

Euclid Creek Watershed Update

Issue 44
Fall 2019

Volunteers Dedicated Over 1,500 Hours in 2019!

The Euclid Creek Watershed Program works to protect and restore the health of this 24 square mile urban watershed in Northeast Ohio. The work to protect and restore does not get done without the key efforts of watershed volunteers.

As of mid September the program has held 26 volunteer events and over 600 volunteers have dedicated more than 1,500 hours of time to the creek!

We'd like to recognize a few volunteers who we have seen quite a bit this year. These folks help motivate others to get involved and inspire us with their initiative and passion for protecting Euclid Creek.

Emily Brown - Emily has been leading bi-monthly cleanups at Euclid Creek Reservation with the [Cleveland Metroparks](#).

Brian Gilbert - Brian is a [Friends of Euclid Creek](#) member who has helped lead several tours and service events at the Dusty Goldenrod Preserve this year.

Natalie Keyerleber - Natalie is a frequent attendee at our cleanups, plantings, weeding events and tours through her efforts as a watershed volunteer with [Cleveland Metroparks](#).

Phil Kinson - Phil has been leading efforts to protect and maintain the trees we planted last fall at the [Community Christian Church](#) in Euclid as well as our tree planting site at [Lower Hawken School](#) this spring (Learn more on pg. 7).

Howard Simon - Howard has been leading clean up events at Acacia with the [Cleveland Metroparks](#) and also hosts tours of the site.

Euclid Creek Water Quality Monitors - Check out pg. 4 to hear about the efforts of our wonderful water quality monitors who have dedicated time each month to track trends at several locations in the watershed.

Kelly Baker, Neil Barrett, Kristen and Samyra Buchstein, Kelly Butauski, Kevin Harrison, Deb Kramarz, Maryann Marconi, Jonathan Parks, Robert Pesarchik, Sam Stone, Breoni Turner and Adam Zimmerman. All have helped at 2 or more volunteer events on behalf of Euclid Creek this year!

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Lataisha Jones, KSU student with pitfall trap—see pg. 6



Join Us

Tues, Dec. 17, 2019 7:00-9:00pm—Friends of Euclid Creek Holiday Gathering

To volunteer for a FOEC Board committee, contact **Ken Messinger-Rapport** (foecpresident@gmail.com).

Sign up to volunteer at cleanups, planting and invasive management events today! www.euclidcreekwatershed.org/euclid-creek/events

For questions, contact the Watershed Program Manager, **Elizabeth Hiser** (ehiser@cuyahogawcd.org).

Friends of Euclid Creek President's Message by FOEC President, Ken Messenger-Rapport

Once again it was a busy summer of educational programming for the **Friends of Euclid Creek**. Thanks to a special grant from **Cuyahoga Arts and Culture** we were able to host several events tied to the observance of the 50th anniversary of the last time that the Cuyahoga River caught fire and burned—an event that sparked the modern environmental movement. The mission of **Friends** is to raise awareness about and preserve the natural features of the Euclid Creek watershed. I am sometimes asked how do the arts tie into our mission for the environment in our watershed? To answer that question, I am reminded of the song we used to sing as children about how the foot bone is connected to the shin bone and shin bone is connected to the leg bone, and so on, and so on. To be sure the Euclid Creek watershed lies in a particular place and has particular features, but it is affected by everything within and around it—much of which we as individuals and we as a species are responsible for. Therefore, our mission of raising awareness is about inspiring best management practices and teaching ourselves and our neighbors how to become good stewards of the environment. The arts have a definite role in accomplishing this mission. The rain barrel workshops we hosted together with the **City of Beachwood** and the **Collinwood Rain Barrel Project** encouraged people to learn about the function of rain barrels, and produced more than two dozen barrels for installation throughout the watershed. And, certainly, the beauty of nature and of the Euclid Creek Watershed can, and, have inspired some beautiful artworks—some of which we had the opportunity to see on display at the Beachwood Community Center this past August. Therefore, if we seek to inspire stewardship, what better way to do that than through the inspiration art can provide.

Our Lake Erie Speakers Series also supported our mission of changing minds and habits through education. The problems addressed this year by our three speakers all centered on ways in which our generation is dealing with some massive problems left by previous generations, and by longstanding agricultural and industrial practices. We could easily despair about what one person alone can do in the face of such overwhelming problems such as microplastics, harmful algal blooms, or even global warming. But as it turns out, our problems are largely the sum of millions of individual acts and habits which means that if each of us commits to changing just one or two of our daily habits, such as not using disposable plastic whenever possible, or planting a tree (and be a Watershed Champion), or properly fertilizing our lawns (or not fertilizing at all); then collectively we can have a significant impact on a massive scale.

Fifty years ago, a fire on the Cuyahoga inspired a generation to stop using our waterways as dumping grounds. **If they could change their habits, then we can too.** If we all take just a few simple steps to change our present habits of daily life, then collectively we can turn all of these problems around so that our children's children can say of us, we saved the Earth that inspires with its beauty and sustains us.

If you have a passion for the environment and want to be involved in getting things done that are fun, worthwhile, and of lasting impact, please participate with us. Come to an event, volunteer for a committee, donate to our Conservation Fund, and commit to learning about becoming a better steward of the urban environment. We do all that we do for you, but at the same time we cannot do anything without you.

Contact us at foecpresident@gmail.com to join in the effort to make all of our communities better places to live.



FOEC President Ken holding his Euclid Creek Watershed Champion sign. Read pg. 7 to find out more about this program, and don't forget to take the pledge yourself!

Who are the FOEC Board Officers?

President: Ken Messenger-Rapport

Vice President: Chris Vild

Secretary: Sue Swisher

Directors: Kelly Butauski, Paul Costanzo, Jim Juknialis, Anna Kozlenko, and Madelon Watts.

Officers serve from July 1 to June 30 each calendar year.



Thank you to Christine Laskin for her service as treasurer!

The Great Blue by FOEC Member, Barb Holtz



Watching birds fly is a pastime worth our enjoyment. From the invisible figure eight pattern of the hummingbird's flap to the dihedron, or "V" shape, of the vulture's liting soar, each bird's flight has a signature. I love to watch one large bird in particular cross my earth-bound path high in the sky – **the great blue heron.**

Wildlife.ohiodnr.gov Image

Neck tucked and legs behind like a kite's tail, the heron's expansive wings pump up and down as if to say, "I'll get there when I'm ready."

On land, herons stand stealthily in shallows of creeks, streams, and wetlands waiting for the unsuspecting fish or other aquatic prey. Still hungry? I watched a heron sit on a fence and pick off chipmunks one day. Fascinating!

Heron keep quiet much of the time (how else do you sneak up on prey?) but are boisterous during nesting. A rookery includes many heron pairs perched in large stick nests high in trees. Walk into this marshy, maternity colony and the squawking can be deafening.

As autumn is upon us, enjoy the beauty of one of Ohio's largest birds. Come winter's frozen landscape, herons will move to areas with open water for fishing. Watch for wings lazily saying goodbye to return again in early spring to the shallows of Euclid Creek.



Heron Rookery—Geauga News Image

Join Friends of Euclid Creek Today!



Membership Form

Name: _____

Address: _____

City: _____ ZIP: _____

Phone: _____ Email: _____

Payment: Membership Level:

☐ Individual \$25.00 ☐ Family \$35.00 ☐ Student (24 & under) or Senior (65 & over) \$20.00 ☐ Other \$ _____

Enclosed is my check for \$ _____

Make check payable to "Friends of Euclid Creek" and mail to:

Friends of Euclid Creek, Attn.: Treasurer
P.O. Box 21384
South Euclid, Ohio 44121

Thank you for your membership and remember your dues are tax-deductible!

Water Quality Monitoring Program News

It is with heavy hearts that we are looking for a new house for the water quality monitoring equipment and a new partner to help with calibration and volunteer coordination. **Lou Rifici** let us know that **TRI-C East** is changing their programming and he will no longer be able to lead our monitoring program. We are in discussions with a few local schools, but in the meantime one monitoring kit is still with Lou and the second is housed at **Cuyahoga SWCD** offices. We are forever grateful to **Lou** for his support of the program these many years!

Despite this loss, it has been quite the year for our volunteer monitoring program. We held a volunteer recognition party, trained several new volunteers, recently added an eighth station to monitor monthly, and we are working on new datasheets that will automatically graph our data.

A few of our volunteers are helping to take our monitoring program to new heights this year and we wanted to let you know about their efforts!

MaryAnne Hejna has adopted this program as part of her graduate studies and is performing dry and wet weather sampling at all of the stations on a routine basis. We look forward to hearing the results from her study next spring.

Keaton Henry has loaned us his programming skills and has been working with watershed intern **Breoni Turner** to create automated graphing sheets for our water quality data.

Frank Skala, former **Friends of Euclid Creek** president, was inspired to start monitoring a new station in Highland Heights at the newly protected property housing the Dusty Goldenrod Preserve.

Thank you to the following volunteers who have dedicated their time to monitoring in Euclid Creek this year!

2019 Monitors:

Mary K. Evans

Carl Headen*

Miesha Headen*

Thomas Headen*

MaryAnne Hejna*

Patrick Henry

Lillian Houser

John Hurst

Caroline Kelemen*

Dan McLaughlin*

Annie Roberto

Frank Skala*

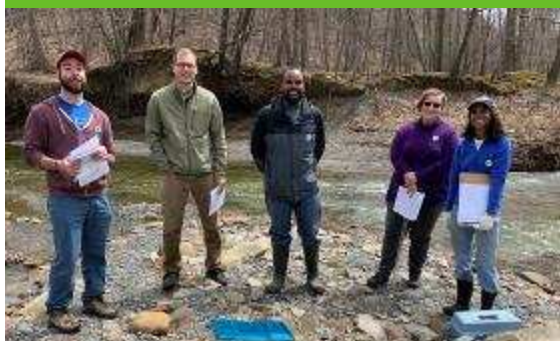
Marian Swirski

* Denotes new Monitors

Special thanks to **Mary K.**, **Lillian**, and **Patrick** who have been monitoring with the program for many years!

Special thanks to **John Hurst** who has adopted several sites and has been filling the very big shoes of the “Daves” who retired from monitoring this year.

Volunteers Learning about Euclid Creek Water Quality Monitoring Protocols



Willoughby-Eastlake School of Innovation Restoration Project Update

Construction is now complete at our Willoughby Hills Stream Restoration Project on the East Branch of Euclid Creek! The restoration effort provided a unique opportunity to engage with the [School of Innovation \(SOI\)](#) students and teachers.

The main goal of the project was habitat restoration and flood storage. Prior to project construction an undersized culvert was causing debris and sediment to back up in the stream. This sediment accumulation resulted in the loss of important stream habitat ([pools and riffles](#)). Overtime runoff from upstream had caused the channel to widen and deepen resulting in one uniform channel (run).

To improve this situation, the undersized culvert was removed and replaced with a [riffle ford crossing](#). The eroding streambanks were laid back to allow for flow to reconnect to the [floodplain](#) during storms. Riffle and pool habitat was created.



It has been so exciting to see the increased number of fish visiting the site already this summer! We even found caddisfly and mayfly larvae on our recent tour of the site with [SOI](#) teachers!

Caddisfly and mayfly larvae are indicators of good water quality

As part of the project:

- 990 feet of floodplain was restored
- 700 feet of stream channel was restored
- 7 habitat structures were added in the stream
- 50 feet of stream was returned to natural flow from the previously culverted state
- 0.6 acres of invasive plants were managed
- 3.3 acres were planted with native trees, shrubs, [live stakes](#), [wetland plug plants](#), and seed mix



Project highlights include:

- Planting 120 trees and 159 shrubs with 6th-8th graders.
- Planting 600 live stakes and 800 wetland plugs with 3rd-5th graders.
- [WKYC](#) featuring the project during their GIRLS in STEM series on April 23rd and a follow up program on September 13th
- Sharing the wetland planting day with volunteers from [Friends of Euclid Creek](#), [Northeast Ohio Regional Sewer District](#), and [Cleveland Metroparks](#).
- Showing off the project to national floodplain managers during the State Floodplain Managers Conference. The site was part of a Rockin' Projects in Euclid Creek tour led by [Ohio EPA](#) and [Cuyahoga SWCD](#).
- Working with [Lake SWCD](#) to offer teaching plans to utilize the restored space as an outdoor learning lab.
- Tadpoles observed in the newly created wetlands.

Learn more about this exciting project on our website and see photos of construction progress on our August 26th blog.

Terminology:

[Floodplain](#): an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding

[Live stakes](#): dormant, live woody cuttings of a species with the branches trimmed off

[Pool](#): areas of slow flowing deep water, often on the outside of bends

[Riffle](#): fast, shallow flow over boulders, cobbles or gravel, which break the water surface

[Riffle ford crossing](#): shallow area of the stream with larger stable boulders and cobble used for substrate to support vehicle crossing through the creek

[Wetland plug plants](#): wetland seedling species which have been germinated and grown in trays of small cells

Acacia Stream Ecosystem Function Project *by KSU Conservation Biology Major, Jared Dyer*



Kent State University (KSU) student and Author Jared Dyer with leaf litter bag

Acacia Reservation has changed quite a bit since its days as a country club golf course. Formerly the [Acacia Country Club](#), the 155-acre property underwent various restoration projects starting in 2012. But do traditional restoration efforts hit a hole in one?

Typical aquatic restoration efforts focus on restoring biological integrity, the abundance and diversity of organisms typically found in the natural “pristine” state of an ecosystem. There is, however, debate among ecologists and restoration managers on whether restoring biological integrity also restores functional integrity, or the ecosystem’s overall ability to maintain its natural processes. For example, for smaller streams such as Euclid Creek on the [Acacia Reservation](#), this would include functions such as processing and transporting fallen leaf litter downstream where such materials would serve as energy sources for food webs in larger streams and rivers.

The question of how biodiversity impacts functional integrity is particularly pertinent to aquatic managers, as previous studies have found that human-driven losses in biodiversity are five times higher in aquatic ecosystems than terrestrial ones.

Over the past year, we have been exploring this question through our research in [Acacia Reservation](#) and throughout the Chagrin River Watershed. By deploying mesh bags filled

with leaf litter in restored and unrestored streams throughout the watershed, we have been able to compare the diversity of aquatic invertebrates and decomposition rates for the leaves, measures of both biological and functional integrity respectively. So far, we have not seen differences in the invertebrate communities or decomposition rates when comparing restored and unrestored sites. These findings would support the need to reevaluate what we consider a successful restoration and to ensure future projects target both biological and functional integrity in their endeavors.

While we did not find differences between restored and unrestored streams within the channels themselves, we did uncover some interesting findings beyond the water. Over the summer, an undergraduate researcher collected insects along the riparian zone of our sites. What we found was that there were significant differences in the terrestrial communities between restored and unrestored sites. One explanation for this could lie within the soil. Throughout our study, we measured soil moisture at all our sites and found that the restored sites of [Acacia Reservation](#) had overall greater soil moisture. The greater soil moisture content found at Acacia could be promoting the insect diversity we observed along the stream channel. This could suggest that restoration efforts are improving the overall function of the streams and that simply more time needs to pass before we can fully measure the benefits of this restored function.

Additional study is of course needed, but these findings are promising in that they may indicate an unexpected “perk” of the restoration project’s replanting of the riparian zone.

Our continuing research efforts will hopefully shed some light on the impact of stream restoration and better allow future projects to ensure a full restoration of streams to their former pristine states.



Harlee Rush, KSU undergrad Zoology Major, surber sampler

Dominion 2018 Grant Project Summary & 2019 Project Award

Dominion Energy and Western Reserve Land Conservancy (WRLC) have partnered the last several years to offer grants to local watershed groups. In 2018, Friends of Euclid Creek (FOEC) was awarded \$2,500 for planting trees in partnership with Lower Hawken School, and we just received word that for 2019 FOEC has been awarded \$3,000 for watershed work at the Dusty Goldenrod preserve!



Lower Hawken School students admiring their phragmites removal work

The 2018 Euclid Creek Tree Planting project enhanced a de-forested hillslope upstream of a detention pond designed to catch runoff from the school property that drains to a tributary of Euclid Creek. A small area of turf was enhanced with trees and a patch of phragmites was removed and enhanced with water loving trees and shrubs to try and out compete the invasive phragmites. On April 18th, twenty-two 8th graders helped plant 75 trees and shrubs and helped remove a stand of phragmites. In addition, 3 adult volunteers and 3 Cuyahoga SWCD staff helped. Forty-eight 4th graders came out to learn about the project and Euclid Creek and helped to cut back and bag phragmites. Enhancing the hillslope and wetland areas in this space will help reduce erosion and resulting sedimentation to Euclid Creek. This project served as an opportunity to educate both students and school staff about proper greenspace management and care for the plants going forward. As part of the project, two educational presentations were given to students. Partners on the project were Cuyahoga Soil & Water Conservation District, Lower Hawken School, WRLC Tree Stewards *Phil Kinson and Laura Marks*, and the City of Lyndhurst.

Watershed Champion Program Update

Your actions on the land can help protect and improve water quality in Euclid Creek.

Pledge to be a Watershed Champion Today!

Thank you to our 28 Euclid Creek Watershed Champions!

Residents from Beachwood (1), Cleveland (2), Euclid (8), Highland Heights (7), Lyndhurst (2), Richmond Heights (2), South Euclid (5), and University Heights (1) have all committed to taking at least 3 simple actions in their yard and at least one action in their community to protect and restore Euclid Creek.

Are you next?

Do you want to be a champion?

Is something holding you back?

We want to hear from you!

Contact our **Watershed Program Manager** at ehiser@cuyahogawcd.org or 216-524-6580 ext 1002 to comment on or join our Watershed Champion Program and get your yard sign!

One action you can take in your community is to become a member of Friends of Euclid Creek (see pg. 3).

The Friends of Euclid Creek is an all volunteer group. We want to recognize and thank the board members who give so generously of their time on behalf of the group.

Thank you to: *Kelly Butauski, Paul Costanzo, Jim Juknialis, Anna Kozlenko, Ken Messenger-Rapport, Sue Swisher, Chris Vild and Madelon Watts.*



Euclid Creek Watershed Program Manager
Cuyahoga Soil & Water Conservation District
3311 Perkins Ave., Suite 100
Cleveland, Ohio 44114

Find Euclid Creek Online!

www.EuclidCreekWatershed.org

Like 'euclidcreekwatershed' on Facebook

Follow 'ecwatershedprogram' on Instagram

Follow @EuclidCreek on Twitter

Only Rain Down the Drain

If you would like to [receive this newsletter electronically](#), sign up on the website, email, or call the Watershed Program Manager (contact information below).

Newsletter printed with generous support of the Northeast Ohio Regional Sewer District through the Watershed Service Agreement.

Euclid Creek Watershed Program & Partners

The Euclid Creek Watershed encompasses 24 square miles, 11 communities, and 2 counties (Cuyahoga and Lake).

Our program is directly supported by the efforts of:
the Euclid Creek Watershed Council (ECWC),
the Friends of Euclid Creek (FOEC)
and the Cuyahoga Soil & Water Conservation District (SWCD).

Stay tuned to our website for additional event and project updates!

Euclid Creek Watershed Council

Composed of the **mayor** of each city that participates in the ECWC or their official designee

Meets three times a year, approves Euclid Creek Watershed Program Work Plan, has several committees that focus on education & outreach, technical issues and volunteer water quality monitoring

Goal: To participate, as public officials and stakeholders, in the implementation of the Euclid Creek Watershed Action Plan.

Mission: To address common environmental, stormwater and development concerns in the Euclid Creek Watershed.



Friends of Euclid Creek

A volunteer **citizen** watershed stewardship group, a non-profit 501(c)(3)

Board members elected every two years at annual meeting in June
FOEC holds educational meetings, hikes and tours throughout the year

Goal: To improve the health of the environment in the Euclid Creek Watershed.

Vision: FOEC is the citizen voice for the Euclid Creek Watershed.

Mission: To raise awareness about and preserve the natural features of the Euclid Creek Watershed.

P.O. Box 21384
South Euclid, OH 44121
FriendsofEuclidCreek@gmail.com



Cuyahoga Soil & Water Conservation District

Houses the **watershed program manager**, a full time staff person who helps implement the Euclid Creek Watershed Action Plan and acts as the liaison between the ECWC, FOEC, and other watershed partners.

Mission: Advocate and implement best management practices for conservation of land and aquatic resources in a developed environment through education, stewardship and technical assistance.

Euclid Creek Watershed Program Manager, Elizabeth Hiser
216-524-6580 x1002
ehiser@cuyahogaswcd.org

