# Summer 2023

Plaster Creek Stewards Newsletter



#### A SUMMER OF GROWTH

This summer has been a season of growth for Plaster Creek Stewards. We've seen our green team students start to connect with nature. We learned about the importance of fresh water mussels for the health of our creek. Curb cut rain gardens have transformed our neighborhoods as we connect with more and more members of our community. Even our team has grown, as we've added a new full-time staff member. This and so much more have happened this summer. We are excited to share it with you!







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#### PLASTER CREEK HAS MUSSELS

By Andrea Lubberts, Program Manager

Freshwater mussels live in lakes and streams throughout Michigan and North America. They are little known and studied, but rising to our attention for a few reasons. Mussels are known as the "liver of the river." They burrow down into the bed of the creek and open their shells enough to siphon water through their bodies, removing microscopic planktons and cleaning the water as it flows downstream. Some mussels rely on fish to host their eggs and disperse the "baby" mussels, after which they burrow in the same location for the rest of their lives. So when our creek receives flashy flows of stormwater laden with road salt, sewage, or chemicals, the mussels are affected. When a 6-foot section of bank is suddenly eroded after a storm and the sediment pours into the stream bed, the mussels are buried. When a host fish can no longer survive in Plaster Creek, the mussels cannot reproduce effectively. When our mussel

population decreases, the water is less filtered and less life flourishes.

This summer, a team of Michigan Dept of Environment, Great Lakes, and Energy (EGLE) staff, Calvin faculty, PCS staff, and student researchers ventured into Plaster Creek to search for and record the first official records of mussels in Plaster Creek. We searched many sample sites up-, mid-, and downstream and found several species, including Creepers, Creek Heelsplitters, White Heelsplitters, Cylindrical Papershells, Giant Floaters, Spikes, and empty shells of four other species. The first species found in the creek was a Fluted mussel, a Michigan species of special concern and the one and only mussel we found in the downstream region. For comparison, at one mid-stream site in Covenant Park we found 153 mussels from 7 different species. The team hopes to continue sampling and learning more about mussels, including locating live mussels that are a state species of concern.

We can protect and improve Plaster Creek for these hard-working, water-filtering mussels by striving to capture stormwater in rain gardens and native plantings, stabilize the stream banks, and discourage land use practices that create surface pollutants in the creek. Everyone can flex a muscle to make the creek a better place for mussels!





#### GROWING WITH THE GREEN TEAM

By Matt Hubers, Education and Outreach Coordinator

When I started working this PCS this past June, I had experience in nonprofit communications, but I had a lot still to learn about biology and ecology. It turns out I was starting at just the right time. To get myself up to speed, I became an honorary member of the Green Team.

Our Green Teams were two very different groups — one energetic and chatty, the other reserved and hard-working — made up of students from different backgrounds, different schools, and different levels of knowledge about the watershed and the natural world in general. Three awesome leaders — Rachel Warners, Jia Luchs, and Delaney Sall — made sure that every day we learned something new and applied it in our speech, our planting, and our general interaction with the world



around us. We got to tour the Plaster Creek watershed, have deep conversations about environmental justice, witness other organizations working toward a cleaner watershed, and so much more.

We learned to be more observant and to use our senses when out in nature. I found myself putting a lot of things in my mouth, whether it was licking the underside of a black maple leaf to feel the hairs on it, snacking on wild raspberries, or chewing staghorn sumac leaves because they are good for our teeth (we only put safe things in our mouths, promise). Most importantly (and for me at least, most fun), we got to get dirty.

We practiced what we learned through identifying and collecting seeds, transplanting in the greenhouse, and installing curb cut rain gardens throughout the watershed. These experiences not only taught us, but gave us practical, hands-on experience that we could apply on our own. (continued on next page)



# **GROWING WITH THE GREEN TEAM** (CONTINUED)

Though they were only with us for three weeks, I saw tremendous growth from each of these kids. As they learned, their questions became deeper and more thoughtful, they started to observe more, and they became more confident identifying and interacting with native plants and animals. They were excited to bring their new knowledge home with them and apply it in their homes, schools, and neighborhoods.

Being part of the Green Team has made me more excited for the work that Plaster Creek Stewards does. This program helped me experience firsthand the work we do and the nuanced reasons for which we do it. I am thrilled to be part of a team that not only does incredible work, but also enables young community members to grow and participate in restoration. These students and I still have much to learn, but through this experience we are all hungry to work in the dirt once again.

The Green Team 2023 was funded in part with gifts from the Bosch Community Fund, Downtown Grand Rapids INC, Kentwood Rotary Club, and everyday people supporting Plaster Creek Stewards.







Photo Credit: Kathleen Sasak Motteler

## **COME SEE THE PLASTER CREEK MURAL**

This summer the Alger Heights neighborhood, led by resident Staci DeVries, worked together to paint a mural along the Plaster Creek trail. Come see it at their Mural Celebration and Spare Change event happening Sunday, Oct 8, from 3:30-5:30pm. This will be a family event, with donuts, walks along the trail, and a raffle!



#### LEISURE CREEK PHASE 2

This summer we started on phase 2 at Leisure Creek Condos. After completing phase 1 on the north side of the bridge, we brought in the excavators and created the floodplain on the south side. Afterward, we began planting. We have had so much help on this project from volunteers, residents, and students! Even after all this, we still have a lot more planting to do, so come help us at our fall event!

#### AN EVENING WITH RON YOB

Oct 5 from 6-9pm, come hear. Ron Yob, Chairman of the Grand River Bands of Ottawa Indians, speak at Aquinas College. Mr. Yob will explore the role Coldbrook Creek has played both in the lives of the Grand River Bands of Ottawa Indians and in his own life. Attendees can also expect to learn about the ecological relevance of Coldbrook Creek. RSVP here!

# SAVE THE DATE: PLASTER CREEK FALL EVENT OCT 21

Our <u>fall volunteer event</u> is almost here! Join us at the Bunker Center for a presentation on the environmental research work being done by students at Calvin. Then help us plant trees at our floodplain restoration or transplant native plants at the greenhouse!

Date: October 21 Time: 9am-12pm

**Location:** Presentation at the Bunker Interpretive Center, followed by planting at the greenhouses and Leisure Creek Condos





#### STREETFEST 2023

Thank you to all the students who joined us for Streetfest this year! One group transplanted at the greenhouses, and two others came to help out at the Leisure Creek Condos! As a bonus, Calvin's new football team came to plant as well! We appreciate the efforts of Calvin's students, faculty, and staff to supporting and cleaning our local watershed.



#### CALVIN'S NEW BIOSWALE

By Haley Weesies, Program Coordinator

This summer PCS had the exciting opportunity to experiment with a creek-friendly parking lot retrofit project right on Calvin University's campus! In May, a roughly 12,000 square foot area of asphalt was removed from Parking Lot 16 (in front of the Prince Conference Center), and the area was then turned into a bioswale that catches runoff from the parking lot and soaks it up with native plants. We had a lot of fun watching the bioswale fill up each time it rained this summer, and we're eager to see all the native plants we planted there grow in the coming years! We hope this space will be a green oasis for bugs, birds, frogs to inhabit and the Calvin community to enjoy.

This project was funded wholly or in part through Michigan Department of Environment, Great Lakes, and Energy's Nonpoint Source Program by the United States Environmental Protection Agency.



# **GREENHOUSE VOLUNTEERS NEEDED**

The greenhouse manager, Benji Steenwyk, is looking for volunteers to help transplant native seedlings on Mondays, Wednesdays, and Fridays during the fall! Volunteers can visit between 1:00pm and 4:30pm. The greenhouses are located at 3770 Lake Dr SE, Grand Rapids, MI 49546. Sign up here!



#### Photo Credit: Christian Frazier

# Welcome, Matt!

Matt Hubers started in June in a full-time role as Education and Outreach Coordinator. Matt graduated from Calvin University with a Bachelor of Arts in Communications in 2012. Since then, he has worked for several non-profits, most recently with Living Stones Academy. Matt brings with him a wide range of experience, including graphic design, event management, fundraising, and program development. Matt is excited to help us as we grow and forge deeper partnerships within our watershed community. Matt has two children who love to help at planting events.



# THANK YOU, SUMMER WORKERS!



#### STUDENT RESEARCH

This summer we had 9 PCS student researchers and 2 student waterers shared with CEPNG. These students came from many majors, including engineering, biology, environmental science, sociology, and art, and are overseen by Director Dave Warners and PCS staff. We asked a few of them to share what they were working on. One of our summer workers shared these words:

"Even though I am a Grand Rapids native, I had never heard of PCS before coming to Calvin and, even then, had minimal exposure to the work being done. Working with PCS this summer has taught me so much about the value of native plants but also the significance of working with and for a larger community. While restoration is the main goal of the work I have been doing this summer and most of that work is done with my team, I have also seen the importance of having the support of a much larger group of people. Without volunteers coming to transplant native seedlings in the winter, the plants never would have had a chance to be put in the ground at our project sites. And without people willing to be the first to say "yes" to PCS, engineers never would've had to design the CCRGs or floodplain restoration projects. And without people writing grant applications those projects could never have been implemented the way they have. I have also learned from the plants I am working with. I see the importance of deep roots like a tree, of having people standing next to and supporting

you while you grow like many of the the prairie plants and I have seen the beauty in even the spikiest roses. I came to work for PCS expecting to learn a bit about plants and gain a few calluses, but I have found so much more than that. "



#### SUMMER REFLECTIONS

By Luke Norvell, Greenhouse Intern

My experience with Plaster Creek Stewards has been nothing short of a miracle and a healing process. Working with people and plants is what I love doing most, and this work made that far clearer than it was before. My favorite part of this summer work was getting to know the student interns and making some good friends along the way! An honorable mention would be our Friday meetings or our potlucks! Our projects with private homeowners, alongside the creek itself, on Calvin's campus, and at the greenhouse all provided their own unique challenges and joys. I hope everyone gets an opportunity to volunteer or work with us.



#### **NEW CURB CUT RAIN GARDENS**

By Betty Gronsman, Green Infrastructure Associate

This summer Plaster Creek Stewards continued to install curb cut rain gardens in SE Grand Rapids! Despite some setbacks, PCS staff and student workers (both college and high school) were able to install 12 curb-cut rain gardens! We installed 6 parkway pockets in places where rain gardens were not a good match, and we repaired many rain gardens that had gotten damaged (by plows, road construction, or groundwork). In addition, we partnered with the City of Grand Rapids to install rain gardens that they identified and funded.

These gardens are a great way to allow stormwater to slow down and soak into the ground, meaning fewer pollutants end up in the creek. Not only do these gardens play an important role in helping to heal Plaster Creek, but they also provide beauty and biodiversity to the communities and homeowners who receive them.

If you live in SE Grand Rapids and are interested in receiving a curb cut rain garden, <u>Apply here</u> to see if your site is a good fit! Our staff will be reviewing applications on a rolling basis and communicating with applicants in the next couple of months.



### In Other News:

In July, WOODTV did a story about our curb cut rain gardens, and interviewed Program Coordinator Haley Weesies. Watch it here!

PCS partners with the National Wildlife Federation helping faith groups support and protect our watershed. Check out <u>this video</u> about the Sacred Grounds program!

#### SUPPORT US THROUGH GIVING

Interested in supporting Plaster Creek Stewards financially? Donations go toward supporting our Green Team program, as well as education and research. You can donate <u>online here</u>. Checks should have Plaster Creek Stewards in the memo line, and can be mailed to:

Calvin University Development Office 104 Youngsma Center Calvin University 3201 Burton SE Grand Rapids, MI 49546