Knotweed in the Mad River Valley

A Midsummer Report from the Intern Team



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This summer the knotweed interns are back in the Valley helping the Warren and Waitsfield Conservation Commissions' collaborative effort to manage Japanese Knotweed. This year we have a group of five college students and recent college graduates all from the University of Vermont. To manage the knotweed, our interns mainly go out into the field to cut, pull, and dig up the invasive plants at over 150 individual sites between Warren and Waitsfield. When they are not extracting knotweed, the team's extra efforts go into exploring alternative management techniques like mowing and smothering and finding ways to interact with the local community and get them involved. Our local volunteers are playing a crucial role this year as well, as they are working alongside the interns to help achieve their goals.

The Town of Warren

Sites: Warren has been tackling the same sites they have been working on for the past few summers. These include:

- Brook Road
- East Warren Road
- Fuller Hill Road
- Hazel Brown Road
- Lincoln Gap
- Plunkton Road

- Prickly Mountain Road
- Quayl Bend
- Roxbury Gap
- School Road
- The Covered Bridge
- Wabanaki Park

The interns have mainly been taking care of these sites, but a few town volunteers have been manning a handful of sites to help out. In addition to these previously worked on sites, the interns have also been taking on Riverside Park and 15 sites on the upper Mad River in the Granville Gulf this summer. As of this past week, every site has been visited 2 to 3 times so far this summer and are practically cleared.

Achievements: In addition to management strategies and physically controlling the knotweed, the team has also been very interested in the scientific and technological aspects of knotweed growth and movement. We have been able to meet with researchers Brian Colleran and Rebecca Diehl who have shared their work in related fields and have helped us consider what the future of knotweed research and management might look like. Inspired by this, two of our interns have been working on mapping knotweed locations all over Warren using GIS. This has given us a large scale picture of what the knotweed problem looks like in the town. They have additionally been using their GIS skills to track knotweed in Warren.

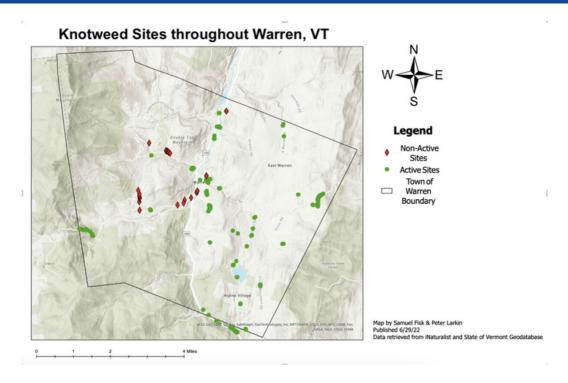


Figure 1. Final product of GIS mapping of knotweed in Warren, VT.

Community outreach is another aspect of the team's work that is being heavily focused on this year. Throughout the month of June, the team had done personal consultations for residents in the town. The team would spend a couple hours at each place showing the landowners how to safely practice knotweed removal and how to effectively do so following our visit. This was a great one-on-one experience for both the team and the clients.

Improved signage has been another goal. Our posters from previous years have been refurbished to encompass all of our management strategies and go into greater detail on each poster. These have been posted at all active sites throughout both Warren and Waitsfield. They have served as great conversation starters for people who happen to stop by while we are at work. To reach a wider audience, we have also created an Instagram page: emadriverknotweed, where we post day to day happenings, announcements, and more exciting news.



Figure 2. Updated knotweed informational poster.



Figure 3. Knotweed signage posted at Lareau Swimming Hole in Waitsfield, VT.

The Town of Waitsfield

Sites: Waitsfield has joined the local mission to eradicate knotweed in their town this summer. The interns join Curt Lindburg, Bob Cook and twenty volunteers to tackle knotweed at an array of town sites. The group has put in 550 hours towards knotweed management so far this season. The Knotweed management sites include:

- Bridge Street
- Brook Road*
- Center Fayston Road
- East Warren Road
- Floodwoods Road*
- Lareau Swimming Hole
- North Road*
- Old County Road

- Palmer Hill Road*
- Reed Road*
- Several sites along Route 100
- Sherman Road*
- Ski Valley Road
- The Tardy Property
- Tremblay Road*
- West Greenway*

^{*} Some of these sites are called "Adopt Some Knot" – locations where volunteers assume full responsibility for managing Knotweed throughout the growing season.

Achievements: The Waitsfield Conservation Commission has been doing a lot of community outreach by holding educational sessions at Lareau, holding a Zoom educational session, and focusing efforts on reaching out to young people. In late June, we were joined by a small group from Neck of the Woods, a local child care center, who joined us on our knotweed mission as part of their community-service-based learning. The kids (4th and 5th graders) did an impressive job in clearing a site down at West Greenway and were very enthusiastic about the work. The entire student body and teachers from the new Mysa School also got their hands in the weeds while participating in a Knotweed workshop on the river. Another older group of students we were fortunate enough to meet with were part of the Azerbaijani Youth Environmental Program (AYEP). Traveling all the way from Central Asia, a group of Azerbaijani students came to the Valley to experience living in an American home. While visiting the Northeast, they learned about Knotweed as part of their sustainability, service-learning education. Their visit was organized by Waitsfield-base PH-International. They lended quite the hand at Lareau Swimming Hole and had a fun time



Figure 4. The Azerbaijani Youth Environmental Program (AYEP) and the interns at Lareau Swimming Hole.

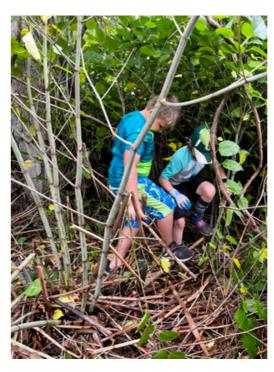


Figure 5. Some students from Neck of the Woods pulling up knotweed at West Greenway.

Community Days

One of the most notable additions to our program this year has been the weekly community days hosted both in Warren and Waitsfield, which you may have seen posted in the Valley Reporter. These evenings serve as an opportunity for the community to come help us achieve knotweed eradication and for them to learn more about the process. Warren hosts their community day from 4 PM to 6 PM every Wednesday, focusing on a new site each week. We have mainly been working on Quayl Bend and Riverside Park, as these sites have the most work to be done. At both sites we have been implementing mowing and drying and have focused a lot of effort on clearing the riverbanks.

Waitsfield hosts its community day, dubbed "Knot Thursday", each Thursday from 4 PM to 6 PM. Despite a few rainy days, these have been quite the success. Lareau Swimming Hole and Bridge Street have been the focus of these days so far. More recently, the team has been taking on the Tardy Property, a hidden town treasure that has plenty of knotweed to offer. Volunteers are feeling proud of their work to restore healthier ecosystems and beautifying special places in Waitsfield.



Figure 6. A group of volunteers during Knot Thursday.



Figure 7. The interns during Knot Thursday at our new site, the Tardy Property.

Our Impacts

Amongst our many small achievements, our biggest impact this summer has been growing the community of people who take interest in the Knotweed Project. From talking to community members one-on-one, it is clear we have successfully communicated the urgency of the knotweed problem in the Mad River Valley. A fire has ignited in most people, and they want to do something about it. There has been overwhelming support and encouragement from the community which has enabled us to take on more sites than we ever thought we could manage.

The regular attention to the sites has also shown to have weakened the strength of the knotweed. At many sites we have found the knotweed is easier to pull up and comes back in much smaller, weaker shoots. The time and effort it takes to manage each site has been quickly declining, which will allow us more time to focus on new sites. The work has been very gratifying for everyone since the results of our work are so prevalent.

Though the summer interns come and go each year, what sticks around is the strong message we leave behind. With enough support and persistence from the community, the knotweed can be maintained, if not fully eradicated, and the Valley's beauty will persist.







