new experiences added for smaller groups (Table 1). The team will collaborate on new learning modules for adaptation and climate justice. Knowledge gained from the learning modules will inform the design and development of new interpretive signage at the Garden. With support for student jobs and graduate research training, UBC Students will be engaged in all aspects of the Field School.

Interpretative signage: The Garden’s interpretive signage installed in 2016 transformed visitor experience at the Garden. Learning from this, a gap exists on signage around climate action and climate justice. The vision is to develop, design and install additional interpretive signs that share diverse community perspectives of sustainability, Indigenous Knowledge and climate action. These additional signs will give guests the opportunity to learn, engage and reflect on sustainability and climate impacts.

Table 1. Field School sustainability learning modules and experiences.

Established Field School Learning Modules	New Learning Modules	Field School Experiences
<ul style="list-style-type: none"> • Biodiversity & Ecosystem Services • Food Gardens and Agriculture • Green Economy and Green Jobs • Policy Landscapes: SDGs, CBD, UNFCCC • Water and Forests • Waste and Regeneration 	<ul style="list-style-type: none"> • Climate Adaptation • Climate Justice • Indigenous Knowledge, Decolonization • Emerging climate topics 	<ul style="list-style-type: none"> • Team building tours at the Garden • Sustainability education workshops • Field trips for local and international conferences • Train-the-trainer workshops • Facilitated meetings • Solution labs