

## Conservation in the Classroom

A Newsletter for Lucas County Educators to learn the latest in Conservation Education MARCH-APRIL- MAY 2024



#### A Note From Patrick



One of my favorite parts about the arrival of spring is being able to get outside and watch everything come back to life. It is truly remarkable to see plants and animals alike awake from their winter slumber and start moving around. I often like to unwind by taking a bike ride or walk through the woods and take a moment just to observe. In our busy world today, we don't often get such an opportunity but it is very important for our well-being to let our minds wonder and take in the beauty of our surroundings.

There are many things you can do to enhance your outdoor experience. One of the best things to do is to take a notebook out with you and start a journal. Let your senses be your guide. Close your eyes and write any sounds you hear or any smells you come across. Open your eyes and draw some things you see. Make a map and draw where you see these things adding as many details as possible.



It is truly amazing some of the things we notice when we let our minds wonder that we may not have ever noticed before. Use this journal any time you go outside and keep track of the things you see, smell, feel, smell, or hear and see how much more you notice each time you go out. Try this activity with your students not only as a brain break from the many things going on as the school year winds down. They will greatly amaze you!

As we wind up another school year, I would first like to thank everyone who has invited me into your classrooms this year. It has been an absolute pleasure to bring the wonders of science to your students and I look forward to a continued partnership! With that being said, the next school year will be hear before we know it!

- Program Scheduling for 2024-2025: You are most certainly welcome to contact me if you would like to book ahead for the upcoming school year. I understand dates/times will change and we can make those adjustments when you have a better idea on what your schedule will be! If you are ready to get something on the schedule now, let me know!
- Equipment Loans: I will once again be offering my program kits available to loan to your classroom. Just send me an email of what kit you would like to borrow and dates when you would need the materials. Loans are typically two weeks.

-Patrick

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To Schedule an Education Program:

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## **Professional Development Opportunities**

# TEACHER WORKSHOP

Help your students get their hands on nature! Motivate, inspire, and create young scientists. Join us as we explore activities that can be used inside and outside the classroom.

## 2 Locations/Dates to choose from!

## JUNE 26-27

Northwest State Community College Archbold, OH

**JULY 16-17** Defiance College Defiance, OH



CEU's or Grad Credit Available!

NOTE: If you would like to be eligible for Grad Credit you must be signed up for one of the workshops by **June 15th, 2024**.

Upon registering for the workshop, details will be sent on signing up for credit\*\*\*

Registration Materials and Payment Information can be found by <u>clicking</u> <u>here</u>

### WETLANDS

CRITTERS & SOIL

**USE WHAT YOU HAVE** HOW TO EXPLORE YOUR CAMPUS HABITAT RESTORATION SMALL OR LARGE SPACES

PROJECT LEARNING TREE

#### **PROJECT WILD**

Sign Up Today!

CONSERVATION IN THE CLASSROOM

## <u>Program Highlight of the Month:</u> 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.

Estimated Time: 40 minutes

## Grant Corner:

## Highlighting Grants of Interests For Local Educators

#### SSSA K-12 Educational Grant

The Soil Science Society of America (SSSA) and the Agronomic Science Foundation (ASF) are proud to provide grant money to K-12 educators to purchase necessary equipment and supplies for conducting soil science lessons in their classrooms. Incorporating soil science lessons into classrooms helps students gain knowledge about soils, the role of soil in ecosystems, its role in helping address a changing climate, and perhaps even peak their interest in a career in soil science!

This grant program will provide ten K-12 educators per year with up to \$500 each to purchase supplies and materials. This funding may be used to purchase one-time supplies or permanent equipment needed to conduct current lessons or lessons from SSSA's Soils 4 teachers website which features information on lessons on soil topics such as soil basics, biology, chemistry, physics, and more!

#### Key Deadlines:

April 30, 2024: Application deadline June 5, 2024: Awardees notified April 30, 2025: Submit final report, photos (with photo release form for each person in the photo), and budget expenditures

To Apply: <u>Online Grant Application</u>

#### Ohio Environmental Education Fund (OEEF)

#### General Info:

OEEF supports innovative projects that increase public awareness and knowledge about environmental issues, and provide the skills to make informed decisions and take responsible actions. Mini Grants cover \$500-5,000 while General Grants cover \$5,001- \$50,000

#### Eligible Applicants:

Schools, universities, nature centers, zoos, watershed groups, 501(c)(3) groups

Application Deadline: July 15th

For More Info/Apply: Visit the <u>Ohio EPA Website</u>

## Fun Fact of the Month



- Did You Know? Solar Eclipse
- The April 8, 2024 solar eclipse was the first solar eclipse in the continental US in 7 years. Prior to that, the last solar eclipse in the US was on February 26, 1979.
- Solar eclipses happen only during a new moon, but not all new moons due to the fact the moon's orbit is tilted 5 degrees compared to Earth's orbit around the sun

## **Resource Connections**

#### How Do Bees Make Honey? | It's Okay to Be Smart (Grades 9-12) Source: PBS

There's a reason we don't call them zucchini bees or apple bees! Western honey bees are the hard workers responsible for pollinating 75% of the fruits, vegetables, and nuts. As pollen season kicks into gear, dive into the complex and, at times, gross science behind the making of this sweet substance.

<u>Video Link</u>

#### <u>Why Is Spring a Thing? (Grade 3-12)</u> Source: PBS

Spring has sprung and with it comes another exciting changing of the seasons. But what causes these changes? Share this video with your class to explore how Earth's axial tilt causes seasons from different perspectives and to develop models of sunlight received at Earth's surface.



#### <u>Resource Link</u>



#### Hench Summer Program :

Here is a summer program opportunity to share with your parents. It is designed for students in Grades 3-8 diagnosed with Autism Spectrum Disorder. See the flyer on the left for information and the links below for registration.

#### Grade 3-5 Sign Up Form

Grade 6-8 Sign Up Form

## <u>Activities of the Month:</u>

Life Cycle of a Tree (Source: National Park Service)

The Circle of Life is a very precious and delicate cycle. We all go through it even large plants like trees! Let's take a closer look at what the Life Cycle of a Tree looks like.

Background Information:

Trees start out small like you and I, with just a single seed. When the seed germinates (begins to grow and develop) in the soil, it begins to sprout out shoots (roots) to anchor the little tree to the ground. The soil in the ground provides the tree with nutrients and water and before long a tiny leaf shoots out from the ground, and the tree begins developing as a seedling. \*Note: Due to the lack of development and protection, seedlings have a high "mortality rate" of being eaten or from disease.

The next stage in the cycle is the sapling (Juvenile; young) stage. If the tree survived from predation or disease, then it most likely has grown to be around 1-4 inches in diameter and about the small size you would see at your local nursery. The tree is not mature enough to reproduce (create a new tree from a seed). Once, the tree matures it will continue to grow and each species of tree will grow to different heights and in different soil environments. Each tree will flower during the proper season, produce fruit, and reproduce (disperse [release] seeds back into the environment). Even at the end of a tree's life, its purpose is still not done. When a tree dies, also called a snag. It provides shelter and food for wildlife along with returning nutrients back into the soil as it breaks down

Activity: Act out the Life Cycle of a Tree

Instructions:

1.Seed: Crouch down on ground with hands over your head.... little tiny seed on the ground.

2.**Seed begins to sprou**t: Dig your roots (toes) down into the ground, and send up leaves (fingers, then arms) towards the sky...you are still small.

3.**Seedling**: Begin to grow taller, extend branches (arms), spread out roots (Legs & feet).

4.**Spire-top**: Stand up and make the pointed spire-top shape with your arms.

5.**Round-top**: Change your arms to a rounded shape, widen your trunk (body) and crown (Neck & head)..

6.**Toppling at an old age**: All fall down! ...(snag): Decompose and help feed the seedlings that are sprouting on the forest floor!

