

## GREENFIELD

# Small group, big impact

Floodplain Forest Restoration Project forms community while removing invasive plants

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For the Recorder

**GREENFIELD** — Though Japanese knotweed towers over Greenfield resident Wisty Rorabacher at the Green River Swimming and Recreation Area, the scale of the invasive plant species is not a source of intimidation for Rorabacher and her group, the Floodplain Forest Restoration Project.

Instead, the strong presence of invasive species is a motivator for the Floodplain Forest Restoration Project, a community group made up of six consistent volunteers and six supportive but less active members. The group targets invasive species at the Green River Swimming and Recreation Area and the adjacent forest, namely bitter-sweet vine, garlic mustard and Japanese knotweed, which is known for its tendency to grow in dense clusters with thick, bamboo-like stems.

Rorabacher said she got the idea for the Floodplain Forest Restoration Project, which meets year-round on Tuesdays and Sundays from 10 a.m. to noon, several years ago while she was



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**Wisty Rorabacher sits in a patch of trimmed Japanese knotweed.**

walking around the recreation area and putting up homemade signs identifying the native plants.

"This area is so rich in native wildflowers, native plants in general," Rorabacher said. "And after I was coming here for several years and then walking along ... looking at the plants, that's when I really became aware of the invasives getting

closer and closer."

The threat of invasive species is multi-faceted. For example, invasive species can dominate an area in such a way that they choke out native plants and throw off environmental balance, which creates a ripple effect throughout the ecosystem.

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# Group works to remove invasive plants

## PLANTS FROM A1

"There are even insects that will only go to one type of plant," Rorabacher said. "So if you start to get things out of balance, the insect population gets out of balance. What gets pollinated gets out of balance. It starts affecting wildlife. The implications are huge."

"[Invasive plant species] are doing dramatic damage to our birds, our insects, our mammals in general," said Karro Frost, a conservation planning botanist with Mass-Wildlife's Natural Heritage and Endangered Species Program who worked with Rorabacher on this project. "They're killing our trees. We really, really need to make this a top priority."

The effort first began to take shape about five years ago, when Rorabacher asked the Greenfield Recreation Department, which manages the swimming and recreation area, if she could remove the invasive species. The department thought it was a good idea and referred Rorabacher to the Greenfield Conservation Commission, which was equally supportive. Finally, Rorabacher was directed to the Natural Heritage and Endangered Species Program, where she had to fill out an application in July 2021 to be approved for the work.

The program maps out where rare and endangered plants are generally found in Massachusetts.

When Rorabacher submitted her habitat management plan to the Natural Heritage and Endangered Species Program, it turned out that there was data of rare plants generally being found in the Green River area.

That being the case, Rorabacher had to hire a botanist to identify the location of rare plants in the area — something that is confidential outside of approved individuals — to avoid harming these plants during the removal of the invasive species.

Rorabacher hired Adam Kohl, a freelance botanist at the time who now works as a field botanist and entomologist at Oxbow Associates Inc., to complete the rare plant survey in the summer of 2022. Kohl documented each rare plant species and their GPS location while taking photos, writing descriptions and making a list of look-alike species. All of this information was then submitted to the Natural Heritage and Endangered Species Program, which approved Rorabacher's plan in August 2023.

Finally, in October 2023, Rorabacher could start removing the invasive plants. Now, she had to assemble a group of volunteers. Some of the recruits were fans of Rorabacher's signs throughout the area. Some of them were friends or neighbors, or friends of neighbors — as in the case of Claire Hilsinger.

Hilsinger, a professional botanist, found out about the Floodplain Forest Restoration Project through her neighbor, Dorothea Sotiros. When Hilsinger got involved, Rorabacher had just finished the extensive paperwork requirements.

"[Rorabacher] was ready to get boots on the ground," Hilsinger recalled. "That's when I came in and attended their first meeting."

Hilsinger's expertise as a botanist helped the Floodplain

Forest Restoration Project's efforts to approach invasives — particularly Japanese knotweed — in a less conventional way. The group uses a method called carbohydrate starvation. Instead of using chemicals or razing the ground where a patch of knotweed has grown, the volunteers trim the knotweed down to prevent it from absorbing sufficient sunlight through its leaves.

"I haven't killed the plant," Rorabacher noted. "It's going to come back. But if we stay on this, and it will take numerous years, but believe it or not, every year it will get less so."

This method, which is gentler than others, does not disturb the ground on which the knotweed grows, allowing other plants to continue to thrive. It's also cost-effective, an important aspect for a small group of volunteers.

"We're learning how to manage and figure out how to live with the forest in a way that's healthy for us and for the forest," Rorabacher said.

Hilsinger said the limiting factor of carbohydrate starvation is the ambition and number of volunteers required to carry out the task.

"It can be depressing," Hilsinger said, "when you see all of these patches of this monoculture of knotweed. ... I think we have something really special with this crew because everyone is just so excited to keep on doing the work."

The group's collective excitement has turned it into a strong community that Rorabacher called a "really nice social support group."

"We support each other. We all understand the importance

of the work that we're doing," Hilsinger added.

The group, though still small in numbers, has enlisted the help of other community members. Students at The Academy at Charlemont helped remove plants on May 28, and since January, the Franklin County Sheriff's Office has participated in invasive plant removal through a community service program where inmates help with non-profit and municipal efforts across Franklin County.

The group's success is something Rorabacher is proud of. She said this is the Floodplain Forest Restoration Project's second active summer, and there is a noticeable difference in the volume of Japanese knotweed and other invasives. But the work is far from over, and the group is looking for volunteers.

"It would be great for people to just connect about knotweed and invasives in general," Hilsinger said, "and, you know, to just reach out to us if they wanted to help us."

Rorabacher noted it's not necessary for someone to be available at every workday where volunteers meet to remove the invasive plants; even people who are only available on some occasions are welcome to participate.

Hilsinger said joining the Floodplain Forest Restoration Project opened her eyes to a community she had been searching for for a long time.

"I'd lived all over the country, and had always wanted to be involved with a community like this, that prioritizes biodiversity," Hilsinger said. "I had never, never found that in another community. So I'm just so excited to be a part of it."