Sustainability Fellowship

Sustainable Approaches to Build the Salt Marsh Platform
UNH - Jackson Estuarine Laboratory - Coastal Habitat Restoration Team
Durham, NH

Summary:
While salt marshes provide a variety of critical services to their surrounding ecosystems and communities, they face significant risk in the face of projected sea level rise. UNH’s Coastal Habitat Restoration Team, based at Jackson Estuarine Laboratory (JEL), is leading the way for innovative, climate adaption techniques in coastal wetland restoration in NH and the region. Our team, comprised of experts in coastal ecology, engineering, consensus building, and outreach and education, is just beginning our work in a National Estuarine Research Reserve (NERR) Science Collaborative Project to use experimental approaches to evaluate Thin Layer Sediment Addition (TLS) to build salt marsh capital in the face of accelerated sea level rise. The TLS project is specifically designed to develop a sustainable technique that land managers can use to help coastal wetlands across the country keep pace with projected sea level rise. Eight NERRs are participating in our national study, including Great Bay. This project has a significant field component coupled with outreach objectives and an opportunity to shape local, state and national policy on new, innovative restoration techniques.

We seek a Sustainability Fellow to help build and strengthen the importance of sustainability in this new and growing field of climate adaptation for threatened coastal wetland habitats with a local and national audience. The Fellow will participate in the activities of this NH-based portion of the project, and also visit and engage with our partners at several of the other NERR sites (e.g. Narragansett Bay, RI or Waquoit Bay, MA at the very least) to better assess the broader issues associated with this project, noting important similarities and differences in the challenges of each reserve and their regional context.

Deliverables:
- Develop a conceptual framework to integrate sustainability concepts into each NERR’s outreach materials
- Contribute to policy and guideline development for TLD on local, state and national scales

Impact:
Since this NH-based salt marsh research effort is critical to the success of the national study, the sustainability concepts developed by the Fellow will be directly relevant and
applicable to the seven other NERRs and will help promote this work on a national scale. The Fellow would contribute not only to our focused efforts in NH, but also to the national forum on TLS by developing an approach that integrates sustainability concepts and learning objectives for use in outreach, education, and policy development around this increasingly important technique for building resilience in our coastal marshes.

Location: UNH-JEL, 85 Adams Point Rd, Durham, NH
Time commitment: 40 hours per week, June 4-August 17, 2018
Compensation: $6000 stipend

Desired Qualifications:
- Background in biology, ecology, environmental management/policy, or related field
- Willingness to participate in wetland field work
- Comfortable engaging with public and land managers
- Experience creating outreach materials
- Excellent communication skills, including ability to communicate results in writing and public forum

UNHSI Sustainability program eligibility:
Graduate students, exceptional undergraduate students, and recent graduates are eligible. We will encourage, but not require, an academic sponsor or reference for each fellow, and where possible we will ask that course credits are awarded.

Supervision, Training, Mentoring and Evaluation:
This fellow will receive supervision from: Gregg Moore, Associate Research Professor of Biological Sciences; David Burdick, Associate Research Professor of Natural Resources; Catherine Ashcraft, Associate Professor of Natural Resources; Alyson Eberhardt, Coastal Ecosystem Specialist of NH Sea Grant/ UNH Cooperative Extension, participating NERR Managers, and mentoring and extensive professional development offerings from UNHSI.

Fellows will be expected to participate in the following MANDATORY events:
- A three-day, two-night orientation in Durham, NH, May 29-31. Lodging and meals will be provided. A limited number of travel scholarships will be available to assist with transportation to Durham.
- Weekly webinars during the course of the 10-week fellowship.
- Midterm project presentations to UNHSI staff, faculty and relevant project partners in Durham, NH, July 12. Travel support provided.
- Final project presentations to UNHSI staff, faculty and relevant project partners in Durham, NH, August 10. Travel support provided.

Apply by February 14 at www.sustainableunh.unh.edu/sustainability-fellows.