

Rubenstein School of Environment and Natural Resources

University of Vermont

Perennial Summer Internship Program - 2024

Internship Title: Invasive Species Field Technician

Internship Site: Mad River Valley (Waitsfield, Warren, Fayston, VT)

Description:

Background – The world-renowned biologist E. O. Wilson has stated that invasive species are the second leading cause of biodiversity loss. The Vermont Agency for Natural Resources confirms this finding, stating that the second greatest threat to biodiversity, in Vermont and across the world, is the proliferation of invasive species. According to Vermont Invasives - “Vermont Non-native, invasive terrestrial plants are one of the greatest threats to the health of Northeastern forests. They negatively impact forest regeneration, forest structure, ecosystem function, recreation and wildlife habitat, are costly to manage, and can be harmful to human health.” The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services reports that an estimated 1 million species currently face global extinction.

Concerned about this threat to the health and functioning of ecosystems the three conservation commissions in the Mad River Valley have been working for years, with some notable success, to address a significant infestation of Japanese Knotweed (*Reynoutria japonica*). A concentrated effort has been made to halt its spread along upper elevation roadways and waterways and to restore floodplain forests along the Mad River. Experts from U.S. Fish & Wildlife and leading conservation organizations in Vermont have noted that these initiatives represent some of the best local work on Japanese Knotweed in the state. This work has been accomplished through a partnership between members of the Warren, Waittsfield and Fayston Conservations Commissions, community volunteers and UVM interns. In 2023, eight interns were engaged by the three commissions.

For 2024, the three towns are looking to engage a team of interns to serve as Invasive Species Field Technicians.

The Technicians, who would work together on a team, will:

- continue efforts to arrest the spread, using manual methods, of Japanese Knotweed in identified locations in Warren, Waitsfield, and Fayston;
- initiate targeted work to control selected other terrestrial plant invasive species in the Mad River Valley;
- use social media, newspaper articles on in-person educational events to educate community members, including young students, about invasive species and how best to manage them;
- work alongside community volunteers in invasive species management;
- conduct an ecological assessment of terrestrial plant invasive species in Warren, Waitsfield and Fayston (involving identification and mapping of such species); and
- research on evidence-based management practices for controlling other terrestrial plant invasive species targeted for attention in 2024.

Overall, we are looking for the team to help the three valley towns advance their work to create a model approach for invasive terrestrial plant management and habitat restoration that serves as a guide for action and a resource and inspiration for other towns in the state and the Vermont Agency for Natural Resources (ANR)

We engaged a great UVM team of interns in 2023. The members made a real difference. We can arrange for candidates interested in this role to speak with them about their experiences. Here is what one of them had to say about her experience:

My time as a Perennial Intern with Waitsfield, Warren, and Fayston's Knotweed Project was nothing short of incredible. I got hands-on experience managing a project between three towns and coordinating a crew of 7 other interns. This project allowed us each to focus on what was interesting to us as students; there is something for everyone in this project! Some interns took on GIS work, literature reviews and research to further our knowledge on invasives in Vermont, social media, and community outreach, all of course in addition to removing Itadori Knotweed. Not only was I able to dive into furthering my leadership, outreach, and managerial skills, I also had the privilege of working in one of the most beautiful parts of Vermont. Days were spent in beautiful forests, rivers, next to waterfalls, and pastures with scenic backdrops of Vermont's Green Mountains.

One of my favorite parts of this project was connecting with the community members. Volunteer days with the community were spent digging holes and laughing alongside dedicated volunteers. By the end of the internship, we all felt a deep connection to the Mad River ecosystem and the wonderful community there. One of the most rewarding parts of the work was seeing the native plants begin to grow back towards the end of our internships. A memory that sticks out to me was at one of our larger plots we worked at weekly, the Lareau Swim Hole. Here, we completed a complete dig of knotweed crowns along a section of the Mad River. After digging up root crowns, one of my fellow interns spread a conservation seed mix. On the last day of my internship, I noticed a milkweed plant with a tiny monarch caterpillar that had decided to make this plant its new home. In a place that had once been a complete monoculture of Knotweed was now full of native grasses, a view of the river, and a home for a monarch caterpillar.

This work ended up being one of the most rewarding and fun jobs I've had. I learned so much about invasives, as well as growing as a leader and person. I've been able to apply so much of what I learned this summer to my classes and job applications. I am more than happy to speak with any interested applicants and answer any questions you may have. You can reach me at apcray@uvm.edu or (802)-989-0230.

Desired qualifications/skills/coursework:

Ability to work well with others.

GIS mapping and invasive species interest and/or coursework.

Passionate about restoring healthy, functioning ecosystems and dealing with the threat presented by invasive species.

Interested in educating community members about invasive species and how they can best be managed.

***Rubenstein students currently in their sophomore and junior years are eligible to apply. Earning Independent Study or Internship credit through the Rubenstein Internship Program is required. ***

Supervision:

The Invasive Species Field Technicians would be supervised and supported and intern Project Manager and by the Chairs of the three Conservation Commissions – Jito Coleman from Warren, Curt Lindberg from Waitsfield, and Andrea Henderson from Fayston. They all have extensive experience in conservation and an interest in mentoring young people. Andrea is a terrific organizer. Jito, an engineer by training, has extensive experience with Japanese Knotweed management. Curt is playing a central role in the creation of a statewide coalition of conservation organizations devoted to biodiversity protection. Education about invasive species and their management will also be offered to all interns by invasive species ecologists. The Project Coordinator and conservation commission leaders will strive to make this summer internship gratifying, educational, and enjoyable.

Each day the interns will work on a site or sites in a designated town. Guidance on management of the sites will be provided by the Project Coordinator and the appropriate Conservation Commission member. There is close collaboration among the three Conservation Commissions on invasive species work, methods, evaluation and scheduling.

Start and End Dates: Early June – Late August, 2023 (exact start/end dates are negotiable)

Total Hours: 24 hours/week for 12 weeks)

Compensation: \$18.00/hour

How to apply:

1. Click the following link to view the Rubenstein Perennial Internship Descriptions in Handshake:

<https://uvm.joinhandshake.com/employers/226837>

- If asked to log in: click “UVM Net ID Login” & login.
- Click the Favorite button to enable easier searches in the future.

2. Click “View All Jobs” in Jobs at Rubenstein Perennial Internship Program box on right side of page.

3. You should now see the great Perennial Internship opportunities! Click “View Details” to learn more about each position.

- Please do take the time to carefully read each individual description so that you don’t miss a great opportunity by judging an internship solely on its title.
- You may apply for up to three Perennial Internships.
- All applications are due by **11:59pm, on Monday, February 5th, 2024.**

4. You’ll need to upload both required documents in Handshake before you can apply for any Perennial Internship:

- Click on your name at top right of screen in Handshake
- Select Documents.

5. Please upload all documents as pdfs. The following are the required documents:

- Resume
- Cover Letter

i. You should write and upload a unique cover letter for each position to which you are applying.

ii. In your cover letter, provide the name & contact information for at least one professional reference. This could be someone who supervised you in a past work/internship/volunteer position, or a professor or teacher, etc. The person listed should not be the person who completes your recommendation form.

6. In addition to the documents listed above, a **recommendation form will need to be completed by a Rubenstein faculty, graduate student, or staff member of your choosing.** When you ask your recommender if they are willing to complete the form to support your application, please provide your recommender:

- This link: [RECOMMENDATION FORM](#)
- Only one recommendation form needs to be completed regardless of how many Perennial Internships you are applying for.
- Your recommender will complete & submit this form online and then your recommendation will be confidentially added to your application(s). This recommendation form needs to be submitted by the February 5th, deadline.

7. Make sure that your resume and cover letter(s) are as strong as they can be! Utilize the resources around you:

- The Rubenstein Student Advisory Board members are great at reviewing resumes/cover letters and providing helpful feedback! Email the SAB to schedule an appointment after the start of the semester, or stop by their peer mentoring hours when the Spring semester starts (schedule to be posted by Jan 16, 2024): rsenrsab@uvm.edu
- Get your resume and cover letter reviewed by a Career Counselor at the Career Center. You can check the Career Center’s drop-in hours [here](#). The Career Center also offers a guide on building your resume available [here](#).
- Get connected with folks in the Rubenstein Student Services Office for resume and cover letter review during drop-in hours:

Meghan Young – Tuesdays, 10:00am-12:00pm, Aiken 219 Emily LeForce – Thursdays, 1:00-3:00pm, Aiken 220 Hub
Cathy Shiga-Gattullo – Mondays, 1:00-3:00pm, Aiken 220 Hub

8. If you are selected to interview for a Perennial Internship, you will be contacted by the site to set up an interview during late February to early March.

