

# Nature News

Seasonal Newsletter of Oglebay Institute's  
Schrader Environmental Education Center

Fall 2018  
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Issue 1



Photo by Colleen Murray



## Field Notes from the Director

**“There is something incredibly nostalgic and significant about the annual cascade of autumn leaves.” ~Joe L. Wheeler**

When I was growing up in northwestern Pennsylvania, in the heart of the Allegheny National Forest, my favorite part of fall was the leaf piles. We had three big maple trees lining the side of our yard with leaves that turned **gorgeous shades** of red and yellow before dropping to the ground. My brothers and I would spend hours jumping in and out of the leaves. Of course, when you're younger, it's easy to be immersed in a pile of leaves. As we grow up, it becomes harder to rake a pile large enough to bury ourselves in. Is it just our increased height that prevents us from this seasonal delight, or is it something more? Children will **throw themselves with glee** into a leaf pile (oblivious or unconcerned about insects that may lurk within), never worrying about how their play may look to others. Imagine if the next time you drove home, you saw adults playing with reckless abandon in a leaf pile. Would you wonder what they were thinking? Would you be jealous? Would you race home to rake up your own leaf pile?

About ten years ago, while working at the McKeever Environmental Learning Center in western Pennsylvania, I attended a “John Muir Trek” leadership training, where we learned the intricacies of leading adults on a full day, structured but flexible ramble through the forest. I vividly remember one segment of the trek, where we spontaneously **re-discovered the joy** of throwing leaves up into the air. For several minutes, a group of serious and respectable adults were engaged in what can only be described as a crazy leaf fight. Afterwards, we all collapsed on the ground as smiles and laughter continued the joy for awhile longer.

I hope that everyone has a chance to experience that level of joy sometime this fall. It's too easy to forget that we were all kids once, not worried about the responsibilities and obligations that can cause us stress as adults. **So take a moment this fall to step outside, breathe deep, and gather up some colorful fall leaves.** Throw them into the air and watch them fall back to the Earth, spin around with your arms out wide, and if you're feeling really brave, rake up a pile of leaves and jump right in!

*Molly J. Check*

## Inside this issue

Field notes.....	1
Photo corner.....	2
Birding w/ Christina....	3
Nature trivia.....	4
Programs.....	5&6
Phenology.....	7
Kid's page.....	8

## Membership

Please consider supporting the Schrader Center through membership. Details can be found at <http://oionline.com/support/>

Members offer valuable support that allows our environmental education programs to continue for local schools and families.

We couldn't do it without our members!

**Thank you for your support!**

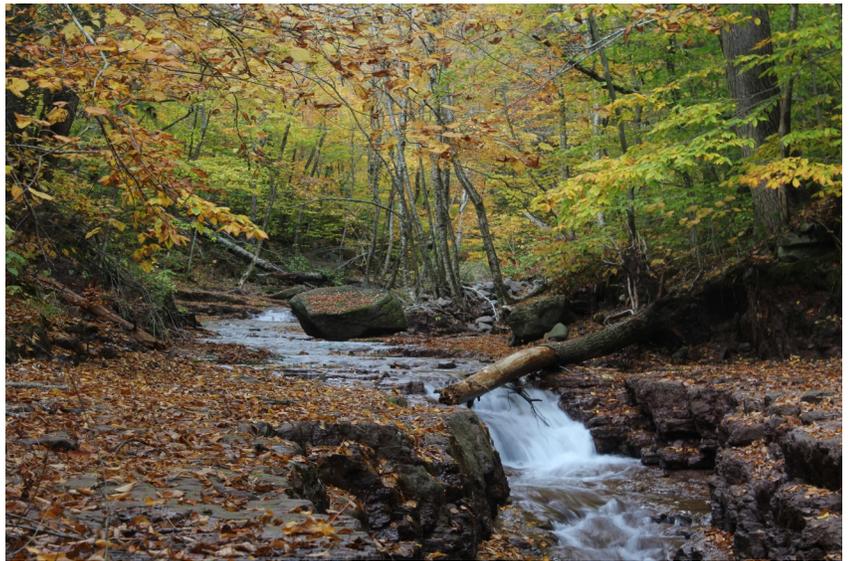
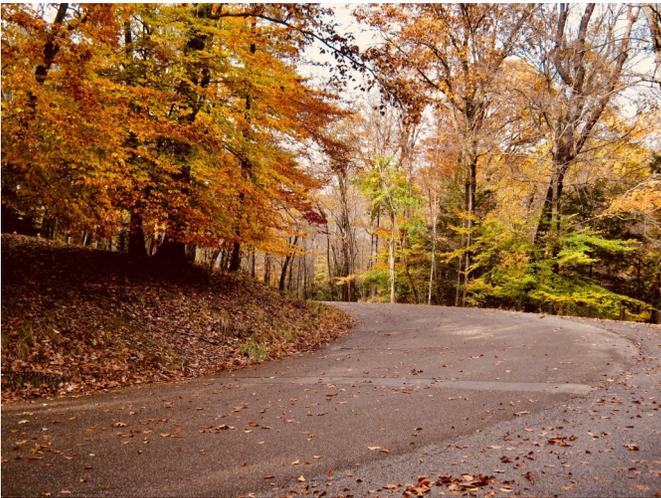
# Photo Corner

Submit photos for the winter newsletter to [mcheck@oionline.com](mailto:mcheck@oionline.com) by November 3!



*Let us probe the silent places, let us seek what luck betide us; Let us journey to a lonely land I know. There's a whisper on the night wind, there's a star a gleam to guide us, and the wild is calling, calling.....let us go. - "Silent Places" by Robert W. Service*

**Thank you to our fall photo winners!**  
Top: Jim Lawther  
Bottom, left to right: Colleen Murray; Bartholomew Robin



## Birding with Christina



*“Along the dust-white river road, the saucy redbird chirps and trills; His liquid notes resound and rise, until they meet the cloudless skies, and echo o’er the distant hills.”*  
 ~ *Cardinal’s Song*, by Naylor

### Migration & Molting

There are so many things to enjoy about the fall season in West Virginia. We welcome cooler evenings perfect for hoodies and campfires, as well as the bright reds, yellows, and oranges of tree leaves. The fall season also marks the point when millions of neo-tropical bird species are traveling from North American breeding grounds to South American wintering grounds. The males of many neo-tropical migrant species may appear different than they did during spring migration. This is due to molting of feathers.

Feather molting is a process in which older worn feathers are replaced by new feathers. According to the Cornell Lab of Ornithology, most neo-tropical migrants go through one complete molt as well as a partial molt every year. A complete molt occurs right after nesting season. All feathers including the flight feathers are replaced and the bird takes on its basic plumage during complete molt. For male scarlet tanagers, this means losing their bright red breeding plumage. The male scarlet tanager will resemble a female scarlet tanager with an olive yellow body, but with darker wings and tail.

Many brightly colored male songbirds will look drabber in color during fall migration. This can make spotting and identifying species more difficult than during spring migration. I do not believe this challenge makes birdwatching in the fall any less exciting. I personally really enjoy the challenge of spotting migrants on their way to their winter destinations. One tip I can share is to make sure the field guide being used during birdwatching includes pictures of basic plumages. Another tip is to become familiar with bird songs and calls. I so often find myself relying on my ears to confirm species sightings.

Happy birding!

*Christina Slover*



*Scarlet tanager, male*  
 Photo by Adam Haywood

## Partner Spotlight:

### Brooks Bird Club

The Schrader Center shares history and a namesake with the Brooks Bird Club (BBC). Before becoming the Schrader Environmental Education Center, we were the Brooks Nature Center, named for A.B. Brooks, the first staff Naturalist of Oglebay Institute.

Today, the BBC provides support for many exhibits and programs at the Schrader Center, including our new Children’s Library and “Brooks Bird Club Book Nook.”

The BBC is an independent, educational, nonprofit organization that promotes the study and enjoyment of birds and other elements of the natural world.

Learn more about their programs and bird walks at [www.brooksbirdclub.org](http://www.brooksbirdclub.org)



## Fundraiser

We are raising funds to support environmental education programs for 1st-6th grade students in Ohio & Marshall County schools!

Our programs create a comprehensive picture of the natural world through horizontal lesson delivery through the grades, reviewing and elaborating on standard-based scientific principles each year.

You can donate over the phone at 304-242-6855 or by sending a check (*payable to Oglebay Institute with "Schrader school programs" in memo line*) to 1330 National Road, Wheeling, WV, 26003.

**Thank you for your support!**



## Upcoming Event: ECOfest!

### ECOfest!

Saturday, October 6, 10am-3pm

Our family festival celebrates the earth with live animal presentations, exhibits from conservation groups, tie-dye, a scavenger hunt, bird watching, games, nature crafts, and a campfire with hotdogs, marshmallows and cider!



Free admission (*food and tie-dye shirts available for extra cost*)

## Nature Trivia: How much do you know about the natural world?

### Questions:

1. How many state parks are in West Virginia?
2. What does it mean if an animal is diurnal?
3. What do adult yellow jackets eat?
4. What color is a marbled salamander?
5. There are ( ? ) times more moth species than butterfly species in the world.
6. *Aesculus glabra* is the scientific name for what tree? (*Hint: glabra is Latin for "smooth" and it's one of the state trees*).
7. What is the eye color of a Common Loon in the summer?
8. Which warbler call is often interpreted as "pleased, pleased, pleased to meet ya?"
9. True or False - male black bears help raise the young during the first year.
10. How many circumpolar constellations are there in our sky? (*Hint: Circumpolar constellations are seen in the northern sky all year round, circling the north star*).

**Answers:** 1. Nineteen. 2. They are active during the day. 3. Nectar; larva feed on insects pre-chewed by adults. 4. Dark gray to black above, with bold white or silver cross-bands. 5. Over 9 times more moths; ~160,000 moth species, compared to ~17,500 butterfly species. 6. Ohio Buckeye. 7. Bright red. 8. Chestnut-sided warbler. 9. False; males have no role in raising young. 10. Five - *Ursa major*, *Ursa minor*, *Cassiopeia*, *Cepheus*, and *Draco the Dragon*.

## Featured Programs: Nature Happenings

### Roots and Shoots Fall Series (ages 2-4, with an adult)

Fridays, 9:15-10:15am (September 7 & 21, October 5 & 19, November 2 & 16)

The Roots 'N Shoots series provides adults and their children the opportunity to incorporate nature education and fun into all seasons. Lessons include hands-on nature activities, a combination of nature crafts, stories, or songs, and trips outside the nature center, weather permitting.

\$60/\$45 OI members (\$30 for each additional child).



**Sept. 7:** Metamorphic Munchers

**Sept. 21:** Furry Forest Foragers

**Oct. 5:** Leaves on the Breeze

**Oct. 19:** I'm Not Scared, Not Really

**Nov. 2:** Oh, for the Love of Turtles

**Nov. 16:** Night Tree

### Nurturing Naturalists (ages 5-8, homeschool students welcome)

Fridays, 1-2pm (September 7 & 21, October 5 & 19, November 2 & 16)

Designed for our youngest independent naturalists who are ready to attend without an adult. Each session will have an outside component, so please have children dress for the weather.

\$60/\$45 OI members (\$30 for each additional child).



**Sept. 7:** Super Seeds

**Sept. 21:** Caching In, Squirrel Style!

**Oct. 5:** Is it Bird or is it Beast?

**Oct. 19:** What Lurks in the Night?

**Nov. 2:** A Day in the Life of an Animal Keeper

**Nov. 16:** Migration Nation

### Soap Making

Saturday, September 8, 9am-2pm



Learn the steps of old-fashioned soap making! This hands-on program walks you through each step as you make shampoo, hand-soap, lard and suet cakes to take home. Participants will need to bring an apron, two quart containers with screw-on lids, and a bag to take your handmade products home. Dress for the weather; we will be outside for at least one hour. Program includes lunch. Preregistration required. \$30/\$25 OI members.

For a full list of programming, visit <https://oionline.com/classes/nature/>

## Wish List

As a non profit organization, we are grateful for donations to improve our exhibits & programs.

Craft supplies

Small garden chairs for kids

Night vision goggles for Night Hikes

Bins with locking lids to store supplies, all sizes

Trail Camera to capture and share wildlife sightings

Please drop by or contact us at 304-242-6855 if you are able to donate an item.

**Thank you for your support!**

## Animal Care Spotlight

The winning names for the two fish that live with Frank the turtle at the Schrader Center are...Bubbles and Glub-Glub!

Thank you to Jackson Taabler for entering the names in our naming contest!



Check out our new "Adopt an Animal" program at the Schrader Center!

<https://www.z2systems.com/np/clients/oionline/giftstore.jsp>

## Featured Programs: Nature Happenings

### Campfire Cooking

Monday, September 17, 5:30-7pm

Tuesday, September 25, 5:30-7pm



Cooking with a campfire is a life skill that connects you to the natural world. Learn the basics of cooking around, in, and over the campfire. We'll make Cajun shrimp, foil packet potatoes, dutch oven BBQ chicken, pizza & dessert mountain pies, and s'mores!

Pre-registration required. \$18/\$15 members (adult); \$7/\$5 members (child).

### Full Harvest Moon Walk

Monday, September 24, 6:45-7:45pm



Watch the full moon rise as you enjoy a relaxing nature walk.

Moderate terrain/slow pace. Adults and older children. \$5/Free OI members.

### Fungus Among Us

Tuesday, October 9, 6-7pm



Mushrooms are extraordinary organisms that come in a variety of colors, shapes and sizes. Learn about the different classifications that can be used to identify fungi, and then head outside to see how many kinds we can find. \$10/\$8 OI members.

### Brownie Badge Fest!

Saturday, November 10, 9:30am-4pm



Join us for a fun and exciting day of badge work! The morning session (9:30am -12:30pm) will cover the Hiker, Bugs, and Brownie 1st Aid badges. The afternoon session (1-4 pm) will cover the Outdoor Adventurer, Outdoor Art Creator, and Home Scientist badges. Sign up for one or both sessions! If you come to both sessions, please bring your own lunch. Morning check-in begins at 9am, and afternoon check-in begins at 12:30pm.

\$15 per scout per session, or \$25 per scout for both sessions.

### Opening Night of the Holiday Art Show

Thursday, November 15



This annual shopping experience showcases the talent of dozens of regional artisans and crafters offering one-of-a-kind gifts for the holidays. Shop hundreds of unique items including pottery, paintings, photography, jewelry, textiles, home décor and gourmet goodies. Free admission.

## Director of Youth Programs: Fun Facts

### We asked our Director of Youth Programs to share his top five “fun facts” of nature:

- #1** Spiders use a technique called “ballooning,” which allows them to create a “parachute” out of their webs, in order to travel great distances. Scientists have recently discovered that the “parachute” the spiders create do not rely on wind for transport. They use electrical currents in the air. Spiders fly using electricity! #mindblown
- #2** Flying squirrels are common in the tristate area! They are nocturnal which is why they slip our mind when we think about animals in our region. Northern and Southern flying squirrels can be found in West Virginia.
- #3** The amount of water on earth is constant; it cycles through different forms (solid, liquid, and gas) and has done so for millions of years. That means the glass of water you just had might have been the same water a T-rex drank in the Cretaceous period! We drink the same water dinosaurs did!
- #4** Tardigrades are found everywhere. Better known as water bears, these microscopic organisms are almost immortal. Scientists have exposed them to temperatures of over 300 degrees Fahrenheit and as cold as -458 degrees Fahrenheit! This was a walk in the park for the water bears. These organisms can even survive in space! Yes, that’s right, I mean outside in the vacuum of space! Radiation cannot even kill them!
- #5** Water Hemlock is a plant that can be found all over North America. It is also one of the most deadly plants in North America. It contains a toxin called cicutoxin which is a violent convulsant. This will lead to respiratory paralysis which is as bad as it sounds.

*Cody Stepanek*

## Phenology: The study of seasonal phenomena, especially in relation to climate and plant and animal life

### The Science Behind Color Changing Leaves

**Chlorophyll** is the pigment that makes a leaf green. During the spring and summer, chlorophyll is slowly broken down (by sunlight) and consistently replaced (by the leaf). The longer nights of early autumn trigger the growth of an **abscission layer** (loose layer of cells that are poorly attached) that blocks the connection between the leaf and the rest of the plant. The production of chlorophyll slows, then stops, then disappears completely. This is when autumn colors are revealed!

Chlorophyll normally masks the **xanthophyll** (yellow pigments) and the **carotenoid** (orange pigments), but both then become visible when the green chlorophyll is gone.

Red and purple pigments come from **anthocyanins**. During autumn, anthocyanins are manufactured from the sugars that are trapped in the leaf.



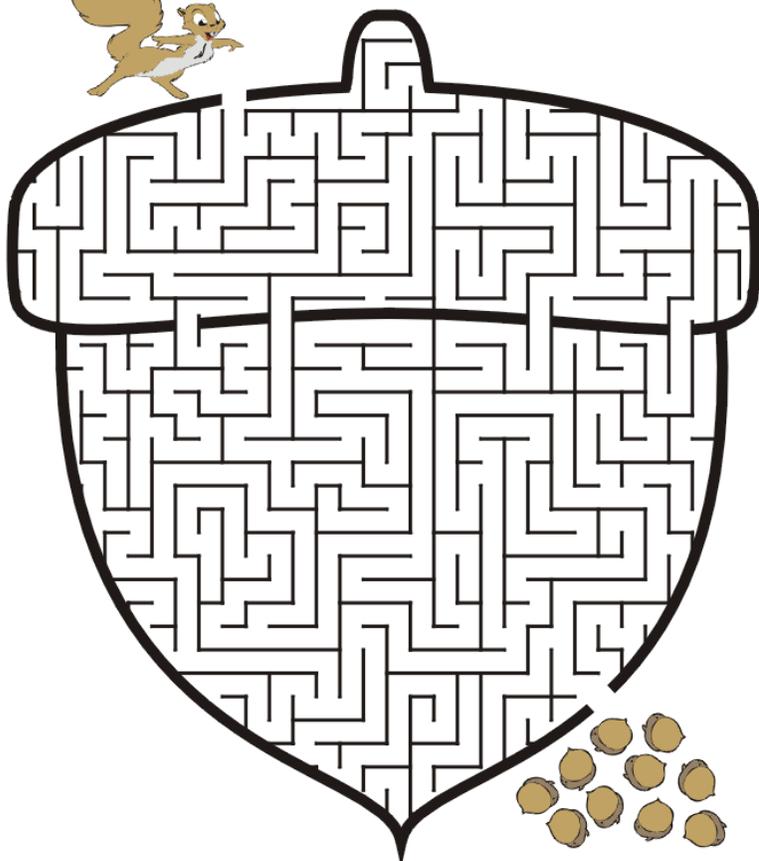
<http://www.usna.usda.gov/PhotoGallery/FallFoliage/ScienceFallColor.html>



# Kid's Page

## Fall Maze

Help the squirrel find its way through the maze to its cache of nuts!



## Connect the Dots



## Autumn Scramble

Can you unscramble the Autumn words below?

1. vhtsear
2. aveesl
3. cesowrrac
4. lowlye
5. kupimnp
6. racon
7. isrqeulr
8. alppe
9. nagreo
10. lfal
11. rde
12. owbrn

Answers: 1) harvest 2) leaves 3) scarecrow  
 4) yellow 5) pumpkin 6) acorn 7) squirrel 8) apple  
 9) orange 10) fall 11) red 12) brown

## Spot the Difference

Can you find 6 differences in the pictures below?

