

Habitat Restoration with Green Team High School Students

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INTRODUCTION: Plaster Creek, though its watershed is home to many potential stewards in Grand Rapids, is the most polluted creek in West Michigan. Plaster Creek Stewards (PCS) grew out of a collaboration of Calvin College faculty, staff, and students working with local schools, churches, and community partners to restore the health and beauty of this problematic watershed. The Green Team, a branch of PCS, focuses on research, education, and working directly to restore the watershed through urban green infrastructure by utilizing native plants to manage stormwater. With funding from The Bernard Klammer Biology Research Fund, and the Wege Foundation, two Calvin summer researchers and eight high school students living in the Plaster Creek watershed were hired by PCS to work and learn together. The high school student teams worked one of two, three week-long sessions, and the Calvin students worked with both teams as full time PCS staff. When not working with the Green Team, the Calvin students participated in ongoing research and restoration with other PCS summer researchers.

PROJECTS: The Green Team worked to install and plant new curb-cut rain gardens, which collect and process street runoff in the Alger Heights and Ottawa Hills neighborhoods. Installation and maintenance was also done on native landscaping at locations ranging from homeowners' back yards to the local Christian Reformed Church world headquarters building. For larger projects, the Plaster Creek Green Team was joined by the Rogue River Green Team, another Green Team organized and funded by Calvin College and Trout Unlimited. These projects included streambank planting, native seed collection, invasive plant removal and native seed sowing on a restored creek bank. When not working on these projects, students learned about greenhouse work and sowing, transplanting, and potting native plants for use in future projects. The Theme of learning through experience was woven into everything that the Green Team did: during these projects students learned about local history, environmentally-minded workplaces, and how individuals motivated hesitant communities toward positive change. Through all projects there was group conversation on topics from social justice, environmental justice, food choices, home life, college life, and career choices to hobbies and favorite genres of music. The students also met with community leaders like our Regional Manager for Debbie Stabenow, the Wastewater/Stormwater Maintenance Superintendent of the City of Grand Rapids, the Environmental Programs Associate for the Lower Grand River Organization of Watersheds, and the Project Coordinator of Trout Unlimited. To conclude the session, Green Team students learned from Calvin's Precollege Programs about attending college and preparing for the college experience. Not only was restoration work accomplished, but the Green Teams learned why their work was important and how they can continue to be involved in restoration efforts beyond their time as a Green Team member.

REFLECTION: Being a part of the Green Team has made this summer my most fulfilling summer yet. Before the Green Team students even arrived, it made me a part of Plaster Creek Stewards, an impressive body of professors, professionals, and college students with a passion for the environment and sincere love of fellowship. From charged discussions about environmental policy and food justice to personal plans for the future or the weekend, and from hours of pulling invasives in a sun-baked restoration site to gathering around a professor's picnic table at a potluck, these coworkers have been in many ways one of the best groups of Calvin students I could ask for. Then, there comes the fellowship with the high school Green Team students. Our students, though all from the Plaster Creek watershed, all led distinctly different lives with distinctly different personal experiences and family and cultural backgrounds. Working alongside them and leading by example has been an irreplaceable experience of being in diverse community with a common goal in mind. I was able to use servant leadership to listen, welcome, and encourage diverse conversational input; and I practiced being open, expressive, and honest in a group that may not all agree but is interested in hearing and learning from others' perspectives. As I hope to hold a position of servant leadership in an intentionally, diverse community in my future, I consider these skills essential and this kind of leadership experience priceless. I have better learned how to lead by example, how to be encouraging through difficult times of hard work, and how to encourage and help cultivate a culture of curiosity, confidence, understanding, and fellowship. Our meeting with community leaders has also helped me make connections with other organizations that have a heart for community like I do. Beside all this, working outside with fellow researchers and environmentally-interested high schoolers has been, simply, fun - and this summer has left me more excited about the future than ever.

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