## MILL CREEK ALLIANCE

May 2021 NEWSLETTER



# #MILLCREEK recreation

#### **Recent Accomplishments:**

- The Mill Creek Yacht Club successfully negotiated a public boat launch access point at the Barrier Dam
- Connecting the Mill Creek Greenway Trail from Salway Park to Mitchell Avenue in Spring Grove Village is underway!
- MCA hosted the 1st ever Pop-up Canoe Livery with more than 30 boat rentals and over 75 paddlers on the Mill Creek in one day, the most ever!

### #MILLCREEK education

#### **Recent Accomplishments:**

- MCA is hiring! Join our team as the Education Program Coordinator (see website for details)
- 49 volunteer citizen scientists were trained in Water Quality Monitoring and work monthly to monitor and analyze Mill Creek water samples.
- A summer series of watershed community programs will continue our legacy as Cincinnati Magazine's 2020 Nonprofit of the Year award winner





## #MILLCREEK restoration

#### **Recent Accomplishments:**

- Water quality analysis shows that the ecological health of the Mill Creek is dramatically improving as a result of restoration efforts
- New grants awarded. Ohio EPA §319 for Sharon Creek Stream Restoration Project. Bonneville Environmental Fund award for mitigation of a low head dam on West Fork Mill Creek
- Citizen volunteers play a key role in the restoration of the creek as participants of our Workparties in the Watershed



BEFORE - Steep unstable streambanks with dense shallow-root vegetation

AFTER - Streambank stabilized, open and accessible to public, connected to the floodplain, and planted with hardy native plants

The Mill Creek runs through Reading Ohio for nearly 2 ¼ miles. Along its route it passes through residential neighborhoods, mixed-use commercial & industrial sites, and city parks. The site of our most recent project in Reading had an adjacent floodplain that was disconnected from the Mill Creek by steep stream banks as high as 12 feet! That presented flooding concerns during high rainfall events. Where was all the floodwater to go? Furthermore, the banks were unstable and eroding at a rate of one foot per year. The erosion was releasing 281 tons of sediment into the Mill Creek each year. Sediment is harmful to aquatic plants and animals and prevents people from enjoying the recreational benefits of the creek.

The Reading Floodplain Bench Project was funded through an Ohio EPA §319 grant and matching funds from the City of Reading. The project improved 550 feet of streambank and adjacent 1.1 acre of stream corridor. Work began in 2019 with the physical and chemical removal of shallow-rooted honeysuckle. Next, some 12,000 cubic yards (800 truckloads!) of soil were excavated from the steep and unstable slopes. Next, the floodplain was reshaped to a stable slope with a 50-foot wide terrace near the top adding 1 million gallons of floodwater storage. Then, rock toe, erosion control fabric, and live willow stakes were installed followed by a dense planting with a hardy native seed mix. The combination of heavy rock and deep-rooted plants bioengineer a more physically stable streambank which improves water chemistry and expands streamside habitat. The stream improvements rebuilt a well-functioning ecological habitat that benefits pollinators, wildlife, and Reading residents.

**Great News from the 2021 State of the Mill Creek Address!** The data results show that this year was the best ever for water quality in the Mill Creek!! Our average rankings were above the Ohio EPA warm water habitat standards and the highest quality since we began monitoring the water in 2013.

To see the details for yourself, visit our website: www.themillcreekalliance.org/wqm

#### **Volunteer Spotlight**

In February of 2021, our beloved volunteer **Dr. Michael Miller** presented the results of the 2020 Mill Creek water quality data analysis. As the Professor Emeritus from the University of Cincinnati Department of Biological Sciences, Dr. Miller brings a wealth of knowledge to our programs and activities. He has 40+ years of experience teaching water chemistry in the lab in addition to performing field and lab water chemistry research all over the world. Dr. Miller has 10+ years of experience participating in our local Water Quality Monitoring Programs. He is also an Emeritus member of the MCA Board of Directors AND volunteers 20+ hours per week in other MCA programs.





Put Your Passions to Work www.themillcreekalliance.org/volunteer

# #MILLCREEK recreation

#### **Diversity in the Watershed**

Next time you find yourself out and about in the Mill Creek Watershed, notice the diversity of people and activities. You will likely see individuals engaged in all sorts of activities like playing in parks, fishing and paddling with families, walking with friends, or riding bikes. Thirty-seven unique communities make up our watershed and there is great diversity among its people and their activities. Likewise, the same diversity can be found in the ecosystems that comprise the creek and its natural surroundings! At Mill Creek Alliance, we believe more diversity makes for a more healthy and beautiful creek for all.

Other than humans, what lives in the watershed? Discover the answers for yourself by spending time down by the creek making observations of the world around you! Join us for the 2021 MCA Bioblitz. The Bioblitz is an ongoing effort by citizen scientists to document the living diversity of species in our watershed. This year, we continue to catalogue birds, plants, bugs, animals, fish and even protozoa. Mill Creek's resurgence can be measured by the diversity of its species. With each passing year and restoration project completed, the diversity of species increases.

In 1997, when the Mill Creek was designated as America's most endangered river, the list of species living in the habitat was much smaller. Industrial waste, sewage, concrete channelization, and at least 31 known or suspected hazardous waste sites adjacent to the Mill Creek destroyed the diverse ecology of the Mill Creek waters. During the infamous 1937 flood, pollutants in the Mill Creek caused the waterway to catch fire.

Measures of biodiversity are increasing, but persistent environmental issues pose barriers to the resilience of native species and natural systems. As we trek forward, make sure to keep a watchful eye on these stressors:

- 1. Invasive species such as Amur honeysuckle, lesser celandine, Japanese knotweed, garlic mustard, and Johnson grass outcompete native species.
- 2. Vast stretches of impervious surfaces cause rapid runoff and impede water absorption, leading to combined sewer overflows that pollute the waterway.
- 3. Overuse and misuse of lawncare products, pesticides, herbicides, and other chemical nutrients runoff into the creek and disturb the natural stability of the ecosystem

Stanley Hedeen concludes his book *The Mill Creek, an Unnatural History of an Urban Stream* with this call to action: "Healing the damage to the creek wil be a lengthy undertaking, but it's a project we owe to the stream, to our children, and to ourselves. The Mill Creek serves as an indicator of our own well-being. The history and health of the society along its banks have always been reflected in the water of the Mill Creek. The condition of the stream is a 28-mile measure of local character, responsibility, and good sense."

Take action to enhance biodiversity within the 166 sq. miles of land area in the watershed. Be a part in the Mill Creek's resurgence! Head down to the creek today to log an observation in iNaturalist or volunteer to help clean up the creek.

Your donations and acts of service are essential to the restoration of our riparian stream corridor.



#### Participate in our Bioblitz!

The Bioblitz is ongoing and needs your input! April 30th marked the 2021 Bioblitz kickoff, in tandem with the City Nature Challenge: a collaborative competition between cities across the world. The challenge was locally organized by our friends and partners Cincinnati Parks & Great Parks of Hamilton County.

These are some common species spotted in the watershed:



### SAVE THE DATE

May 22, Urban Stream Adventure • June 5, Workparty in the Watershed (Salway Park-North) June 19, Urban Stream Adventure • July 31, Lower Mill Creek Cleanup August 7, PADDLEFEST (+Mill Creek Peek) • August 21, Urban Stream Adventure September - October, 2nd Annual MCA Trash-a-Thon September 18, Workparty in the Watershed (Salway Park-South) • September 25, 3rd Annual Run the Riffles

# #MILLCREEK education



Engaging the Next Generation of Environmental Stewards

Concept drawing by Andrew Bach, UC Student.

College interns play an important role at MCA: we teach them and they teach us! A key component of our education program is providing first-hand experience to the next generation of environmental stewards for careers in environmental services. In 2020, we worked with 10 different college students from 6 different universities in programs ranging from Environmental Engineering to Electronic Media and Anthropology. In 2021, we have another full set!

This spring semester, the University of Cincinnati's College of Design, Architecture, Art and Planning (DAAP) orchestrated a comprehensive "cluster" of classes focused on studying and designing solutions for the Mill Creek watershed. In partnership with MCA and other regional stakeholders, students explored the assets of the watershed through a collection of courses with varying planning and design perspectives, including:

- **Regional Planning:** The Mill Creek is an ideal subject for regional study because it includes numerous communities and environmental systems existing within and beyond the boundaries of the watershed.
- Landscape Architecture: Our watershed represents a series of distinct ecological communities and offers a full pallet of design opportunities and landscape interventions.
- **Neighborhood District Planning:** The Mill Creek Watershed includes 37 jurisdictions, each with unique opportunities and needs, making it ideal for neighborhood-scale planning.
- **Planning Theory & Foundation:** Studying the history and structure of Mill Creek Alliance provides real-world understanding of organizational theory, behavior, analysis, and nonprofit planning.
- Geospatial Information and Analysis (GIS): Spatial information relevant to residents, planners, and the environment at large can convey the intricacies and connections of the watershed and its inhabitants.

Participants of the cluster were given unique opportunities to create useful spatial data and illuminate scaled design solutions to socio-environmental problems in the watershed. Final studio plans and projects were featured on websites, Esri GIS storymaps, and public presentations. The semester findings will continue to be built upon by future UC classes, our organization, and community leaders. You can view student designs at *www.themillcreekalliance.org/daapcluster*.

MCA is moving! While we have enjoyed our time in Northside in the old St. Pius X Rectory adjacent to Urban Artifact, we are the unfortunate victims of our landlords' success! Beginning in July, you will find us at our new office in the Mill Creek Museum and home of the MCYC, located at 1223 Jefferson Avenue, Reading, OH 45215. Our phone number and other contact information will remain the same!

Become a Donor Invest in Your Local Water.



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