



# WATERSHED NEWS

## Fall 2026

Little Sewickley Creek Watershed Association

P.O. Box 183, Leetsdale, PA 15056

Find us at [www.lscwatershed.org](http://www.lscwatershed.org) and on Instagram and Facebook

### Note from the President 2026

Barbara Carrier, LSCWA President

Welcome, and thank you for your interest in Little Sewickley Creek and the work of the Little Sewickley Creek Watershed Association (LSCWA).

As we reflect on another year, we are grateful to have an active association of members, residents, community partners, and friends who care deeply about the creek and its future. Yet we continue to be surprised by how many people in our surrounding communities are unaware of Little Sewickley Creek and its significance to our area. Increasing that awareness remains an important part of our work.

We are especially grateful this year to EQT Corporation for a \$23,000 grant to support our plant resurvey project. This important initiative will help us continue to learn about and document the plant life within the watershed and strengthen our understanding of its ecosystem.

Little Sewickley Creek and its tributaries meander through our communities, supporting a diverse ecosystem of fish, flora, and fauna. Educating children and adults about the watershed and the important role it plays in our local environment helps build an appreciation for this natural resource and an understanding of why protecting it matters.

We are grateful for the residents who live along and near the creek and take care to protect it, and for the members of LSCWA who contribute their time, knowledge, experience, and talents to our mission. The remarkable variety of skills our members bring makes our organization stronger and expands what we can accomplish together. Our partnerships with the communities throughout the watershed and with organizations such as Fern Hollow Nature Center are equally essential, helping us increase awareness of the creek, bring attention to potential concerns and threats,

and create opportunities to educate others and celebrate this special part of our community.

As stewards of Little Sewickley Creek, our responsibility is both to protect it and to help others understand its importance, allowing the creek to continue its natural journey through our communities as it has done for centuries. To learn more about the watershed, our programs and projects, or ways to become involved, please visit [lscwatershed.org](http://lscwatershed.org).

Finally, all members are warmly invited to attend our **Annual Members Meeting on November 9 at 7:00 p.m. at Sewickley Public Library**. We hope you will join us as we come together to learn more, connect with one another, and continue our shared commitment to Little Sewickley Creek.

### Become a Member Today!



*Rainbow Darter found at LSCWA BioBlitz 2026*

### Mark Your Calendar

|                      |                                                               |
|----------------------|---------------------------------------------------------------|
| <b>Nov. 9, 2026</b>  | Annual Members Meeting at 7:00 pm at Sewickley Public Library |
| <b>Jan. 9, 2027</b>  | Winter Bird Count                                             |
| <b>Apr. 25, 2027</b> | BioBlitz                                                      |
| <b>Spring 2027</b>   | Summer Discovery Camp Registration Opens                      |

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## Plant Survey Begins!

Brenna Culbertson, QV Creeker

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### What is the project?

The Little Sewickley Creek 2026-2028 herbarium project is a continuation of a three-year botany collection from the mid-1980s, which was re-started in early May of 2026. This project consists of five student interns from the Quaker Valley High School “Creekers” program. The adults who helped organize the project are Janel Morrison and Cam Elko from Fern Hollow Nature Center, as well as Alyssa Landa and Bonnie Isacc from the botany department of The Carnegie Museum of Natural History. The interns involved are Cora Dwyer, Lucy John, Brenna Culbertson, Anna Fuener, and Nora Saracco. The project itself is funded through a grant from EQT and the Little Sewickley Creek Watershed Association. This project is about collecting field samples of plants that grow in the riparian zones of the Little Sewickley Creek Watershed. The interns collect the different plant data by taking samples, and by using the iNaturalist app to record photos and locations of where the field samples were found.

### Why collect plants?

While collecting plants might not seem like a very intriguing project, plants are a crucial part of the watershed. The plants that grow in the riparian zone are a very important part of maintaining the health of the creek. These plants help filter out harmful chemicals that would otherwise seep into the water. By collecting samples of the plants that grow in our watershed, we can see how many invasive species are growing in our watershed as well as the difference in plant species since the last collection 40 years ago.

### What does an outing for this project look like?

About once every month the adults and students meet at a location along Little Sewickley Creek, and everyone gets a pair of snips and an uprooting tool to collect all the identifying parts of the plant specimens we find. We have about an hour to go along the creek and find any plants that we can log into the iNaturalist app. We take the roots, leaves, stems, and/or fruits of the plants we find to take back to the meeting point. We then place our plants in a plant press to get them ready to be mounted onto paper and placed in an herbarium, a library of preserved plants.

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## QV Creekers 2025-26

Madeline Horton, QV Creeker

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QV Creekers is an environmental internship open to Quaker Valley High School students that allows students to get hands-on experience in Sewickley’s local watersheds and promote environmental awareness to others. The program began with a training day at Little Sewickley Creek in which students collected and examined macroinvertebrates in the water and even learned to electrofish. Most notably, students collected water samples from the creek and conducted various tests such as pH, alkalinity, and salinity on the samples. For each meeting at Fern Hollow, new water samples were tested and recorded to compare the health of the creek each month. Students also spent time learning about various water habitats, conservation, and animal rehabilitation, among other topics. Other meetings included Creekers meeting at Morrow Pontefract Park to search for trash and cleaning a vernal pool to assist an ongoing research project at Robert Morris University. Bird watching was another event where students explored the watershed and recorded bird species to track migratory bird populations.

The largest Creekers’ event of the year was the symposium in which members met with other schools to present nature themed poster projects they crafted. Hundreds of displays, including research projects and informative games, allowed students to learn new information in a fun and interactive manner. After presenting, schools were broken up into various groups to listen to watershed experts, bird watch, bug hunt, and more. Overall, Creekers was a great opportunity to get involved in Sewickley’s local waterways and work to educate others on its importance.



*Summer Discovery campers looking for critters.*

# Birds Warn Us of the Presence of Microplastics

Robert S. Mulvihill and Dr. Steven C. Latta at the National Aviary and Ramon Childs at Duquesne University

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Some of the most important bird species are those that can warn us of harm that humans are inflicting on our shared environment. For more than two decades, ornithologists at the National Aviary have studied the Louisiana Waterthrush, establishing this unique warbler as an important indicator of the ecological integrity of forested riparian ecosystems. The waterthrush breeds along small, shaded streams in eastern North America, where it feeds on the aquatic larvae of mayflies, stoneflies, and caddisflies.

In previous studies we have shown that, because of their position at the top of the riparian food chain, Louisiana Waterthrushes experience negative effects from the contamination of streams by acidic rainfall, acidic abandoned mine drainage, and metals associated with hydraulic fracturing for shale gas extraction. The latter has been shown to have epigenetic effects on gene expression that may affect long-term population survival and fitness of waterthrushes on impacted streams.



In 2025, with generous support from the Pennsylvania Department of Conservation and Natural Resources, we began a new study to assess the presence of microplastics in the Louisiana Waterthrush and their aquatic environments in southwestern Pennsylvania. Plastics are ubiquitous, with more than one-third of plastics production dedicated to packaging and disposable items. Many plastic articles, such as throwaway cups, utensils, and plastic bags, have a useful life span measured in timescales of only seconds, minutes, or hours. Upon release into the environment, however, these products can persist and pollute for decades, centuries, or even millennia, as none of the commonly used plastics is biodegradable.

Because toxic chemicals in the environment, such as PCBs, PFAS, and phthalates, often adhere to microplastics, facilitating their entry into cells of organisms, it is important to understand the prevalence and composition of microplastics in stream habitats where they can enter food webs and affect the overall health of the ecosystem, which, of course, includes us.

So, in spring 2025 we began an investigation of the comparative presence of microplastics in the Louisiana Waterthrush in urban and rural streams in Allegheny and Westmoreland counties. We hypothesized that the larval insects present in these streams would ingest microplastics found in the water, that Louisiana Waterthrushes would themselves ingest these microplastics-loaded macroinvertebrates, and also feed them to their nestlings.

Throughout the 2025 breeding season, we sampled microplastics (MP) in 14 streams in Allegheny and Westmoreland Counties. We collected water samples and stream insects from all streams, and fecal samples from 46 adult birds and 41 nestlings. Provisional laboratory analysis of these MP samples has revealed considerable diversity and variation in MP presence across our study streams. We observed a range of MP particles in our stream samples between 140-1850 MP/L; MP types in our samples ranged from 3-15.

Notably, samples from Little Sewickley Creek showed much lower than average MP contamination (273 MP/L compared to an average of 720 MP/L); and only four MP types compared to an average of 9.5. 90% of the particles detected in samples from Little Sewickley Creek were <100,000 nanometers in size, which is less than the width of a human hair.

Upon completion, results from our study will determine the degree of trophic exposure and food web transfer of nanoplastics and microplastics in the Louisiana Waterthrush along an urban to rural gradient of headwater stream habitats. This will enable us to determine potential ecotoxicological consequences of increasing plastic pollution in streams not only on an obligate riparian songbird but also alert us to potential harmful effects to humans—all of this, we hope, in time for preventative or restorative measures to be taken.

[To read this article in its entirety, visit [lscwatershed.org](https://lscwatershed.org).]

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## Keeping Connected

Chriss O'Lare, LSCWA Secretary

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Want to learn more about the watershed? Our website is a great source of data from the studies that have been completed in and around Little Sewickley Creek. It ranges from the plant specimens collected in the 1980s (which inspired our recent project) to an interactive map of water chemistry data and photos collected in 2018 to the list of birds counted in our most recent Winter Bird Counts in 2025 and 2026.



Want to actually get out in the field and help collect the data? In the last couple of years, we have increased the number of chances for you to do so! No experience is necessary. Besides birds, we are interested in everything living within the watershed. Our BioBlitzes in 2025 and 2026 included searches for fungus, plants, insects, birds and creek critters. There were walks to the beaver habitat and demonstrations of electrofishing to help us count fish.

Anything added to the iNaturalist citizen-science app that was found within the watershed on that day (or any day!) is included in our project. Take a look at [www.inaturalist.org/projects/little-sewickley-creek-watershed](http://www.inaturalist.org/projects/little-sewickley-creek-watershed). If you like to explore outside and would like some help identifying a plant or a bug or a mushroom, iNaturalist is the app for you! Start using it in the LSC watershed and you will be adding to our knowledge.

Follow us on Instagram or Facebook and check out our website for more information about upcoming events. Hope to see you in person soon!

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## Summer Discovery Camp 2026

Chriss O'Lare, Camp Director

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Although our two weeks of camp were dramatically different when it came to temperatures, with one unusually cold and one extremely hot, we had two great sets of campers who managed to learn a lot about our watershed. We explored the creek and the woods around it, along with a visit upstream to Kings' Lake on Friday of each week. Campers really enjoyed the games designed to teach about ecological concepts and of course looking for critters in the creek and at the lake. Some of their favorite finds were crayfish, salamanders, sculpins, crane fly larvae, and mayfly nymphs.

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## Proposed 2027 Budget

John Orndorff, LSCWA Treasurer

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### LSCWA 2027 Budget

|                                         |                 |
|-----------------------------------------|-----------------|
| <b>INCOME</b>                           | <b>\$13,900</b> |
| Membership                              | \$10,000        |
| Camp Registration Fees                  | \$1,000         |
| Investment Account                      | \$2,900         |
| <b>EXPENSES</b>                         | <b>\$13,900</b> |
| <b>Program</b>                          | <b>\$12,425</b> |
| Summer Discovery Camp                   | \$4,000         |
| QV Creek Program                        | \$3,750         |
| QV Middle School Watershed Club         | \$2,500         |
| Website                                 | \$1,000         |
| Newsletter Printing/Mailing (half cost) | \$1,175         |
| <b>Administration</b>                   | <b>\$300</b>    |
| Postage                                 | \$100           |
| P.O. Box Fee                            | \$140           |
| Secretarial Supplies                    | \$60            |
| <b>Fund Raising</b>                     | <b>\$1,175</b>  |
| Newsletter Printing/Mailing (half cost) | \$1,175         |

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**If you would like to become a member or contribute to the LSCWA, please send a check to “Donations” at P.O. Box 183, Leetsdale, PA 15056 or visit our website: [lscwatershed.org](http://lscwatershed.org)**

# Birds Warn Us of the Presence of Microplastics

Robert S. Mulvihill and Dr. Steven C. Latta at the National Aviary and Ramon Childs at Duquesne University

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Some of the most important bird species are those that can warn us of harm that humans are inflicting on our shared environment. For more than two decades, ornithologists at the National Aviary have studied the Louisiana Waterthrush, establishing this unique warbler as an important indicator of the ecological integrity of forested riparian ecosystems. The waterthrush breeds along small, shaded streams in eastern North America, where it feeds on the aquatic larvae of mayflies, stoneflies, and caddisflies.



*A Louisiana Waterthrush captured for this study.*

*Photo by Robert Mulvihill*

In previous studies we have shown that, because of their position at the top of the riparian food chain, Louisiana Waterthrushes experience negative effects from the contamination of streams by acidic rainfall, acidic abandoned mine drainage, and metals associated with hydraulic fracturing for shale gas extraction. The latter has been shown to have epigenetic effects on gene expression that may affect long-term population survival and fitness of waterthrushes on impacted streams.

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Because toxic chemicals in the environment, such as PCBs, PFAS, and phthalates, often adhere to microplastics, facilitating their entry into cells of organisms, it is important to understand the prevalence and composition of microplastics in stream habitats where they can enter food webs and affect the overall health of the ecosystem, which, of course, includes us.

So, in spring 2025 we began an investigation of the comparative presence of microplastics in the Louisiana Waterthrush in urban and rural streams in Allegheny, Washington, and Westmoreland counties. We hypothesized that the larval insects present in these streams would ingest microplastics found in the water, that Louisiana Waterthrushes would themselves ingest these microplastics-loaded macroinvertebrates, and also feed them to their nestlings.

Our project also provided valuable training and educational opportunities for students, as well as an opportunity for community outreach. Recent graduates of the University of Pittsburgh, Chatham University, and Duquesne University were key members of our field team. At Duquesne, Dr. Brady Porter and graduate student, Ramon (Ray) Childs, took on the job of analyzing our water samples for microplastics as part of Ray's master's research project.



*Field crew (l-r: Hannah Jones, Ramon Childs, Oliver Jankosky) collecting data on a waterthrush captured for the study.*

*Photo by Robert Mulvihill*

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|                                 |
|---------------------------------|
| Polyamide                       |
| Polyvinyl chloride              |
| Polyolefin                      |
| Polyurethane                    |
| Polymethyl methacrylate         |
| Polyoxymethylene                |
| Polytetrafluoroethylene         |
| Polyethylene terephthalate      |
| Polycarbonate                   |
| Polystyrene                     |
| Polylactic acid                 |
| Polypropylene                   |
| Polyethylene                    |
| Acrylonitrile butadiene styrene |
| Rubber                          |

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Upon completion, results from our study will determine the degree of trophic (i.e., the individual steps from producer to primary consumer, secondary consumer, etc. in a food chain) exposure and food web transfer of nano- and micro-plastics in the Louisiana Waterthrush along an urban to rural gradient of headwater stream habitats. This will enable us to determine potential ecotoxicological consequences of increasing plastic pollution in streams not only on an obligate riparian songbird, but also alert us to potential harmful effects to humans—all of this, we hope, in time for preventative or restorative measures to be taken.