



Perennial Internship Program – Summer 2025

Internship Position Description

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, Waitsfield and Fayston Conservations Commissions, community volunteers and UVM interns. For a number of years now Perennial Interns have contributed to this conservation work. In 2024, six interns were engaged by the three commissions.

For 2025, the three towns are looking to engage a team of interns to serve as Invasive Species Field Technicians.

The Technicians, who will 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;
- work with two invasive species ecologists from UVM – Noelia Barrios-Garcia and Mariano Rodriguez-Cabal – to help ensure that the invasives and habitat restoration work in the Valley continues to advance based on the latest scientific research;
- use the newly created Valley-wide invasive species GIS system and document invasive management efforts using the system;
- take measurements at each of the monitoring plots and record the data in the GIS system; and
- undertake research on evidence-based management practices for controlling other terrestrial plant invasive species targeted for attention in 2025.

Much of this work will take place outdoors in typical summer weather conditions. When outside conditions are not safe (i.e., during thunderstorms), the interns will move to one of several inside locations in the Valley to work on tasks best done indoors. Knotweed removal involves physical work with shovels and picks. Some locations will require navigating some steep river and stream banks. Attention to safety is emphasized and is guided by a safety policy.

Overall, we are looking for the team to help the three valley towns advance their ongoing 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).

Interns will need to have transportation to the Mad River Valley and among various work sites in the Valley. In previous years, interns have carpooled.

We engaged a great UVM team of six interns in 2024. 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 a 2023 intern, Ashely Cray, 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 (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.

Supervision:

The Invasive Species Field Technicians will be supervised and supported 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 and especially interested in community engagement. 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 Noelia Barrios-Garcia, and Mariano Rodriguez-Cabal. The Project Coordinator and conservation commission leaders will strive to make this summer internship gratifying, educational, and enjoyable.

Each day, weather permitting, 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, 2025 (exact start/end dates to be determined)

Total Hours: 24 hours/week for 12 weeks

Compensation: \$18.00/hour

How to apply:

Rubenstein students who will have completed their sophomore or junior year by summer 2025 are eligible to apply. Students graduating in May 2025 are not eligible to apply. Earning Independent Study or Internship credit through the Rubenstein Internship Program is required.

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 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 Friday, February 7th, 2025.**

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
 - You should write and upload a unique cover letter for each position to which you are applying.
 - 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 7th, deadline.

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

- 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](#).
- Set up an appointment with one of Rubenstein's Career Coaches - [Emily LeForce](#) or [Cathy Shiga-Gattullo](#) - or with PIP Coordinator, [Sarah Mell](#). Sarah Mell will also be available on Wednesdays from 1pm-3pm for PIP Drop-ins! Just swing by Aiken 220 to connect!

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.