Community-Based Indigenous Science for Restoration & Reconciliation: Natural Resource Survey Internship

Project Summary

CSU's Native American Cultural Center (NACC) in partnership with the Warner Natural College of Natural Resources and CSU Extension is preparing a 70-acre field site and programming for community-based Indigenous science education to address a longstanding need for Indigenous education. This internship will support the design for this program, serving CSU's commitments as a land grant institution and needs identified by our local Native community. Long-term project goals include engaging Indigenous and climate resilient design principles to develop a site that will support experiential learning and research opportunities for students, faculty, staff, and community members. Research, outreach, and activities at this field site will broadly focus on ecological restoration and cultural reconciliation efforts. We have identified two extension internship opportunities centering around our unifying project theme: Community-Based Indigenous Science for Restoration & Reconciliation, including a natural resource survey and Indigenous and climate-resilient landscape design.

Internship Goals & Objectives

Goal: The intern will provide baseline data on the natural resources at the property to support development of an Indigenous community-based Indigenous science program focused on restoration and reconciliation.

- Objective 1 Research culturally important plant species native to the area through oral history archive records & literature searches.
- Objective 2: Conduct a survey of plant and soil resources at the property.
- Objective 3: Draft a native plant guide for the property and local region, including a list of target species and strategies for propagation and restoration efforts, and identify local knowledge keepers for future interviews.
- Objective 4: Identify suitable locations for an on-site climate monitoring station and culturally important native plant garden.
- Objective 5: Develop a presentation of research to relevant stakeholders.

Student Learning Outcomes

- 1. Identify culturally important native plant species in Northern Colorado.
- 2. Conduct a survey of plant and soil
- 3. Develop interdisciplinary skill sets in applied ecological restoration,
- 4. stakeholder engagement, natural resource management, data organization, analysis, and visualization.
- 5. Research approaches that integrate quantitative and qualitative data.
- 6. *Present* research findings in a variety of formats including a conference poster, social media posts, and Extension-style fact sheets.

Internship Mentors

- Kat Caswell, Extension Regional Specialist Small Acreage Management, Colorado State University Extension
- Dominique David-Chavez, Assistant Professor of Indigenous Natural Resource Stewardship,
 Dept. of Forest and Rangeland Stewardship; Director, Indigenous Land & Data Stewards Lab
- Caroline Havrilla, Assistant Professor of Rangeland Ecology and Management, Dept. of Forest and Rangeland Stewardship; Director, Dryland Ecology and Management Lab
- Ty Smith, Director, CSU Native American Cultural Center

Location

The intern will work both at Colorado State University and at the program field site located on County Road 82E in Livermore, Colorado.