

Conservation in the Classroom

A Newsletter for Lucas County Educators to learn the latest in Conservation Education

SEPTEMBER-OCTOBER 2023



A Note From Patrick



Happy Fall Everyone!

Welcome back everyone! I am very much looking forward to visiting your classrooms for another great year of fun! Thank you very much for allow me the opportunity to provide these educational opportunities for your students. I truly enjoy seeing the excitement in a student's eyes when they learn an amazing fact or get to see something really cool like worms!

\$55

If you have not recieved this newsletter in the past, let me tell you a little of what you may find inside. Inside you will find a program highlight of the month, classroom grant opportunities, a new exciting resource to use in the classroom, fun fact of the month, and an activity you can try in the classroom with your students. This newsletter will come out on a bi-monthly basis in September, December, February, and April. Each edition has some great resources!

In addition to classroom visits, the activity kits for my programs are available for loan if you would like to borrow them! Loans are typically two weeks and materials can be dropped off/picked up at your school or you can stop by our office located at 3350 Hill Ave. Suite K. in Toledo. Feel free to reach out anytime if I can be of help to supplement your classroom learning in any way!

Take Care! - Patrick

Save the Date! Vermicomposting 101 Class



Have you ever wanted to start composting but weren't exactly sure how to get started? Let us help you!

Participants will receive helpful information on how to compost indoors or outdoors using worms! You will make your own compost bin complete with a plentiful starter pack of worms.

Power tools will be used during the class. Must be 18 years or older to use. Class limited to 10 participants.

Register online: https://www.lucasswcd.org/vermicomposting.html

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LUCAS SWCD

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To Schedule an Education Program:

Patrick Troyer, Education Specialist Phone: 419-893-1966 Ext. 2# Email: ptroyer@co.lucas.oh.us



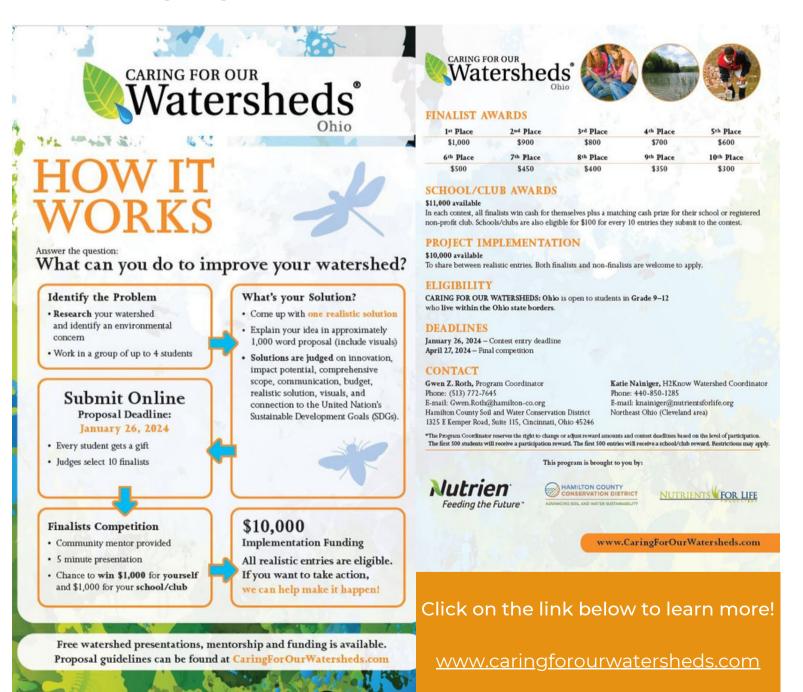


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Upcoming Events / Contests

Are you looking for a way to get your students involved in their community? This contest is for you! Caring For Our Watersheds is an education program that engages students in preserving and improving their local watersheds through student-led solutions. This program is curriculum-based and an excellent way to bring project-based learning to the classroom. Plus, students and their schools can win cash-prizes! Check out the informational flyer below and feel free to reach out to Patrick Troyer (ptroyer@co.lucas.oh.us) with any questions!

Additional information is posted on the Lucas SWCD Website at <u>www.lucasswcd.org/caring4watershed</u>



Program Highlight of the Month: Hazardous Waste Enviroscape



When thinking about hazardous waste, what comes to mind? What are hazardous wastes and why do we use them? We use them everyday including: fuels, solvents, fertilizer, and pesticides.



Thanks to funds from an Ohio EPA Grant, Lucas SWCD has a Hazardous Prevention and Cleanup Enviroscape that will help answer these and many additional questions by helping to visualize this very important issue.



This demonstration model will help illustrate issues arising from improper discharge/disposal, or accidental spills along with methods to clean up and prevent spillage of hazardous waste. Sources that are discussed include underground storage tanks, illegal dumping, and household/commercial practices.

Grant Corner: <u>Highlighting</u> Grants of Interests for Local Educators

Lori Otto Seeds For Education

Deadlines: November 15

Description: For more than 25 years, this vital Wild Ones donor-funded program has provided grants ranging from \$100 to \$500 for native plant gardens and landscaping projects throughout the United States. The funds are designated for acquiring native plants and seeds for outdoor learning areas that engage youth (preschool to high school) directly in planning, planting and caring for native plant gardens. Examples include

- pollinator gardens,
- rain gardens to improve water quality,
- taligrass prairies,
- native plant monarch waystations featuring community science activities,
- and sensory and natural playgroun

Do you know of a local school, nature center, after-school care program, community center or youth group in need of funding for a native garden or habitat for hands-on learning? If so, please invite them to apply for an SFE grant. All public and private schools, non-profits such as nature centers, youth organizations and community youth centers in the US are welcome to apply so long as the project uses native plants or seeds to educate youth. Please note, at this time, SFE grants do not fund vegetable gardens.

First Energy STEM Grants

Description: Grants are available to educators (Pre-K through grade 12) at schools, youth groups and educational program administrators in communities served by our electric operating companies, other areas where we have facilities, and where we do business.

Grant Award: Up to \$1,000

Fund Preference: Projects that support classroom projects or teacher professional development in the areas of science, technology, engineering, and math. Preference is given to applications that are well-written in and submitted in a timely manner, clearly explain how items requested for funding are important to the successful implementation of your project, and the involve one-time, one-year implementation and evaluation.

Learn more by visiting the First Energy Website!

Learn more at <u>https://wildones.org/seeds-for-education/</u>

Fun Fact of the Month



Did You Know? Stormwater Awareness

- After a one-inch rainfall, the resulting runoff from a one-acre parking lot could fill a swimming pool with 26,000 gallons of water
- A one-inch rain on a 1,000 sq. ft. roof produces 600 gallons of water
- Surface runoff, which is stormwater that does not soak up into the ground, flows into the storm drain that eventually flows into waterways such as rivers, lakes, or oceans
- Chemicals such as pesticides, herbicides, household cleaners, motor oil can make humans and animals sick while also destroying aquatic plants
- In a natural environment with ground cover, approx. 50% of water soaks up into the ground, 40% evaporates, and 10% becomes surface runoff
- In an urban environment, approx. 55% of water becomes surface runoff, 35% evaporates, and 10% soaks up into any natural ground cover available

Resource Connection of the Month WOW! Wonders of Wetlands Workshop



WOW! WONDERS OF WETLANDS EDUCATOR WORKSHOP

Saturday, October 21, 2023 Deer Haven Park 4183 Liberty Rd Delaware, OH 43015

9 a.m. - 3 p.m.

WOW! The Wonders of Wetlands is an instructional guide for educators that provides a creative collection of wetland activities, information, and ideas. WOW! includes more than 50 hands-on, multi-disciplinary activities in lesson plan format, extensive background information on wetlands, ideas for student action projects, and a wetlands resource guide. This workshop is open to environmental educators, teachers (informal and formal), volunteers and anyone interested in learning how to educate others about wetlands. There is a \$10.00 fee which will cover lunch/drinks costs. The WOW! Guidebook is being provided by the Ohio EPA, Office of Environmental Education. **Registration required by Friday, October 6, 2023.**

For more information, contact Dennis Clement at dennis.clement@epa.ohio.gov or (614) 644-2048



Are you looking to obtain more experience with Wetlands and Water Quality Education? Be sure to check out this amazing workshop coming up in October hosted by Ohio EPA.

For additional questions or to register, contact Dennis Clement at <u>dennis.clement@e</u> <u>pa.ohio.gov</u>

<u>General Education Updates:</u> Ohio Stormwater Awareness Week



OHIO STORMWATER AWARENESS WEEK October 1st-7th, 2023

Clean Streams Start With You!

What we do at home and work affects water quality. You can help keep water clean by:

- Planting native plants and trees.
- Properly disposing of chemicals and hazardous waste.
- Keeping storm drains clear of debris like leaves & litter.
- Always picking up and throwing away pet waste.
- Volunteering at or organizing a stream or roadside cleanup.



Scan the QR code to learn more & get involved!

TORMWATER

Clean Stream

Start HERE

ohiostormwaterweek.org

While rainwater is great for lawns and gardens, it can be dangerous for streams and rivers. Stormwater can push common household items – such as trash, lawn fertilizer, or paint- into local waterways, threatening our environment and clean drinking water.

Stormwater Awareness Week is a statewide effort that encourages communities (and the groups that care about them) to raise stormwater awareness via newsletters and social media posts, or with fun and educational events.

Follow or Like us! @LucasSWCD



Activity of the Month:

MATERIALS

For each group of students (2-3):

- one 8 oz. styrofoam cup
- coffee filter (cut into circles)
- sponge
- empty two liter soda bottle
- one sheet of paper
- sugar
- sand

PROCEDURE

1. Make a hole in the bottom a styrofoam cup about the size of your thumb (Step A in the figure).

2. Cut a circle the size of the cup bottom from a thin scouring pad. Place this circle in the bottom of the cup (Step A in the figure).

3. Cut the paper to approximately the same

height as the cup. Roll it into a tube which is about one-half the diameter of the cup and place the tube into the bottom center of the cup (Step B in the figure).

4. Fill the inside of the tube with sugar and the outside of the tube with sand. (The sand is between paper tube and sides of the cup.) Remove the paper tube. Place a thin layer of sand over the sugar (Steps C and D in the figure).

5. Cut the bottom off a two liter soda bottle at about the same height as the paper cup. Fill it about one-half full of water. This symbolizes groundwater. The level of the water in the tube and the sand in the cup should be about the same (Step E in the figure).

QUESTIONS TO PONDER

- What natural process does the water in the soda bottle represent?
- What type of rock does the sugar represent?
- \cdot What characteristics must a rock have to be suitable for forming sinkholes and caves?

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Sinkhole In A Cup



