



Great Blue Heron
Ardea herodias
Ohio Division of Wildlife

Spring
2023
Newsletter

Spring Watershed Program News

The district's watershed program was established in 2021 to initiate and manage watershed planning in target Summit County communities. This includes restoring and protecting the water resources of the county through collaboration with stakeholders by identifying goals and implementing projects.

These projects include habitat restoration and preservation, watershed tours and field days, homeowner workshops, and the development of Nonpoint Source Implementation Strategic Plans.

The district's watershed program is supplemented with the volunteer water quality program and this data is used to guide future restoration and land protection decisions.

Call for Volunteers!

The 2023-24 volunteer water quality monitoring year starts in May 2023. Volunteers are provided with training and all equipment required to complete monitoring for the year. After training, volunteers visit their assigned monitoring sites in the watershed to monitor chloride, dissolved oxygen, temperature, conductivity, and pH. Volunteers also engage in biological monitoring via macroinvertebrate sampling. If you're interested in joining the volunteer monitoring program, or want to learn more about our program, click [here](#).

STEPHANIE DEIBEL, WATERSHED COORDINATOR



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Healthy Streams

Stormwater - Slow it Down, Spread it Out, Soak it In.

Imagine taking a walk in the country and seeing a beautiful bubbling brook meandering through a valley. Chances are that the little brook has banks covered with herbaceous plants and woody shrubs, like purple coneflower and buttonbush, and is shaded by a variety of stately trees such as willow and sycamore. As you wander down the gently sloping floodplain and get closer to the stream you can see minnows swimming in the clear water, water boatmen striding on the surface, and dragonflies hovering above. Looking down, you are able to see all the way to the bottom, where there are mixed cobbles, pebbles, and smaller grains of sand in the streambed. This variety of sediments creates a diversity of habitats. Imagine lifting a rock and finding a crayfish among a multitude of other small creatures, making their homes, and raising their families in the bottom sediments. We would call this stream healthy. So, what makes a “healthy” stream?

Channels that bend and curve

Stream channels are unique from one another, taking on their size and shape based on how much water they carry before and after storm events, the size of their watersheds (how much land they drain), the type of land use within the watersheds, whether that land is steep or flat, and even the type of soils they flow over. Streams naturally meander—twisting and turning over the landscape. Stream water tends to run faster in straight sections, and slow down on the curves.

It's more than just water!

Healthy streams carry more than water. Their channels naturally erode to some degree—especially along the outside meander bends where the water moves faster than on the inside of the curve. Eroded material is transported along with the stream water, dropping out where water moves slower—especially along the inside of the curves. In this way, streams form their bank patterns, including sand bars and islands. These patterns change over time, adjusting to changes within their watersheds and trying to reach their equilibrium.

It's why we call it a FLOODPLAIN

Healthy streams spill water out onto their floodplains when rainstorms add to the base flow volume of water. Therefore, it is vital for stream banks to be

low enough to allow flood waters to escape from the channel to disperse, slow down, soak into the ground, and later evaporate into the air. Stream channels that are able to flood onto their banks give the stormwater and the suspended sediment a place to go, instead of sending it all downstream. Naturally vegetated floodplains are the best!

Changing their size and shape

Many streams have been degraded by our attempts to make the stream channel “fit” the developing landscape around it. Straightening stream channels entails removing the meandering bends, thereby reducing the overall length of the channel. Since a straight line is the shortest distance between two points, shorter, straighter channels deliver water faster downstream than channels with many twists and turns. As stream water velocity increases, so does its erosive power, and the higher-energy stream water increases erosion on both the banks and channel bottom. The stability of a stream bed and bank can be greatly stressed, and lead to a chain of events including increased suspended sediment (muddying the waters) and greater sediment deposition. Muddy water can reduce the photosynthetic activity of channel-dwelling plants, so there may be a net decrease in available oxygen. Lower oxygen concentrations dictate which organisms can live there (those tolerant of degraded conditions and pollution) and which will likely die out (those requiring higher-quality conditions).

Replacing their healthy vegetation.

Replacing natural plants and shrubs with lawn or turf grass within riparian areas lessens the stability of the stream banks. Compare the properties of grass with native herbaceous plants and shrubs, both above and below the ground. The short length of a grass root does little to anchor soil during a storm or to dewater the soil following a storm compared with the longer, more developed



root systems of native herbaceous plants and woody shrubs. Above ground, native plants and shrubs are considerably hardier than blades of grass in standing up to stormwater runoff as it rushes over the ground toward the stream. Mowing grassy stream banks makes the problem worse—reducing, even more, the resistance to stormwater runoff—thereby making the banks even less stable. As well, dumping grass or leaves into stream channels offsets the healthy nutrient balance, and can add to pollution.

Encroaching on their space.

We appreciate the beauty of streams and like to be close to them, but should “keep our distance” if we want to respect and protect them. Over the years, riparian landowners who build too close to streams have experienced property damage from flooding and/or loss of land from streambank erosion. If we remove the natural capacities of streams and fill in or build upon floodplains, we can create a harmful situation—both for the water quality of the stream and the welfare of the property owner. Consider the water quality impacts of straightening a channel and replacing natural vegetation noted above. Building next to a stream adds to the problems and can put you in harm’s way, especially during storm events.

Riparian Setbacks **A Solution to Protect Streams**

There are ways to keep streams and the people who live near them healthy and functioning well. One of the best ways is to adopt riparian setback legislation to protect streams and their riparian areas by keeping them in as naturally vegetated state as possible. Riparian setbacks are similar to other setbacks—such as front and side yard setbacks—found in local zoning codes. Riparian setbacks establish “no-disturb” zones along the length of streams to protect both the water quality of the streams and the riparian landowners from destructive forces of flooding and erosion.



This type of legislation has worked well in Summit County since 2002. In that year, Summit was the first county in Ohio to adopt a countywide riparian setback for unincorporated areas.

Riparian setbacks afford protection to riparian areas that return benefits to all community residents. The benefits of improved riparian areas and water quality within a community include, but are not limited to:

Physical improvements:

Increase the protection of the health, safety, and general welfare of the residents by restoring and maintaining the physical, chemical, and biological integrity of the water resources and their channels and reduction of flooding, erosion, and property loss.

Economic improvements:

Preserve land characteristics (lot size, shape, and integrity), sustain or increase property values because of aesthetic enhancements, help to keep community costs low, reduce infrastructure costs, and decrease the reliance on engineered solutions. The overall costs associated with the protection of riparian areas are typically lower than the expenses of stream restoration projects.

Recognition of Good Stewardship:

Communities choosing to incorporate Best Management Practices, such as riparian setbacks, into law, are being acknowledged for their efforts, especially by neighboring communities downstream.

Clean Water Act amendments:

Riparian setbacks are tools that will help satisfy federal and state requirements for municipalities and townships to improve the quality of stormwater entering our waterways.

Protecting streams makes sense to maintain a healthy environment, which helps to protect our health as well. Contact Summit SWCD at staff@summitoh.net for more information regarding riparian setbacks and other measures to protect and preserve our valuable surface water resource and combat stormwater runoff.





Master Rain Gardener Program



Train to be a Master Rain Gardener! Learn to design and install your own raingarden and be the raingarden expert in your neighborhood. Master Rain Gardeners help friends and neighbors to learn about, design, and plant raingardens.

Raingardens work with nature to collect and filter rainwater that runs off impervious surfaces like rooftops and driveways. Impervious surfaces lead to increases in surface runoff and often result in increased flooding and stream bank erosion. As water travels over impervious surfaces, it also has the potential to pick up pollutants. Polluted stormwater runoff enters our rivers and lakes and is one of the leading threats to water quality in the United States.

The Master Rain Gardener Program will teach you how to manage rainwater in your own yard. Raingardens naturally manage stormwater by infiltrating precipitation and allowing it to soak into the ground rather than sending it directly to storm sewers and nearby streams untreated.

We will have a virtual orientation meeting for the class on, June 7, 2023, when we will also provide links to the online classes. The series of online classes will have weekly teams virtual meetings where we will have office hours to answer your questions. These office hours are totally optional and not necessary for your course completion. The first office hours will be held during the week of June 12, 2023, and the last office hours will be held during the week of July 17, 2023. There will be no office hours during the week which includes the Fourth of July. The weekly discussions are totally optional and attendance is not necessary for the completion of the class. Invitations will be sent for the virtual office hours when we send all the information, on June 7, Orientation Day. You may watch the

classes at your convenience within the course timeline, and this allows for more flexibility. Your webinar access will be permanent. Summit SWCD will provide you with weekly feedback on your weekly homework assignments and quizzes through google classroom, and you will need a g-mail account for the google classroom.

Upon completion of the course, and either installing your own raingarden or helping to maintain a community raingarden as a volunteer, you will receive your Master Raingardener certificate.

Cost for the class is: \$25.00.

You may register for the class at: <https://sswcd.sumitoh.net>. Registration and payment should be in our office by Wednesday, May 31, 2023. You may pay by mailing a check to Summit Soil and Water Conservation District, 1180 South Main Street, Suite 230, Akron, Ohio, 44301.

Please call 330-926-2452 for more information and any questions that you may have.

We are grateful to Washtenaw County Michigan Water Resources Commissioner's Office, Cuyahoga County Soil and Water Conservation District, Lake County Soil and Water Conservation District, and Chagrin River Watershed Partners, for their resources and assistance with this program.



Richfield Village Raingarden

Raingardens

The conservation practice of raingarden installation can provide any private or commercial property owner with the opportunity to improve water quality and reduce stormwater runoff. The raingarden intercepts the stormwater before it gets to the storm drain and ultimately, the nearest stream or river. The native plants have deep roots, which filter out toxins such as pesticides and animal waste. Surface runoff is slowed down, preventing erosion of sediments, which is the number one source of pollution in our streams and lakes. So, raingardens not only improve the quality of surface and groundwater, but also improve the quality of life for all of the plants and animals that live in and around our surface waters.

If you would like information about raingardens, or practical instructions on installation, please feel free to call Summit SWCD, at 330-920-2871 or go to our [website](#) to download a raingarden manual or other informational brochures on related environmental topics.





Native Plant Month

April is Native Plant Month! U.S. Senators Rob Portman and Mazie Hirono introduced a resolution designating April 2023 as “National Native Plant Month”. This resolution recognizes the importance of native plants to environmental conservation, wildlife diversity, and restoration projects. After this resolution passes, April 2023 will be recognized as both Ohio Native Plant Month and National Native Plant Month! In addition, the Ohio Native Plants of Distinction initiative has been launched to highlight Ohio native plant species that represent distinct benefits for Ohio’s ecosystems and native wildlife while being readily available throughout the nursery industry. Ohio Native Plants of Distinction!

Starting in 2022, we highlighted four GREAT Ohio native plants including the Bur Oak (large canopy tree), Eastern Redbud (understory tree), Northern Spicebush (woody shrub), and Purple Coneflower (Perennial). Please learn about these great native plants and add as many as possible to your landscape! This year, we encourage the planting of another set of great Ohio plants: Sugar Maple (large canopy tree), Paw Paw (understory tree, and the Ohio Native Fruit), Virginia Bluebells (early-flowering perennial), and Swamp Milkweed (amazing native milkweed for mid-summer pollinators).

April is also a great time to search for native spring wildflowers. The diversity and resilience of Ohio’s ephemeral wildflowers are a wonder to behold year after year. The Ohio Department of Natural Resources (ODNR) publishes a weekly bloom report, which can be viewed [here](#). They also publish a spring wildflower checklist, which is very helpful when hiking and wildflower hunting! It can be viewed [here](#).

RESOURCES: OHIO NATIVE PLANT MONTH, OHIO DEPARTMENT OF NATURAL RESOURCES.
PHOTO BY NANCY STRANAHAN

Rain Barrels Making Every Drop Count

A rain barrel is a container that collects water from a roof, as it flows through a downspout. Because the rain barrel collects and slows down the runoff, it not only conserves precious water, but also helps to reduce stormwater runoff volumes and rates and prevent erosion and flooding. Rain barrels are an easy, practical way to control excess stormwater and reduce the negative effects of pollution. The installation and use of a rain barrel will also generate savings on water and sewer bills and may result in credits on stormwater utilities in some communities.

In Summit County, where the average annual rainfall amounts to approximately 36 inches, a one-inch rainfall draining off a 1000-square-foot roof, will generate about 562 gallons of water. The water collected in the rain barrel can be used for lawn and garden watering, which accounts for nearly 45% of total household water use in the summer season.

The upcoming Rain barrel Workshops in Summit County so far this year are:

- May 22 @ Macedonia - click [here](#) to register.
- June 20 @ Northfield Village (drive-thru) - click [here](#) to register.

If you have any questions about rain barrels or rain barrel workshops, please call 330-926-2452 or go to our [website](#).



Make an investment in the environment!



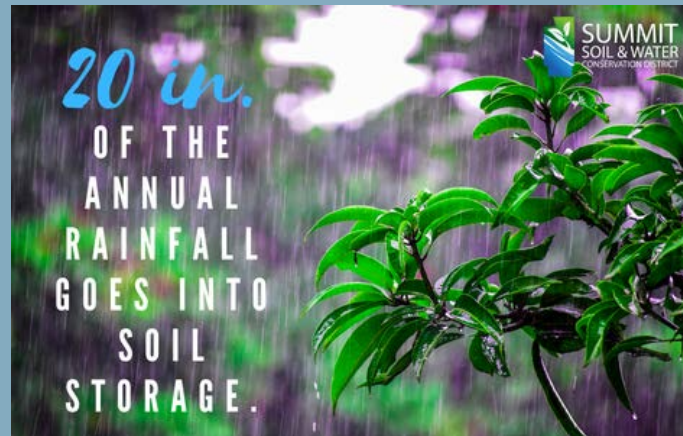
Start with your own backyard!




“Don’t Guess - Soil Test”

All lawn and garden fertilization programs should begin with a soil test. The test will tell you which nutrients may be deficient in your soil. Soil tests provide specific fertilizer recommendations for your lawn and/or garden and can help you avoid over-application of fertilizer. Fertilizers are one source of non-point source pollution, which accounts for 60% of the water quality problems in Ohio. When it rains, excess fertilizer runs off the lawn into the storm sewers or ditches ultimately ending up in our lakes and rivers. Problems resulting from excess fertilizers in our waterways include poor stormwater quality, dead fish and aquatic animals, weed-choked lakes, loss of habitat and species diversity, and flooding.

For more information on soil testing contact the Summit Soil and Water Conservation District at 330-926-2452 or visit or [website](#) to order a soil test from Penn State University.



 **We need your help planning our 2024-2028 Strategic Plan!** 

Please scan and fill out the [survey](#) 





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Contact Us!

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Mission Statement:

Summit SWCD provides leadership and advocates for the stewardship of our natural resources and responsible land use through the provision of education, technical assistance, and partnerships in Summit County.

The Summit SWCD is an independent division of the Ohio Department of Agriculture and is funded by the State of Ohio, the Summit County Council, and the Summit County Communities for Clean Stormwater.

In order to provide equal employment opportunities to all individuals, employment decisions in the District will be based on merit, qualifications, and abilities. The Summit Soil and Water Conservation District does not discriminate in employment opportunities or practices on the basis of race, color, sex, age, religion, national origin, ancestry, veteran status, disability, sexual orientation, gender identity or any other characteristic to the extent protected by law.

Summit SWCD does not discriminate in services with regards to race, color, sex, age, religion, national origin, ancestry, veteran status, disability, sexual orientation, gender identity, or any other characteristic to the extent protected by law.

