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# **Program Schedule Change**

By Jeff Ormiston, President, Fox Island Alliance

You will notice that this issue of "The Fox Tale" does not contain the usual quarterly schedule of park programs. Those programs are listed in "The Wild Grapevine" and the Allen County Parks website and we felt they were covered adequately; also "The Fox Tale" could be mailed more quickly if we did not list the programs. This decision was made with the approval of the staff of Allen County Parks.

I would like to hear the reader's opinion on this change. You are encouraged to contact me at: jeffo1947@yahoo.com.

# Vera Dulin Wildlife Observation Building Update

The renovation of the Vera Dulin Wildlife Observation Building (formerly "Bird Observation Building") project continues to move forward. Money was appropriated for the project at the September 8<sup>th</sup> meeting of the Alliance Board of Directors and quotes have been received for the window replacement, painting and lighting installation. We are all anxious to get this project underway.

### **Fox Island Monarchs**

By Jeff Ormiston

Along with the fall equinox comes the publication of "The Fox Tale" and the migration of the Monarch Butterfly. This year the Fox Island butterfly garden made its own contribution to the numbers of butterflies migrating to Mexico by providing habitat to over thirty eggs, caterpillars and adults. As of publication time we

have released over 15 tagged monarchs that were collected in the garden and raised in the "butterfly nursery" built by Jeff Baxter, Allen County Parks superintendent. In 2013 the garden was certified as a "Monarch Way Station" by Monarch Watch Organization and this spring another 20 milkweed plants were transplanted, from the property of Sue and Marty Peters, to add to the existing 15 milkweed plants.

While working on plantings and renovation of the and we needed a means of getting water the park's remote flower beds. Construction of a shed was suggested and approval was given by Jeff Baxter.



Design and construction of the shed was accomplished by recent Indiana Master Naturalist graduate John Reidenbach with materials purchased by the Alliance. A spare water tank was donated by Metea County Park and a cradle was constructed so the tank can be transported by pick-up truck. Please check out the shed that John built behind the Nature Center under the porch.

Anyone interested in helping with flower bed maintenance or raising the 2015 hatch of Monarch Buttertflies should contact Jeff Ormiston at jormiston@allencountyparks.org.

# Beware the Cyanobacteria.....in a pond near you!

### By Brett Fisher

Blue-green algae (Cyanobacteria) are ancient photosynthetic organisms that contributed to the oxygen rich atmosphere of our planet. Some cyanobacteria have evolved elaborate mechanisms of survival that allow them to thrive in environments other organisms cannot and when conditions are right, cyanobacterial populations can explode in events called "algal blooms". Although blooms are natural processes, the introduction of humans, industrialization, and modern farming practices have increased the frequency and severity of these blooms to a point that requires further study and understanding. One species of cyanobacteria recently discovered in Ohio and Indiana, is *Cylindrospermopsis raciborskii*.

Cylindrospermopsis originated in the waters of Australia and has been transported to Europe, Asia, North America, and South America in the ballast tanks of commercial shipping vessels. It has proliferated in these new areas because it employs a host of tools that allow it to be successful.

- It has an arsenal of photosynthetic pigments that provide a wide spectrum of effective light absorption, including chlorophyll a, b, and c, carotenoids, phycocyanin, allophycocyanin, and phycocythrin.
- It is capable of regulating its buoyancy thereby controlling its light exposure by adapting its depth in the water column via gas exchange.
- It has specialized vegetative cells called heterocysts and akinetes. Heterocysts are cells where nitrogen fixation occurs providing cyanobacteria access to nitrogen in otherwise depleted environments. Akinetes are specialized storage vesicles cyanobacterial can use to store fats, phosphorus, and amino acids when conditions are favorable. Akinetes also act as an asexual resting spore that can survive years of adverse conditions after the rest of the organism has died.

It does not suffer from predation, it thrives on it. The only organisms that are readily capable of feeding on *Cylindrospermopsis* are sensitive to the toxins it produces and generally will select non-toxic species first, removing their competition. Many grazers also help select for *Cylindrospermopsis* by breaking the organism at natural weak points thereby promoting vegetative propagation through fragmentation.

Although cyanobacteria have evolved an impressive array of attributes that allow them to thrive under harsh conditions, humans are the reason that the frequency and severity of algal blooms are increasing. Be it agricultural runoff, poor waste water treatment practices, high populations of waterfowl, or detergents, the increasing the levels of phosphorus in our waterways has provided cyanobacteria with their only limited resource. Blooms of *Cylindrospermopsis* are potentially hazardous due to its production of cylindrospermopsin (a liver toxin) and a paralytic shellfish toxin. In fact, *Cylindrospermopsis* can impact entire ecosystems by displacing native vegetation and greatly reducing the biodiversity of nutrient rich waters.

What can we do?

Continue regulating the ballast water of shipping vessels to prevent the spread of invasive aquatic organisms.

Continue the production, isolation, and testing of cyanotoxins to better understand the consequences of exposure and create safety guidelines to be used during algal bloom studies.

Better methods of detection need to be developed. Current methods are limiting because very high cell concentrations are required to change the color and clarity of the water, *Cylindrospermopsis* has very low chlorophyll a content, cylindrospermopsin is intracellular until death, and *Cylindrospermopsis* has been found to take on at least three distinct cellular shapes.

Editor's note: Toxin from cyanobacteria shut down the municipal water supply of Toledo, Ohio for several days this summer. Similar toxins killed some dogs that had played in the water at Salamonie Reservoir. If you see a warning, stay out of the water!

# Crickets by Kenlyn Peters

Why is it better to be a grasshopper than a cricket?

Because grasshoppers can play cricket but crickets can't play grasshopper!



With the arrival of fall you have no doubt noticed the increase in the nightly chorus of crickets. The shorter days and drop in temperatures signals to the insects that it is time to mate and lay eggs before the coming of winter. The cricket's quintessential chirp is produced by a process called stridulation. On each of the cricket's wings is a vein covered in serrations. It rubs its wings together and the teeth create a chirping noise. Crickets produce several different calls, for instance a mating call and an aggressive warning call. Males produce most calls, but occasionally females will produce chirps as well. They sense vibrations through their tympanum, a type of ear located on their tibia.

Crickets are apart of the order Orthoptera, which also includes grasshoppers, locusts and katydids. There are many species of crickets, the most familiar probably being the common field cricket, the black or brown crickets usually found entering your home. Crickets are harmless to humans. They feed on plants, seeds, and sometimes other insects. They are great sources of protein and when fed on a diet of apples and roasted, they can be quite tasty! They are a common snack in some countries. The house cricket is often bred for feeding certain household pets including lizards, birds and tarantulas.

Humankind has long revered and been fascinated by the cricket. This is evident from the abundance of appearances in the folklore and popular culture among many different cultures across the globe. Jiminy Cricket embodied the human conscience in the beloved Disney movie Pinocchio. The cricket is the symbol of luck in Chinese culture. And in Brazil the chirps portend rain. The cricket is sure to continue to capture our imagination.

### Demise of the Passenger Pigeon, 100 years ago in September

#### **By Cynthia Powers**

Indiana pioneers were familiar with huge flocks of Passenger Pigeons, that darkened the sky for hours every spring, and nested in huge colonies in the dense forests that covered our state. They were good to eat and so were hunted severely, even shipped in barrels to New York City on the newly built railroads. They were bigger than Mourning Doves, and the males especially were bright pink/ orange in front. Although Michigan passed laws against killing them on the breeding grounds, the laws were not enforced. Part of the problem was that the Passenger Pigeon only laid one egg per season, so hunting prevented them from reproducing. People just thought they would last forever. (We know where this is going, don't we?)

Some Passenger Pigeons were brought into captivity, but they didn't do too well. The very last survivor, named Martha, died in September, 1914 in the Cincinnati Zoo. Her body is now a mounted specimen in the Smithsonian.



This might be a fun way for "children of all ages" to remember Martha and the huge flocks before her. Check out this website: www.foldtheflock.org. A clever person has created an origami

Passenger Pigeon that you can download for free. If you get hooked as I did you can buy a whole pack of 50, printed in color on both sides, and create your own flock. (Attention: scout troops, grandparents, Sunday School classes, homeschoolers, etc.)

Let's all do all we can to save habitat, so we don't lose any more species.

It's a privilege to live in Indiana!

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## Kit Kapers: Fox Tale for Kids

## By Pam George



## Who's the Yellow Fellow?

What would you call this pesky creature?

A. a bee C. a hornet

B. a wasp D. a yellow jacket

If you answered B, C, or D, you'd be right! But the best answer is "D."

As the warm summer gives way to a cool fall, flying insects start to ruin our outdoor activities, especially if we're eating sugary foods. We sometimes call these intruders "bees."

However, these uninvited guests at our picnics are probably yellow jackets, also known as "ground wasps" or "meat eater bees."

Yellow jackets are also confused with paper wasps, because they have much in common. Both have yellow stripes, fly, and sting. Both help our environment by feeding on pest insects and larvae that damage crops and shade trees. They also kill house flies that spread diseases! But paper wasps have thinner bodies, have blacker wings, their legs hang down when they fly, and they don't crave sugar.

Yellow jackets build their papery nests in holes in the ground left by other animals, by chewing on wood chips and mixing the pulp with their saliva. In the spring when the nests are full of larvae, the adults also chew on protein-rich insects and caterpillars, making an insect paste to feed the babies. By late summer, they have no more babies to feed, so they start to crave those sweet, sugary foods,

like your dessert! At this time they are more aggressive than other stinging insects and are easily riled. Beware of their sting! Unlike honeybees, yellow jacket stingers are not barbed, and there-

fore remain attached to their abdomens even after repeated stings. Their

venom is also much more painful!

Guess what animal likes to dig up yellow jacket nests and eat their contents, without ever getting sick? The skunk! And adults are eaten by Summer

Tanagers, an unusual bird at Fox Island.

The good news: Yellow jackets never use a nest for more than one season. In the fall, all the males die off, leaving only a pregnant queen to overwinter under tree bark or a fallen log, patiently waiting for spring when she can build a new nest somewhere else.

# Stephen Smith-Guitard Builds Chimney Swift Tower By Ron Zartman



The move in modern home and commercial construction has been toward increased heating efficiency. Open large diameter chimneys have been replaced by the narrow PVC exhaust vents of high efficiency furnaces. Many older chimneys have been screened or capped to prevent access by nuisance animals such as raccoons, squirrels, and birds. This has had the unintended consequence of reducing roosting and nesting opportunities for the Chimney Swift, a small bird that feeds on insects while on the wing. The Chimney Swift, *Chaetura pelagica*, spends all its time either flying or clinging with specialized feet to chimneys flues, or within hollow trees or other suitable roosting sites. They also build their nests in these places.

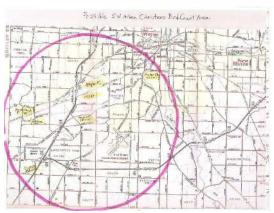
Concerned home owners can, where possible, remove chimney caps or screening and allow hollow trees to remain standing. In recent years the loss of these roosting and nesting habitats has been countered by placing

artificial "chimneys" in open areas where swifts might use them. This trend was recognized and researched by Eagle Scout candidate, Stephen Smith-Guitard, who proposed erecting a swift tower at Fox Island County Park. Stephen researched proper construction and placement, and then raised funds to acquire all construction materials. On August 30, 2014 he and family members built his swift tower just outside the Vera Dulin Wildlife Observation Building at Fox Island County Park. In this picture by Jeff Ormiston, Stephen is in the gray t-shirt.

Stop by on your next visit to view this attractive and well-built feature that not only provides important habitat for swifts, but also assists with our efforts to educate our visitors about wildlife and their needs.

**Big Sit bird count to occur on Sunday, October 12,** on the back deck of the Fox Island Nature Center. Billed as "birding's most sedentary event" we just sit and let the birds come to us. We've had over 30 species fly over as we enjoy cider and treats. Just drop in any time from 1-5 p.m. It's really more fun than you'd think!





#### Save the Date!

### Experimental After-Christmas Bird Count to cover Fox Island on January 3, 2015 By Cynthia Powers

As you may know, since 1900 the National Audubon Society has conducted Christmas Bird counts all across the nation. These take place over the 10 days before and after Christmas, and cover a 15-mile diameter circle. For many years the Fort Wayne count has included Metea Park, Franke Park, and the area northwest of Fort Wayne. But wouldn't it be fun to have one in southwest Allen County, including Fox Island and Eagle Marsh, Arrowhead Prairie and Marsh, and the three small ACRES properties?

Little River Wetlands, Allen County Parks, and Stockbridge Audubon have agreed to sponsor this new count as an experiment. If it goes well, we'll get it registered with National Audubon so we can be official. You'd need to register so that teams can be assigned; feeder watchers also welcome, if you live in the count circle.

(No doubt there will be chili for lunch at Fox Island.)

More information to follow; contact Cynthia Powers, zzedpowers@aol.com or 638-4291.

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# Fox Island Alliance

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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.

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