



## Fall Newsletter 2022

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## **Reflections on Our Mission**

Too often mission statements are the kind of thing organizations work really hard at but then few people notice. Plaster Creek Stewards' mission statement is

"To create opportunities for all watershed members to join in the story of a healthy, beautiful, renewed Plaster Creek. As an initiative of Calvin University, our strategy includes research, education and engagement, partnerships and regenerative practices."

To avoid having this statement go unnoticed, I'd like to call your attention to a few of the carefully chosen words and phrases that are truly important to us and our work.

First, we "seek to create opportunities . . ." When we began this work over a decade ago, we thought our goal was to clean up Plaster Creek. But after getting started in this work, we realized that if the creek was somehow magically cleaned up, without any mending of the broken relationships between watershed residents and the creation, then the "cleaned-up" creek would simply become contaminated all over again. So, by providing opportunities for watershed residents to join us in this effort, we are helping people develop an affection for the creek, and out of this growing, caring relationship, new behaviors are bound to emerge.

Second, since we are connected to Calvin University, we realized that although we can't do everything, we can focus on research, education, and restoration. Those are things we know how to do as students, educators, and scholars, and those remain our three areas of focus.

Third, we are striving not just for restorative, but for regenerative practices. Regenerative practices highlight that we want to see *improved* relationships and a *better* future. We don't want to just restore things to how they were before, because the "before" gave us a dangerously contaminated stream. Regenerative practices will get us back into the kinds of relationships where all community members, human and non-human, can live together in ways that honor the beauty and integrity of this part of God's good creation. Thank you for joining us in this mission!

This fall, the PCS team spent Tuesdays traipsing through forests, wetlands, oak savannas, and prairie remnants in West Michigan to collect local native plant seeds. In total, we collected 487 species of seeds, all of which will be grown and used in watershed restoration projects next year. As Wendell Berry so beautifully said, we take great joy in finding, collecting, and "keeping an inventory" of these "uncommercial goods!"

"The bell calls in the town
Where forebears cleared the shaded land
And brought high daylight down
To shine on field and trodden road.
I hear, but understand
Contrarily, and walk into the woods.
I leave labor and load,
Take up a different story.
I keep an inventory
Of wonders and of uncommercial goods."

Wendell Berry, Sabbaths (1979)

# Fall Event 2022 Future Thriving:

Sustainability at Calvin, in Grand Rapids, and in Our Watershed

















Images October 2022 Johnny Quirin

This Fall Event, Plaster Creek Stewards partnered with Calvin University to put on a special panel about sustainability in our communities. Grand Rapids Mayor Rosalynn Bliss, Dr. Wiebe Boer (President of Calvin University), Rev. KyleMeyaard-Schaap (Vice President of the Evangelical Environmental Network), Gia Mien Le

(Student at Calvin University), Debra Rienstra (Professor of English at Calvin University), Dave Warners (Professor of Biology at Calvin University, Plaster Creek Stewards Director), and Matt Heun (Professor of Engineering at Calvin University) all came together for a conversation about sustainability at Calvin University, in the Plaster Creek Watershed, and in the City of Grand Rapids. After the panel, we headed out for hands-on restoration, nurturing native seedlings at the greenhouse, adding to a native woodland garden on Calvin's campus, and planting the last few plants at the Leisure Creek Condos floodplain restoration project. Together, we transplanted 1,254 native seedlings for future projects and planted over 890 native plants at the project sites; a great benefit for reduced flooding, carbon dioxide absorption, welcoming back biodiversity, and ensuring cleaner water locally and downstream. We're proud of the work we accomplished together and grateful to be talking, planning, and working with each to promote sustainability in our community.

## A New Strategy for PCS - Parking Lot Retrofits

A bird's-eye view of our automobile-driven landscape reveals a lot of concrete and asphalt parking lots. These large spaces get heated up in the summer, salted in the winter, and layered with chemical residues year-round--all of which gets washed into our waterways. With the pandemic and the rise of online shopping, these parking lots are less and less full of cars, creating opportunities to rethink, reimagine and "retrofit" our lots to protect our waterways. Retrofit here refers to changes after a parking lot is established that will divert water into gardens or the ground rather than into the metal grates and pipes that lead directly to the creek. Calvin University is working through this process on our campus. In addition, the Michigan Dept of EGLE awarded PCS with a \$40,000 grant for research and education about these retrofits, and to create a set of engineered plans for a parking lot retrofit in our watershed (in partnership with Fishbeck). The research results and educational material will be added to the PCS website this winter as a resource for reconsidering our hardscapes.











## Research

Research efforts are ongoing in the watershed, but recently there has been a lot of activity including:

#### Importance of Trees (Schooley Drain)

Schooley Drain is a channelized stretch of Plaster Creek near Dutton along which we planted 200 native trees in 2019. Since trees grow slowly, to determine which species is best for intercepting runoff and shading out Reed Canary grass, we are invested in a long term monitoring project. (View poster on our website under "Student Research")

#### **Macroinvertebrate sampling**

West Michigan Environmental Action Council (WMEAC) received funding for macroinvertebrate sampling on Buck and Plaster Creek for two years. This fall we trained and sampled with them at five sites on Plaster Creek including at two restored sites at Calvin Avenue Basin and Shadyside Park.

#### The contours of a restored floodplain

(Shadyside Park and Leisure Creek Condos): MI EGLE staff took careful measurements of the project sites at Shadyside Park to compare with measurements before the large restoration project there; and at Leisure Creek Condos ahead of the restoration work slated for next year.

#### **Chloride levels in Plaster Creek (Alger Heights)**

A DIYEnviro sensor was installed with the huge help of Jake Lemon from Trout Unlimited to help understand the levels and nature of Chloride in the water. The sensor relays data every 15 minutes, offering real time data that can be checked at this website (search for Plaster Creek and choose the Union Ave sensor).

## **Betty Joins the Team**

In October, Betty Kliewer joined the team as our Green Infrastructure Associate. Betty grew up in Grand Rapids and graduated in 2021 with a Bachelor of Science in Biology from Calvin University. She spent two of her summers at Calvin working for the Calvin Ecosystem Preserve and Native Gardens, and after graduating, spent time working as a Naturalist at the Wittenbach Wege Agriscience Center. Betty is excited to be returning to Calvin and joining Plaster Creek Stewards. She is looking forward to connecting others to native plants and ecosystems while contributing to the continued restoration of the Plaster Creek watershed.



## PLANTING PARTNERS!

Many thanks to the students and school groups who joined us for learning and restoration this fall! Together, we installed and maintained rain gardens, learned about the importance of integrating "green" solutions into our architecture projects, and explored the patterns of race and environmental justice in the neighborhoods of our watershed. We're grateful for the wisdom, curiosity, and work these students shared with us!

- Calvin University Streetfest
- Calvin University Service Learning Center
- Crosstown High (Memphis, TN)
- Godfrey Lee High
- Godwin Heights Middle
- Grand Rapids Christian Middle
- Hope College
- Northpointe Christian
- The Potter's House Wonder Academy







#### **Interns**

This fall we partnered with 3 interns for learning and restoration. Jeran Louwerse and Josh Farmer (Northpointe Christian High) are working with us in the greenhouse for part of their internship while starting a greenhouse and rain garden at their school, and Luke Norvell (Calvin University graduate) worked on projects, transplanting, and leading volunteers in field work at key events.





In the past year, PCS has decided to find new ways to support the good work already being done around us. <u>Tree Tops Collective</u> installed a rain garden this summer and PCS donated native plants to fill it. <u>Kent School Services Network</u> at Cesar Chavez Elementary hosted a Trunk-O-Treat for the school's families to enjoy music, fun, and get candy in the safety of their parking lot with access to helpful resources. PCS staff joined in the fun of passing out candy and enjoyed community together. Both of these organizations are doing important work and we encourage you to check them out and find ways that you can support the good work already being done in your community, too!

## THANK YOU

Whether you've partnered with us this year in garden installation, financial support, greenhouse volunteering, educational events, or simply following our journey - thank you!

It takes a whole watershed community to rewrite the way we interact with land and heal our creek.

We could not do it without you.

## Your Gifts Make a Difference

Communities find ways to work together, care for each other, encourage, and sustain the good. PCS enjoys being a part of a wonderful community. We appreciate the goodwill offerings from Alger Park and Sherman Street CRC churches, partnerships with other non-profits, collaborations with businesses and government agencies, and conversations with school kids, and we continually look for ways to work beside the neighborhoods of Plaster Creek.



If you would like to join in this work in your own way, we welcome your presence. Two ways you can do this today:

- <u>Donate</u> to build a stronger Green Team in 2023 or enable Plaster Creek Stewards to create more opportunities for connections with the watershed.
- Sign up for volunteer opportunities and stay tuned for more information.



## Celebrate with Us - Dec 6

Join us **Dec. 6** for our annual end-of-year Greenhouse Celebration! Transplant our last seedlings as we reflect with gratitude and warm treats over a year of great community and good work in our watershed.

- 3770 Lake Drive SE. 5:30 pm 8:30 pm. Openhouse-style.
- RSVP Online: https://calvin.edu/plaster-creek-stewards/get-involved/volunteer/

#### **Plaster Creek Watershed**

The Plaster Creek Watershed occupies a portion of the ancestral home of the Hopewell people (Goodall Focus), and more recently the Anishinaabe Three Fires Confederacy of Ojibwe, Odawa, and Potawatomi nations. We are grateful for the way these people cared for the land and loved it. We are informed by their teachings and strive to honor their example through ongoing education and restoration work.





## **Plaster Creek Stewards**

Plaster Creek Stewards is a collaboration of Calvin University, community partners, and residents focusing on education, research, and restoration in an effort to return health and beauty to the Plaster Creek Watershed.