



FALL LEAF COLORS BY BILL SEIDEL

Once again we are all looking forward to one of nature's most spectacular displays: the changing colors of the autumn leaves. While we're used to this here in Indiana, world-wide it's a relatively rare phenomenon. Only 14% of the world's forests are temperate deciduous forests, and only this type of forest experiences an annual color change. Why do the trees do this? How do they do it, and what are the odds for a good display this year?

As for why they do it, it's a survival strategy for coping with the cold months of the year. In essence, it's the plant answer to animal hibernation. Store up all of your energy and take a long nap. Since cold slows photosynthesis, a deciduous plant could not produce enough carbon in the winter to make up for the loss that would occur through transpiration from its broad leaves. Sucking most of the nutrients out of the leaves and then discarding them is an effective solution to this problem.

How do they go about doing this, and where does the color come from? When temperatures and the length of day reach a certain combination – a combination that is unique to each species and to each location – the tree releases hormones that initiate a very complex process called “senescence.” Basically the plant stops photosynthesis and moves most of the nutrients from the leaf into the plant. As photosynthesis slows down, several things begin to happen that affect the leaf color. First of all, the chloroplasts lose their green color, which reveals the yellow and orange colors that were there all along. If you want to get technical, these color components are called *carotenoids* and *xanthophylls*, and they provide the dominant colors of birches, hickories and (the late great) ashes. There are also *tannins*, which cause the brown colors predominant in many oaks.

The really interesting ones, however, are the *anthocyanins*. Anthocyanins produce the pink, red and purple hues of sugar and red maple, white oak, and many woody plants. These were *not* there all along. These are produced entirely by the last bit of sugar production as photosynthesis shuts down. This accounts for why the sunny side of a tree is frequently redder than the other: there was more last-gasp photosynthesis there. The more warm sunny days we have after the trees start the senescence process, the more reds we will have in our fall landscape.

So what kind of a color display can we anticipate this autumn? It really does all depend on the weather. The effect of the on-again off-again drought we have experienced this year remains to be established, but if we enjoy normal rainfall for the rest of the season there is still hope. If we have warm sunny days and cool but not freezing nights, the display could be spectacular. On the other hand, if we have an early killing frost, the anthocyanins will not have a chance to develop, and we could have poor color, or even no color at all. I'm hoping for the best.

It's a privilege to live in Indiana!

The Year Without a Summer

By Jeff Ormiston

We all know what a hot and dry summer we have had. Fortunately the green is coming back to the vegetation and the “wet” is coming back to our wetlands. One day, in the middle of another scorching afternoon, I was looking over an issue of the Fox Tale, and there on the front page was a picture of the Fox Island entrance blanketed by several inches of new fallen snow. It reminded me that Indiana is no stranger to extremes in weather, and in the year 1816 Indiana, and the world, experienced what is known as “The year without a summer”. In 1816 Indiana’s legislators were pushing the territory toward statehood, James Monroe became President, and the Thomas Lincoln family was setting up housekeeping at their new location in Indiana. Meanwhile the 60,000 residents of Indiana were losing crops and livestock to freezing temperatures in the middle of the summer. In May it snowed or sleeted 17 of the 31 days!



Breaking the ice covering on the livestock watering tanks in June, July and August was common practice. On June 17th a farmer left home and joked he might get lost in a snow storm. He did and was found later with both feet frozen. The small settlement at Fort Wayne had no inkling that during the previous spring, on April 10th, 1815 and half a world away, an Indonesian volcano known as Mt. Tambora had erupted in a massive explosion that was heard 1200 miles away. It dwarfed the Mt. St. Helen’s eruption, both in size and impact on the earth’s weather. The ash and gases released into the atmosphere during the eruption blocked the sun’s warming effect enough to make a “chickadee’s teeth chatter in August,” according to some people.



“The true beauty of nature is her amplitude; she exists neither for nor because of us, and possesses a staying power that all our nuclear arsenals cannot threaten.” Stephen Jay Gould

PHIL HERRICK

FOX ISLAND ALLIANCE BOARD MEMBER

19 YEARS FROM 1993 THROUGH 2012

Phil Herrick has been on the Fox Island Alliance board for 19 years. He was always anxious to do anything he could to help the park and the Alliance in any way. Phil did a huge amount of Trail Guiding and enjoyed it. He always attended any education meetings so as to hone his skills. He was responsible for publicity for the board's activities for several years, writing news releases and contacting the newspapers and TV stations about significant events at Fox Island. The park and the Alliance both benefited from his public relations efforts. He developed a way to make signs simply for the park to help people learn about different areas. Phil always had a good story to tell about almost any topic. He has had a wide range of experiences. Phil is a quiet, environmental steward. He is a teacher of the outdoors. He supports preservation and environmental education in a quiet, unassuming way. Natalie met with him several times at the Dupont library and didn't know that he bicycled until she saw him returning home on his bicycle.

Phil joined the 2011 Indiana Master Naturalist Program. About half way through that program his car was hit broadside by another car and he was sent to the hospital. He was not well enough to continue with the IMN program and has not been able to attend our meetings. We miss him and wish him a quick return to the outdoor spaces that he loves. The Executive Committee has decided that we would like to give him Emeritus Status on our board.

This article was written with several board members' suggestions as well as those of Natalie.

APPLICATION FOR INDIANA MASTER NATURALIST CLASS

(see information on page 5)

Name: _____

Address _____

_____ zip _____

Phone-Day _____ Night _____ Cell _____

2011-Registration Fee = \$80.00 Check * or Cash *Payable to: Fox Island Alliance, Inc.

Mail completed registration to: **Pam George, Treasurer**
6316 Tree Top Trail
Fort Wayne, IN 46845

Deadline February 1, 2013. First come, first served; class size is limited to 30 students



Kit Kapers: Fox Tale for Kids

By Pam George

Itinerary for Winter Survival

As days draw shorter, nights grow colder, and frost appears on the pumpkins on a brisk fall morning, all animals, including humans, feel the stirring to make plans for the coming winter months. Maybe your family will travel “over the river and through the woods” to visit relatives or fly to a warmer climate to bask in the sun. The animals at Fox Island Park also have to make sure they have their winter plans in place to ensure their survival!

Most animals in the wild have only a few choices available to make sure they are safe and snug during a harsh winter. They can: go to a warmer climate (**migrate**); burrow into the ground somewhere and sleep a deep sleep (**hibernate**); find ways to change their bodies or surroundings to find food and water and stay warm (**adapt**); or complete their life cycle after making sure they had left offspring behind (**expire**).

Match the pictures of Fox Island animals below with the way each survives the winter by using the following strategies:

migrate **B.** hibernate **C.** adapt **D.** expire

Red Fox



Monarch Butterfly



Muskrat



Bull Frog



Cardinal



Wood Frog



Oak Apple Wasp



Garter Snake



Mourning Cloak Butterfly



Migrator: Monarch Butterfly

Since their pupa are unable to survive cold winters in the north, these butterflies, using wing power and air currents, can travel over 3,000 miles into Mexico to stay warm!

Hibernators: Bull Frog; Garter Snake; Wood Frog; Mourning Cloak Butterfly

Bull frogs hibernate while they are still tadpoles with only hind legs. They burrow deep into the mud at the bottom of lakes and ponds. **Garter snakes** hibernate below the ground in dens which they share with numerous other snakes. **Wood frogs** hibernate by letting their bodies freeze solid while hidden under leaves on the forest floor awaiting the first thaw of spring. **Mourning cloak butterflies** also use a form of antifreeze that super-cools their bodies. They hide under tree bark to survive winter’s blast.

Adaptors: Red Fox; Muskrat; Cardinal

The winter fur of the **red fox** becomes thicker, longer and lighter. It uses its thick bushy tail as an earmuff as it sleeps in its den. A **muskrat**’s fur also thickens, and it spends the winter under the thick ice in its lodge, building “push-ups” of frozen vegetation in the ice over its air holes and feeding spots. The **cardinal** overwinters in the cold without changing the color of its feathers. However, it does change its diet from eating mostly insects in the summer to eating only seeds, such as sunflowers, and left-over, dried berries in the winter.

Expirer: Oak Apple Wasp

The **oak apple wasp** lays its egg in the center vein of an oak leaf, causing a gall to form. The gall protects the larva inside and gives it food to eat as it grows into an adult wasp. The adult oak apple wasp dies before winter invades, having completed its life cycle.

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Become An Indiana Master Naturalist! 2013

Interested and intrigued by nature and the environment?

Want to learn more about Indiana's natural resources and share this information with others?

The Indiana Master Naturalist Program is an educational/volunteer program developed by the Indiana Department of Natural Resources and Purdue Extension to provide citizens with hands-on opportunities to learn about our State's natural features and resources. The purpose of the program is to:

Bring together natural resource specialists with adult learners (18 years and older) to foster an understanding of Indiana's plants, water ecology, soils, and wildlife, and also to promote volunteer service in local communities.

Provide an educational opportunity for course participants by volunteering with a local agency or organization involved in natural resource management.

In Allen County Indiana, this program is sponsored by Fox Island Alliance and Allen County Parks.

Program Information

The sessions will be held on Tuesday evenings from 6 to 9:30 pm and on Saturday mornings from 8:30am to 12:30pm and either at Metea County Park or Fox Island County Park.

The sessions begin on February 26 and end on May 14. The Final Exam is Tuesday May 21.

Participants **must attend the orientation meeting** on Tuesday evening, February 12.

Participants **must attend at least 8 of the 9 class sessions, complete a final exam, and complete 33 volunteer hours** to obtain Indiana Master Naturalist Certification and a pin. Graduation Day is Tuesday, October 15, 2013.

Class size is limited to 30 applicants. Space is reserved **only** when the **\$80.00 registration fee** is paid. You will receive a letter or e-mail inviting you to orientation if you are among the first 30 to register.. SEE APPLICATION ON PAGE 3.

Class Schedule:

Date	Sessions*	Instructor	Time	Location
2/12	Orientation	Get Acquaint-	6:00 – 9:30	Metea Park
2-26	Forest Ecology	Dr. Jordan Marshall	6:00 – 9:30	Metea Park
3-5	Geology	Tony Fleming	6:00 – 9:30	Metea Park
3/12	Reptiles/ & Amphibi-	Dr. Bruce Kingsbury	6:00 –9:30 pm	Metea Park
3/23	Wetlands	Tim Skiver	8:30am-	Fox Island
4/13	Birds	Dr. James Haw	8:30am-	Fox Island
4-20	Wild Flowers	Ben Hess	8:30am-	Fox Island
4/30	Insects	Divelbiss, Arata, Harding	6:00 – 9:30pm	Metea Park
5/11	Native Trees	Ricky Kemery	8:30am-	Metea Park
5/14	Mammals	Dr. Bruce Kingsbury	6:00 – 9:30 pm	Metea Park
5/21	Final Exam	Required –	6pm-?	Metea Park

***Note-** Some sessions will require moderate walking.

FALL ACTIVITIES AT FOX ISLAND

To register for programs or for more information contact one of the following:

For Ron Zartman call 449-3186 or rzartman@allencountyparks.org

For Natalie Haley call 449-3246 or nhaley@allencountyparks.org

Most activities and programs have a \$2.00 charge and require pre-registration .

Trail Trekkers: November 1, December 6 (Thursdays) FREE but register 5 days prior.

Min. 5, Max 30. Being discontinued next year. But you can hire a naturalist as a guide for a group of at least 5 people, at \$2 a person. Call Natalie.



Fox Kit Club Adventures: Spider Biology Oct. 9 and **Winter Bird Feeding** December 11, Tuesdays. 9:30 to 10:30 a.m. (No class in November due to invasive plant removals. Fee of \$3 includes a snack and theme-related craft. Teachers of attending students are free. \$2 per parent. Pre-register 5 days before each class. Call Natalie.



Little River Bike Hike: October 13, Saturday., start 9 a.m.. Bring your own road-ready bicycle, water and snacks for a leisurely 13 mile tour of the Little River Valley. We'll see old Wabash & Erie canal features, the Vermilyea House, and break at Little River Wetlands' Arrowhead Prairie. **Helmets required, and dress for the weather. Call Ron by 10/09; Min. 5, Max 15.**

“The Big Sit: Birding’s Most Sedentary Event” Oct. 14, 1:30-4:30. Join our birding circle team the “FIBS” (Fox Island Bird Sitters) for our annual Sunday afternoon birding event. We’ll sit on the back porch of the Nature Center and let the birds come to us! We pledge never to “fib” on our sightings. Cost: \$2 park entry: pay Natalie at the program. Preregister by 10/4. Min. 5, max 30. Local expert birders from Stockbridge Audubon will be on hand, hoping to inspire new fledgling birders to join the bird listing craze. Bring your kids and stay as long as you like.



Also on Oct.. 14, Sunday: 1:30-4:30. **Sunny Schick Close-up and Nature Digital Photography.** Cost \$25, register by 10/9 Min. 5, Max 30. Instructors Chuck Fletter and Bob Goines will share tips and gadgets for outdoor and close-up photos. Ron will lead participants afield to find seasonal objects. Tamron Lenses for Nikon and Cannon SLR’s can be borrowed for demo use. Call Ron or Sunny Schick at 426-1615.

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Preschool Discovery Hours: Tuesdays, 1-2 p.m.

Oct. 16: Colorful Fall Leaves; Nov. 6 Animal Homes; December 11 Birds for Beginners, (at the Bird Building.) All include a craft and a snack. Cost \$3 per child and \$2 per adult. Preregister 5 days ahead; call Ron Zartman.

Tai Chi: Oct. 17-Dec. 12 Wednesdays 6 to 7 p.m.. Instructor Sandy Gebhard will teach the Sun Seventy-Three Form in this eight week class. This gentle, non-strenuous form can be practiced by all. Be prepared to have fun as you join this light hearted group. **Cost \$50 for 8 weeks; pre-register by 10-12. Min. 5, Max 20. Registration accepted through 3rd week if the attendance minimum is reached.**

Scrapbooking: “Crop ‘Til You Drop!” Fridays 6 p.m. till Midnight. October 19, November 16, and Dec. 7.....and then Saturday Dec. 8 ALL DAY! Join Creative Memories Consultant Sherina Hewson in scrapbooking memories to last a lifetime. Cost is \$10 per class, \$30 for the all day session. Call Natalie for details and to pre-register : **paid 5 days in advance is now required. If you bring a new scrapbooking friend you get \$5 off your registration.** Natalie is at 449-3246.



Night Hike November 17, Saturday. Darkness falls early now that daylight savings time has ended. Explore Fox Island in the dark and still have time for other Saturday night activities or an early bedtime. Pre-register by 11/12; minimum 5, max 15.

Call Ron at 449-3186. **Owl Prowls Dec. 15 and Jan. 12, Saturday 5:30-7:30; call Ron for more information and to preregister. Cost \$2.**

Cross Country Ski

Clinics: Dec. 15, Saturday and Jan. 12, Saturday. Learn all about how equipment works, waxing vs. no-wax, how to dress, and receive basic instruction, weather permitting. When registering, leave phone no., shoe size, height and weight in order to reserve equipment. Cost \$7 includes one hour rental; \$3 if bringing own equipment. Preregister 5 days in advance; Min. 5 Max 15; Call Ron 449-3186

Requested Programs—Open All Year! 24-7

If you are interested in having a naturalist guide your family, friends, home school group, church group, club, etc.....contact a naturalist today. Call 449-3246 for Fox Island or 449-3778 for Metea. We require a minimum of 5 participants and a minimum of \$20 per group session. Topics include (but are not limited to): spring wildflowers, prairie plants, insects, pond life, geologic history (fossils, glacier, dune sands), seasonal hike, fall color, trees, wetlands, natural history of the park, nature center tour, honeybees, butterflies, birthday parties, night hikes, canoeing 101, fishing 101, etc. Crafts or snacks may be added for an additional fee.

Ask Natalie about the next Indiana Junior Naturalist Class!





Fox Island Alliance

Ed Powers
12206 W. Yoder Road
Roanoke, IN 46783

We're on the Web!
www.foxislandalliance.org

It's a privilege to live in Indiana!

Officers:

Jeff Ormiston, President
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Vera Dulin, Phil Herrick, John McCory, and Bob Weber

Fox Tale Editor:

Cynthia Powers

The **Fox Island Alliance** is a volunteer not-for-profit organization. Its purposes are to help preserve the natural features of Fox Island County Park, to assist its orderly development as a nature preserve, to raise funds to facilitate its development, to promote Fox Island's use as an educational center, and to coordinate volunteer efforts.

ITS TIME TO RENEW YOUR MEMBERSHIP IF YOU HAVEN'T ALREADY DONE SO!! Use the application to the right and check the "Renewal" area!!

Fox Island Alliance Membership Application **New** **Renewal**

Name _____

Address _____

City, State, Zip _____

Phone _____ Email _____

 Check if you would like to receive your Fox Tale by email

 Check if you do not want your name published

Please Circle One:

Students \$5 - Senior \$5 - 2 Seniors \$10 - Indiv. \$15 - Family \$20

Sustaining \$30 - Patron \$50

Additional gift \$__ Education \$__ Exhibits \$__ Scholarship \$__
Preservation

Total Dues and Gifts \$__

If this membership is a gift, enter donor's name:

Check if you are interested in volunteering. You will be contacted.

Will your employer match your gift to FIA?

Check with your Human Resources/Personnel Department.

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Make your check payable to FIA, Inc. and mail with this form to:

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