

✉ charlievweiss@gmail.com 🌐 charliesharman.com 📞 425-737-8373

## EDUCATION

---

### University of Washington

Wetland Science and Management Certificate 2023

### Franklin W. Olin College of Engineering

Engineering: Robotics 3.8GPA 2020

## EMPLOYMENT

---

### US Fish and Wildlife Service and Student Conservation Association

GIS Wetland Intern · Apr. 2022 to Feb. 2023 · Anchorage, AK (Field) and Seattle, WA (Remote)

Updated all wetland boundaries and classifications on Joint Base Elmendorf-Richardson (JBER) for the National Wetlands Inventory (NWI)

- Surveyed over 50 sites on a controlled-access military base to judge wetland characteristics based on vegetation, soils, and hydrology using NWI methods (with Cowardin classifications) in challenging physical conditions
- Digitized over 3000 wetlands in ArcGIS Pro by correlating wetland characteristics in the field to photo signatures in CIR, RGB, and LiDAR imagery and other ancillary data
- Presented technical information to a diverse audience of USFWS and JBER partners with reports and presentations (one of which was adapted into NWI training materials after positive feedback from the audience)
- Created an extensive signature library of Cowardin codes with field descriptions, photos, and imagery signatures, available at [charliesharman.com/writing-samples.html](http://charliesharman.com/writing-samples.html)
- Navigated difficult terrain in adverse weather conditions on foot using GPS and paper maps, and drove a 4x4 vehicle through unmarked and unpaved roads
- Completed a week-long US Army Corps of Engineers (USACE) Wetland Delineation Training (Alaska Region) including classroom and field training

### Ecological Succession Field Work

Field Research Assistant · June 2021 · Glacier Bay National Park

Conducted field work in long-term study of primary forest succession

- Safely camped at five backcountry marine environment sites with four other team members, enduring poor weather, biting insects, and bear country over the course of 2.5 weeks
- Successfully located and re-established all 50 plots (established some 30 years ago) spread throughout rugged backcountry terrain using sketch maps, GPS, compass, and visual cues
- Documented plot status, including thousands of tree positions and DBH measurements, as well as quantitative and qualitative descriptions of understory flora, soil sampling, etc.

### Washington Conservation Corps

Crew Member, Safety Officer · Oct. 2020 to June 2021 · Renton, WA

Restored native ecosystems on public lands within King County

- Gained a hands-on perspective of how restoration projects are implemented
- Developed strong plant identification skills while personally planting over 4000 native trees, shrubs, and live stakes and removing noxious weeds in all conditions, including areas requiring waders
- Performed intense physical labor (manually digging out Himalayan Blackberry, carrying bundles of live stakes, and using various hand and power tools) for at least 8 hours per day in all weather conditions (freezing, rain, heat)
- As Safety Officer, lead daily talks addressing site conditions, proper gear and conduct, COVID-19 safety protocols, and emergency plans; occasionally conducted safety scenarios

## VOLUNTEERING

---

### Seattle Aquarium · Tide Pool Interpreter and Naturalist

Mar. 2022 to Current · Seattle, WA

- Encourage empathy toward native marine life by guiding guests to gently touch tide pool creatures in an indoor exhibit while sharing interesting facts and stories
- Interpret salmon behavior and importance to the Pacific Northwest to visitors at various parks along the Cedar River during spawning season

### Puget Sound Bird Observatory · Bird bander

Aug. 2021 to Oct. 2021 · Graham, WA

- Banded passerine birds on early weekend mornings, including mist-net setup, bird extraction, and age classification using the Wolfe-Rider-Pyle system

## SKILLS

---

**TECHNICAL:** ArcGIS Pro, ArcGIS Online, Esri Field Maps, Programming (Python, Git, etc.), CAD/Design (Solidworks, etc.), Fabrication (Mill/Lathe, MIG Welding, etc.), Excel

**TOOLS:** Auger, Brushcutter, Pesticide Applicators, Various hand tools