



# MOSAICS IN SCIENCE

## Diversity Internship Program

### 2021 Project Descriptions

<b>NPS UNIT: NORTH CASCADES NATIONAL PARK SERVICE COMPLEX</b>	<b>PD #: 2021518</b>
<p><b>Project Title:</b> North Cascades National Park - Native Plant Propagation Intern <b>Position Type:</b> Mosaics PLC <b>Primary natural resource discipline:</b> Biological Sciences <b>Project keywords:</b> Native plant restoration, resource management, botany, North Cascades, youth, community involvement, hands-on, <b>Location:</b> Marblemount, Washington</p>	
<b>COVID-19 NOTICE</b>	
<p>As the COVID-19 pandemic continues to change and evolve, project timelines and structure remain flexible and it may be necessary to postpone start dates, begin work remotely, or reformulate the project's description. Should any development in the COVID-19 outbreak impair a project's timeline or results, the SIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.</p>	
<b>PROJECT DESCRIPTION AND WORK PRODUCTS</b>	

**Position Description:** The goal of an internship with the North Cascades National Park Native Plant Restoration Program is to cultivate skills and knowledge that lay the foundations for leadership in natural resource management. By giving our interns the opportunity to build career skills within the National Park Service we are preparing them to be qualified employees of the NPS or ambassadors for the NPS in other careers. Their time here will help them become stewards of our parks and stronger, more vibrant members of their community.

Interns will work with, and be integrated into, the park's Native Plant Propagation and Restoration Program, but the focus of the internship can be tailored to the intern's strengths and interests. Interns may choose to focus on:

- A) Refining and improving plant propagation techniques; for example, increasing germination rates of difficult-to-grow species, or determining best practices for fertilization on a species-by-species basis.
- B) Developing a framework for restoration site assessment and monitoring protocols that will result in better long-term colonization by native plants.
- C) Working with local community groups, including Youth Conservation Corps, to increase awareness and appreciation of native plant communities.

Native plant work will include seed collecting, planting, transplanting, and fertilizing native plants. Other work within the Natural Resources Management division may include natural resource surveys, such as in the Cascades Butterfly Project or Dragonfly Mercury Project. Occasional opportunities to work in other divisions could include grounds keeping, trail maintenance, campground maintenance, or participation in search and rescue operations. In addition, the interns will work with the Park's Youth Stewardship program. Interns will assist park staff completing stewardship work with students and volunteers. The intern will also help mentor our Youth Conservation Corps enrollees, by sharing their own life experiences and education with them and demonstrating work ethic by working hard alongside them. Through this multi-faceted experience, interns will develop an in-depth understanding of the Natural Resource Management division as well as receive an introduction to the other divisions within The North Cascades National Park Service Complex.

Our vision is to teach the importance of adaptive resource management through work in a native plant restoration program. Our projects tangibly address the natural resource management need to restore native plant communities which were damaged or compromised. Interns will work hands-on to develop the skills needed to grow native plants, manage a native plant nursery, and enhance native plant colonization within a restoration site. They will experience first-hand the complexity of restoration project implementation and the need to adapt to unexpected changes at each restoration site. The internship program also provides an opportunity for interns to collect data to help the park understand the impacts of climate change to biological resources including western red cedar populations, subalpine vegetation communities, and subalpine butterflies. They will understand through observations of changes in plant communities how climate change is impacting even common species, and how restoration efforts must also factor in climate change as a variable.

Additionally, interns will be able to learn about issues in our park regarding geology, hydrology, archaeology, and soundscapes. Interns will work frequently with local Youth Conservation Corps participants; they will understand the varied ways that people understand and interact with the natural world and they will be able to share their own views. Daily hands-on work activities, combined with regular opportunities to observe and gather data, experienced through various social lenses, will foster a balance between pragmatism and academic learning, and prepare each intern to be an effective leader in the natural resources field. Therefore, this internship also has the potential to address a corollary natural resource management need – the need for effective natural resource

## NATURAL & PHYSICAL WORK ENVIRONMENT

North Cascades National Park Complex is a land of waterfalls, trails, glaciers, steep vertical valleys, jagged mountain tops, glacier-fed lakes, and lush western and dry eastern slopes. The Complex consists of North Cascades National Park, Ross Lake National Recreation Area, and Lake Chelan National Recreation area.

The intern will work mostly outdoors throughout the Complex and at the Marblemount native plant nursery and will reside at the NPS ranger station in Marblemount, WA. Marblemount is a small, remote town with limited services; two convenience stores open year round, and two restaurants are open during the summer season. Grocery stores are available in Concrete (18 miles), or Sedro-Woolley, Burlington, and Mount Vernon (within 50 miles).

Cell phone service is variable at the Marblemount NPS compound but is generally good in the town of Marblemount within one mile. Wi-Fi may be available at the NPS housing but must be set up and paid by residents in shared housing. The nearest public Wi-Fi is at the Marblemount Community Hall and in Concrete at the library.

The weather is variable, and interns must be prepared to work under conditions that include heat, cold, rain, wind and/or biting insects. Interns may be required to lift and carry objects up to 50 pounds, such as plant flats, wheelbarrows, tools, and backpacks and work may include backpacking and hiking up to 10 miles with a 40-lb pack. Transportation will be provided from Marblemount to work sites in the park.

## QUALIFICATIONS

We are seeking interns who are interested in gaining an understanding of the plants and plant communities of the North Cascades, learning about the National Park Service, and who are enthusiastic about working within the local community. Applicants should have strong organizational skills, interest or experience identifying plants, experience camping or backpacking, and the ability to work both independently and effectively with a team. Interns must be able to hike up 10 miles, work in inclement weather including rain, snow and heat, occasionally lift up to 50 lbs, and complete moderately strenuous physical work throughout the day. Strong personal work ethic and cultural sensitivity is important as the intern will be a role model for local youth.

The applicant must be a U.S. citizen or U.S. permanent legal resident (“green-card-holder”) between the ages of 18 and 30 years old, inclusive, or veterans up to age 35. Prior to starting this position, a government security background clearance will be required.

## VEHICLE AND DRIVER LICENSE REQUIREMENTS

**Applicant must have a valid drivers license and a good driving record.**

**A personal vehicle is REQUIRED for this position.**

## HOUSING

Park housing is available and will be provided at no cost to the participant. Housing is provided in a shared room in a 3-bedroom, 1-bathroom house in Marblemount, within walking distance of the interns work site. Interns will share a room with another intern, volunteer or seasonal NPS staff member. Housing is multi-gender but rooms are shared by individuals of the same gender. Special considerations will be given to ensure interns gender identity is respected and interns feel comfortable in their housing assignment. Furniture and cookware are provided.

**INTERNSHIP START/END DATES**

**Start Date:** 5/17/2021

**End Date:** 10/02/2021

Nineteen weeks of the internship will be in the park. A mandatory Career and Leadership Workshop will be held in Washington, D.C. from August 1 – 5, 2020.

**PLEASE DIRECT ANY QUESTIONS TO ENVIRONMENT FOR THE AMERICAS**

Email: [mosaics@environmentamericas.org](mailto:mosaics@environmentamericas.org)