

Westchester Land Trust -Groundwork Hudson Valley Internship Partnership

Summary: During the Summer of 2021, Westchester Land Trust (WLT) hired two summer interns, Briana Marcano and Erick Rosa. Briana and Erick are alumni of the Groundwork Hudson Valley's (GHV) "Green Team," an initiative that employs youth from Yonkers public schools to work as a team on environmental projects. The internship was 10-weeks long, with 30 hours of immersive work scheduled per week. As part of a partnership between WLT and GHV, the internship was advertised to Green Team alumni. In addition, WLT hired the Green Team for 4 days of fieldwork, and Briana and Erick had the opportunity to lead youth crews. During the internship, Briana and Erick also worked on various projects across WLT's properties, including mapping beech leaf disease, an emerging invasive forest pathogen in Pound Ridge, maintaining preserve trails from Mamaroneck to Lewisboro, removing invasive plants to improve the local ecology of preserves, leading volunteer days, and designing and implementing their own independent projects. At the end of the internship, the interns wrote a brief report on their experiences, and the WLT Preserve Manager conducted exit interviews. The interns were largely managed by the WLT Preserve Manager, John Zeiger.



Erick and Briana at the Westchester Wilderness Walk/ Zofnass Family Preserve in Pound Ridge.

Objectives:

1. Create a “career ladder” for Green Team alumni to encourage them to continue to work in the environmental field or engage with the conservation community.
2. Develop interns’ professional skills, especially leadership and communications.
3. Encourage and support applications from diverse socioeconomic backgrounds.
4. Manage Invasive Species across WLT preserves.

Deliverables:

1. *Hire two summer interns for summer projects:* Briana and Erick, both Green Team alumni, were hired for a paid 10-week internship during which they accomplished many stewardship tasks, including invasive removal, preparation for forest restoration, trail maintenance and communication work.
2. *Schedule 4 days of work with the Green Team:* Green team crew was scheduled for 4 days of work.
3. *Interns to lead a volunteer day:* Although the interns’ mile a minute removal volunteer day was not well-attended, with just 1 attendee and 1.25 hours volunteered, 2,500 mile a minute vines were hand pulled and the “orchard” management unit of the preserve was cleared of its mile a minute infestation. Furthermore, the interns had a plethora of other leadership opportunities, including leading 3 farm volunteer days with about 20 attendees of all ages, as well as leading crews of Green Team members to install bog bridges and rebuild deer fence.
4. *Prominently mention LH PRISM in communications regarding the project:* LH PRISM was tagged a total of 4 times on WLT social media during the internship; dates and details are discussed below. A video was produced and shared with LH PRISM, and short written reflections by the interns are attached.
5. *Supervise Green Team fieldwork:* WLT staff worked with the Green Team to accomplish all stated goals, including but not limited to, rebuilding 900’ of deer fence, installing 115’ of bog bridge, planting 20 native wildflowers, and removing invasive species, including 30,000 mile a minute vines.
6. *Evaluate and report on success of Internship:* Project success was evaluated, and WLT’s Preserve Manager conducted exit interviews during their last day of work. The success of the project is discussed in the report below. WLT’s Preserve Manager reported on the internship

partnership to LH PRISM at the fall meeting, and Briana presented to the WLT board in a pre-recorded video.

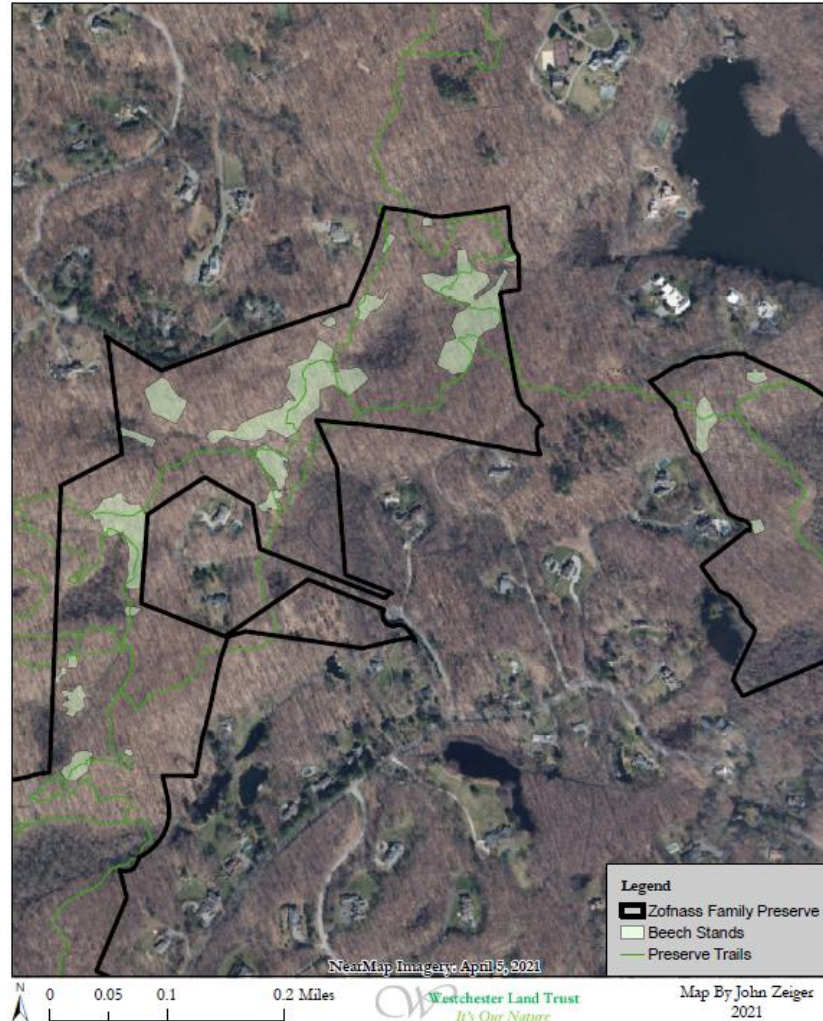
7. *iMapInvasives*: Invasive work was entered into iMapInvasives. Metrics are discussed below in the “Overlap with LH PRISM action plan” section of the report.

Overlap with LH PRISM action plan priorities:

Capacity Building: This project led to the expansion of WLT’s ability to regionally control invasive species by communicating about the work to the general public. WLT promoted LH PRISM and the work being accomplished as a result of your support through several posts on WLT’s social media. Interns created a short video on the spread of beech-leaf disease, which was shared on WLT social media on 8/4/2021 and prominently mentioned and tagged LH PRISM (1.A.2). LH PRISM was also tagged in a post on 7/27/2021 about the interns’ work removing mile a minute during a volunteer event the interns led (1.A.5; 1.C.3). In total, LH PRISM was tagged 2 other times, on 8/6 and 9/2 2021, during the summer of 2021 in posts relating to the Green Team work (1.A.5). Erick wrote a short article on beech leaf disease, which has yet to be published. In addition, Briana and Erick were featured on the cover and in an article of WLT’s Annual Report newsletter which gets mailed to over 2,500 households. The article connects the stewardship work that the interns and the Green Team assisted with, including removing invasive vines, to the bigger picture impacts of climate change. Finally, of course, this project supported WLT’s internship program (1.D.1).

Conservation Targets: The work by WLT’s stewardship team including the interns advanced conservation targets. The removal of mile a minute promoted the growth of native vegetation, including white turtlehead, at Pine Croft Meadow Preserve in Lewisboro. White turtlehead is the host plant for the Baltimore Checkerspot Butterfly, and Pine Croft is one of only a couple documented sites for this species in Westchester County (2.C.3). Additionally, beech leaf disease monitoring by interns will lead to a better understanding of how to protect habitat for forest-interior specialist species at the Zofnass Family Preserve in Pound Ridge. Species include the Westchester County listed wood thrush, worm-eating warbler, and Cooper’s hawk, both of which have been observed on the preserve by WLT staff (2.C.3).

Zofnass Family Preserve/ Westchester Wilderness Walk *Beech Stands*



High percentage beech stands threatened by beech leaf disease mapped by WLT interns.

Strategic Invasive Species Management: Strategic invasive removal and management was one of the main focuses of the summer work. Interns were introduced to several tier 2 invasive species, such as linden viburnum and oriental photinia, and helped survey for beefsteak plant at WLT's Otter Creek Preserve in Mamaroneck (3.A.4; 3.E.1). Interns were a crucial part of WLT's suppression of mile a minute, a tier 3 invasive, across several preserves (3.E.2). Interns worked with the Preserve Manager to pilot a flame weeding project targeting Japanese barberry, multiflora rose and privet, as part of a project to suppress and treat tier 4 invasive shrubs in a degraded ash woodland at WLT's Hunter Brook Preserve. After treatment, trees will be planted on the site in spring 2022 (3.E.3; 3.G).

Education and Outreach: During the summer, interns were encouraged and supported in their

exploration of the natural world using iNaturalist. They were trained in how to use this program in the field and were asked to add to WLT's plant inventory using the application (4.B.1).

Invasive Removal Metrics:

Invasive Species	Location	Stems Treated	Area Treated	Hours Worked*
Mile a minute	Lewisboro	32500	2.5 acres	141.75
Tier 4 shrubs	Yorktown	>1000	0.5 acres	28.75
Mugwort	Mamaroneck	>1000	0.25 acres	5
Porcelain Berry	Mamaroneck	>250	0.25 acres	5
Beefsteak Plant	Mamaroneck	0	0.25 acres	1

*Hours worked include all staff and volunteers working with the interns

Results:

GHV Green Team work: In early August, Briana and Erick spent 4 days leading GHV's Green Team, comprised of 13 teens during the 2021 season, on projects at two of WLT's preserves. The Green Team spent one day at Pine Croft Meadow Preserve in Lewisboro removing invasive mile a minute vines that were strangling native trees and wildflowers, and three days building bog bridges, enhancing a deer enclosure fence, and planting wildflowers at Otter Creek Preserve in Mamaroneck. During this time, the Green Team crew leader told WLT staffers that this was "the hardest the Green Team worked all summer," indicating the interns' success at motivating and leading the Green Team crew. Erick later expressed in his exit interview that leading the Green Team was his favorite project, "the peak of the summer." The Green Team work is also an important recruiting tool for our internship program as we hope that working with the Green Team will introduce more youth to WLT who may apply for the internship in future years.



Erick leads a crew from the GHV Green Team building bog bridges at Otter Creek Preserve.

Leadership: The interns were given multiple opportunities to develop their leadership skills. They helped Allison Turcan, WLT’s farmer, lead 3 volunteer days at the food bank gardens at WLT’s headquarters, Sugar Hill Farm in Bedford Hills. They also worked with the Preserve Manager to lead an event removing mile a minute, a pernicious invasive vine, at Pine Croft Meadow Preserve in Lewisboro. Additionally, Briana and Erick led youth crews for 4 days while working with GHV at both Pine Croft Meadow Preserve and Otter Creek Preserve in Mamaroneck. When asked about his favorite part of the internship, Erick immediately said it was the “leadership opportunities.”

Communications: WLT staff worked with the interns to develop their communications skills. Since social media is an important way to communicate our work with the public, WLT organized an hour long “social media skills” workshop with a communication’s consultant, Jes Parker. The interns were encouraged to take photos while in the field. In the office, they developed captions and submitted the content to be added to WLT’s social media platforms. The interns also worked with the preserve manager and communications consultant to create a video explaining the threat of beech leaf disease, an emerging invasive forest pathogen, to the public. Midway through the internship, both interns delivered a 5-minute presentation on their work via Zoom to the summer meeting for the

Lower Hudson Partnership for Regional Invasive Species Management (LH PRISM). This presentation was viewed by about 50 participants at the meeting. At the end of the internship, Briana and Erick also spent several days writing a report on their independent projects and a reflection on their work experiences throughout the summer.

Professional skill development (workshops): The Preserve Manager organized 3 workshops to develop the interns' professional skills: social media skills, geographic information systems (GIS) and tool maintenance. The social media skills workshop was run by Jes Parker, a communications professional that WLT contracts. She explained the details and strategy of connecting with different audiences on Facebook, Instagram and Twitter. The GIS workshop was delivered by Land Projects Manager Steven DiFalco. Steven gave an overview of the importance and functionality of GIS software and guided the interns through a short practical exercise making polygons of dense stands of beech trees from data the interns helped collect in the field. Lastly, the tool maintenance and sharpening workshop was led by Mike Surdej, an advisory board member of WLT. Mike has assisted WLT's stewardship team in constructing infrastructure across WLT's preserves, from kiosks and bog bridges to osprey platforms, and has a wealth of knowledge on skills applicable to fieldwork. At the end of the workshop, the interns sharpened WLT's loppers, shears, brush cutter saws, shovels and post-hole diggers.

During the internship, Briana and Erick learned knowledge and skills that may inform their future careers. Both Erick and Briana noted that their plant and tree identification skills developed during the course of the internship. Briana said that "trees were all the same" before the internship, but now that she can identify many of the main groups of trees. Both interns also said they enjoyed learning about farming, and Briana in particular would have liked to learn more about regenerative agriculture, which is practiced at Sugar Hill Farm. Briana also noted that she really enjoyed learning about the process of mapping beech leaf disease and having the opportunity to do both the fieldwork and office work to create the maps.



Mike Surdej explains tool maintenance.

Integration into land trust operations: During their exit interviews, both interns expressed that they really enjoyed how the internship exposed them to the “behind the scenes” work that makes a land trust successful. According to Erick, there was an “ecosystem inside the office,” a “machine” that he never could have imagined. While the internship was primarily managed by the Preserve Manager, interns spent considerable time with other staff members. Several board members, including the President of the Board of Directors, visited WLT’s headquarters to discuss their role in the organization with the interns over lunch. The Vice President spent a morning discussing WLT’s mission, current projects, and strategies with both interns. The Conservation Easement Steward spent a day with the interns monitoring easements and teaching them to write reports. The Development Associate explained the nuts and bolts of WLT’s development software and the interns spent an afternoon working with her on development projects.

Independent Project: The interns each developed and implemented an independent project during the internship. They were encouraged to think creatively in developing a feasible project, and efficiently manage and implement the components of the project during the internship. The interns worked closely with WLT’s Preserve Manager and Director of Stewardship while developing their projects.

Both interns ended up working on valuable projects that accomplished important work for WLT. Briana's project focused on the importance of natural gardens. Briana originally planned to work with a youth camp group to create a natural pollinator garden at WLT, while also presenting on the benefits of pollinator-friendly plantings. But due to Covid-19, she was forced to pivot, and instead designed and laid out the installation of an edible blueberry patch. Brianna also designed and installed education signs for each blueberry species. The originally planned natural pollinator garden was still installed, but without the youth group.



Briana adds informational signage to the blueberry patch.

Erick's independent project focused on trail accessibility at preserves. He worked with Mike Surdej to build a handrail at Westchester Wilderness Walk/Zofnass Family Preserve in Pound Ridge, to aid people who might have a difficulty with balance. He also documented trail conditions at Pine Croft Meadow Preserve and created informational signage based on federal ODAAG (Outdoor Developed Area Accessibility Guidelines) guidelines. This will help inform would-be hikers at the preserve, so they can make decisions about the feasibility of hiking on the trails there. WLT plans to expand this signage to all its trailheads within the next few years.

Challenges: One of the most challenging aspects of the internship was transportation, which was

noted by both interns in their exit interviews. Interns were not required to have a car, and preference was not given to applicants with a car. WLT was committed to finding a transportation solution if they lacked a vehicle. Both interns car-pooled across Westchester County, from Yonkers to Bedford Hills, a distance of about 30 miles each way. WLT paid mileage to Erick, who used his personal car to drive himself and Briana, who did not have a personal vehicle. However, his car was unreliable and broke down twice during the internship. During these occasions, the Preserve Manager, who lives relatively close to Yonkers in the north Bronx neighborhood of Woodlawn, picked up the interns. Additionally, the Preserve Manager acted as a backup driver if for any other reason, such as illness, Erick was not able to work. This system functioned since the Preserve Manager lived close to Yonkers and was committed to the success of the internship. However, to make the internship more sustainable in the future, WLT should investigate alternate transportation options. This could include using public transportation, such as Metro North railroad, and having a staff member pick up the interns at the station.

The ongoing Covid-19 pandemic was also a major challenge during the internship. WLT did not require the interns to be vaccinated, though this would be worth exploring in 2022. On the last day of the internship, one of the interns was contact traced by NY State and required to quarantine. This impacted several planned activities which were either made virtual or cancelled due to ensure proper COVID precautions were followed. Briana's independent project involved teaching youth about natural gardens; however, the youth crew she planned to work with from the Greenburgh Police Summer Camp, had to cancel their event due to a positive Covid-19 test. Likewise, in-person meetings, which would have been excellent networking opportunities, such as the PRISM meeting and WLT's board meeting, were transitioned into virtual meeting because of the pandemic. However, even with the difficulties caused by the pandemic, the internship was successful due to the interns and staff's ability to be flexible and adaptable. In fact, in Briana's reflection, she specifically referred to "pivoting" in the face of covid difficulties as an important skill that she took away from the experience.

Conclusion: Westchester Land Trust is deeply grateful to LH PRISM for their support. The WLT internship was a successful and transformative step towards building a more diverse professional conservation community. The interns specifically appreciated opportunities to lead events, learn professional communications skills, and understand the inner workings of a non-profit organization.

WLT staff members benefited from the interns' perspective as residents of downtown Yonkers, as WLT is hoping to expand our urban conservation efforts and be more impactful in urban areas of southern Westchester. The interns accomplished all the deliverables expected while working with the GHV Green Team, including but not limited to building 115' of sturdy white oak bog bridge, enhancing 900' of deer fence, planting 20 native wildflowers, and removing 32,000 invasive mile a minute vines. Erick and Briana each creatively developed and implemented an independent project that fulfilled a real need at WLT. The interns and staff worked together to overcome the significant challenges of transportation access and restrictions caused by the Covid-19 pandemic. Both Briana and Erick really enjoyed and valued the experience, as expressed in their reflections and exit interviews, and hope to integrate environmental consciousness into their future careers.



Briana and Erick working on bog bridge construction at Otter Creek Preserve.

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