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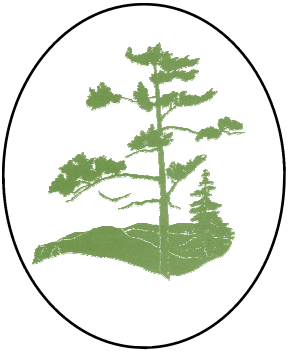
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**Pfeiffer Nature Center—
where science, art, and
nature come together!**

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The Ovenbird

Pfeiffer Nature Center

Fall, 2011

Bewitching Butterflies

World of Butterflies

We normally think of butterflies as delicate creatures but they are sturdy enough to be found almost everywhere on our planet, from deserts to mountaintops, arctic tundra to your own back yard. There are approximately 20,000 kinds of butterflies in the world with more than 700 species recorded in North America, north of Mexico. Of those 700 species, about 130 of them are strays, that are mainly found in the Rio Grande Valley of Texas. This leaves us with approximately 572 different species of butterflies that are found on a regular basis in the lower 48 states. Each state varies in the number of butterflies that can be found within its borders. On average there is about 100 to 400 species within a state; the warmer the state the more different species can be found.

Most of those butterflies live and die close to the spot where they were born. They spend their adult life on flowers and congregating in the sunshine. Most butterflies like it warm and sunny and can be seen on days when the temperature is greater than 60 degrees F. The hotter the day, the less critical the need for sunshine becomes. Butterflies enjoy a leisurely life. Most butterflies do not really fly until after 9:00 am and settle back down in the late afternoon.

Moth vs. Butterfly

Many people think that this day-flight preference is a way to tell butterflies from moths. It is true that all adult butterflies, except one tropical group, fly only during the daytime. Most moths do fly only at night; however, there are many moths that fly during the day.

Butterflies and moths are part of the immense group of animals we call invertebrates. Insects are a class of animals in this group that is broken into different orders. One of these orders consists of the Lepidoptera – moths and butterflies. The word “Lepidoptera” means scaly-winged. Scaled wings are characteristic of moths and butterflies. There maybe 20,000 butterfly

species but there are more than 100,000 moth species.

Nevertheless, how do you tell a moth from a butterfly? One way is to watch how they fly. Butterflies fly much more gracefully than most moths. This is because moths have a structure that hooks the top wing to their bottom wing. This results in a flight pattern that is stiff and jumpy. Butterflies lack this structure so their flight is smoother than a moth's.

If you can get close enough to the insect, you can look at their antennas. Butterfly antennas are simple strands that have a noticeable swelling, called the club, at their tip. Moth antennas are either slender, tapering strands or look somewhat like radio antennas, with lots of cross hairs.

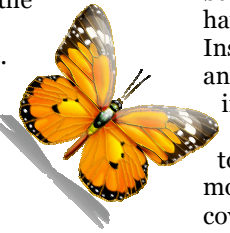
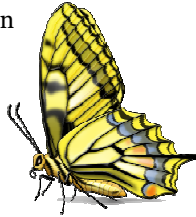
Butterfly Biology

While moths and butterflies have some slight physical differences, their basic anatomy and life cycles are very similar. Both moths and butterflies have a similar body structure. They have two pair of wings and three pairs of legs. Instead of having a nose they use their antennas to smell. The main portion is divided into three segments, the head, the thorax, and the abdomen. Whereas we have bones to support our body, the butterfly's and moth's body is supported by a hard outer covering made of chitin called an exoskeleton.

Their eyes are made-up of thousands of tiny lenses to create a complex eye. These eyes allow them to detect movement very well and to see colors in the ultraviolet range. So the pattern or color on a flower, or on another butterfly, that a butterfly sees is not necessarily the same as the pattern or color that we see.

The scales on the their wings contain pigment that makes them colored. Some scales have a microscopic structure that makes them iridescent. Other scales are completely transparent, allowing you to see right through the butterfly's wing.

Another important structure of a butterfly's
(Continued on page 9)



**Make & Take ~
Homemade Soap**
@ Lillibridge
July 23

Owl Prowl
@ Lillibridge
July 23

**Know the Night
Walk**
@ Eshelman
August 6

Sala'Meander
@ Lillibridge
August 27



Get Out There And Walk!
We support our local hiking interests!
You can reach them on Yahoo! Groups.
Olean_Area_Hiking &
Southern_Tier_Greenway_Hiking.

Let's Make ~ Homemade Soap

Are you looking for way to get clean while using natural ingredients? Then look no further!

Come and join Pfeiffer Nature Center, as Mike Johnson shows you how to make your own soap using native plants. These native plants have wonderful healing qualities. While here you will learn about making soap by the cold process method and will discuss different aspects of the soap making process. We will work as a group to make some jewel weed juice and some birch leaf oil to take home to make your own natural soothing soap. You will leave with the knowledge to

make your own soap and a sample of Castile (olive oil) soap.

This program will be held Saturday, July 23rd at the Lillibridge Property. It will start at 10:30 am and run until 2:30 pm. You will need to bring your own lunch.

For safety reasons there will be a limit of 12 participants for this program.

Please contact Pfeiffer Nature Center to get involved. Call (716) 933-0187 or email Naturalist@PfeifferNatureCenter.org to register. The deadline for registration is July 16th. The cost is \$35 for the general public and \$30 for PNC Members. The cost includes the materials to make your own soap.



Be sure you don't miss out on any of our exciting programs! Simply write

programs@PfeifferNatureCenter.org with the subject line **Count Me In** and we'll add you to our e-mail distribution list.

Hours of Operation

Office, 14 S. Main St. Portville:
Generally Tue-Wed, 8am to 3pm;
other times by chance or
appointment

Lillibridge Road Property:
Trails open to non-motorized
usage dawn to dusk, 7 days a
week, year round.

Yubadam Road Property:
Trails open to non-motorized
usage dawn to dusk, 7 days a
week, year round EXCEPT *during
hunting season Oct —Dec , when
all trails are closed.*

Staff is available for questions,
tours, and programs as scheduled
or by prior arrangement.

~~~~~  
Check our website or call for the  
most up-to-date information and  
upcoming programs:

**[www.PfeifferNatureCenter.org](http://www.PfeifferNatureCenter.org)  
716-933-0187**



From the Director

Given the focus of this entire issue of *The Ovenbird*, I can't stop myself from writing at least a little bit about the butterfly effect. A component of chaos theory, the butterfly effect basically tells us that it's impossible to predict all of the implications of any single action, or to determine the likelihood of a particular event occurring. Edward Lorenz, the meteorologist who coined the term, was not trying to say that the flapping of a butterfly's wings could cause a storm halfway around the world, as is commonly interpreted. Instead, he meant that, particularly when referring to the natural world with its myriad interconnections, it is impossible to make long-term predictions. (Remember, he was a meteorologist, trying to make weather forecasts.). With the countless possibilities inherent in a complex system like nature, it is similarly impossible to pinpoint a single factor as the absolute cause of a particular effect.



All that being said, I'm going to use my own personal interpretation of Lorenz's butterfly effect. It's very closely related to my "It's A Wonderful Life" theory. (Remember that old movie

with Jimmy Stewart & Donna Reed?) Since we can't know for certain that any of our individual actions will make a difference, it's best to take positive steps and hope for the best. When we do our part to reduce, reuse, and recycle, we're tossing our pebbles in the big pond of life. We're hoping that the ripples we start will meet up with those of others who live on our street, in our town, our region, our country, and on our planet. It is true that these small steps may be too little, too late, but it's also possible that they won't be, that their collective impact will spur our leaders to



Margaret Shulock lives in Friendship, NY. Her "Sticks" cartoons can be seen in the Olean Times Herald. See more of her work online at [www.shulock.blogspot.com](http://www.shulock.blogspot.com) or [www.thesixchix.com](http://www.thesixchix.com).

take the big steps, that some grand global phenomenon no one can currently predict will make the best possible use of both our actions and our intents.

As always, try to think globally and act locally. Support local businesses, local agriculture, local charities.

Ask yourself -- If not me, then who? If not now, then when?

\*\*\*\*\*

On a completely unrelated note, if you're a gardener, now is the time to begin gathering and drying flowers for our holiday wreaths. Some commonly-grown flowers that dry beautifully include colorful yarrow, statice, roses, baby's breath, and hydrangea. Wildflowers include pearly everlasting, goldenrod, Joe-Pye-weed, and teasels. When drying flowers, it's best to pick them just before they're fully open. Just gather them in bundles and hang them upside down in a dark, dry location. In addition to flowers, there are lots of attractive seed heads. A few examples are silver dollar plant, sensitive fern fronds, and rose hips. I'll be happy to provide more specifics on types of flowers or drying techniques – just give me a buzz (716.933.0187) or shoot me an email ([peg@pfeiffernaturecenter.org](mailto:peg@pfeiffernaturecenter.org)).



Treading lightly,

Peg Cherre

Seasonal Stirrings & Nature Notes

**July** ~ It's time to look for Monarch Butterfly eggs on milkweed. Take a small sample & place it in a well ventilated jar. Watch for the eggs to hatch & the larvae to emerge. Feed the larvae a steady diet of fresh milkweed leaves & you may see it create it's cocoon. It's a beautifully jeweled case from which the adult butterfly will soon emerge.

**August** ~ The Perseids is one of the best meteor showers to observe, producing up to 60 meteors per hour at their peak. The shower's peak usually occurs on August 13 & 14, but you may be able to see some meteors any time from July 23 - August 22. The radiant point for this shower will be in the constellation Perseus. The full moon will definitely be a problem this year, hiding the fainter meteors with its glare. But with up to 60 meteors per hour possible, it could still be a great show. Find a location far from city lights and look to the northeast after midnight.

**September**~ In late summer, glacial melt is a vital water source for plants & animals in temperate regions, as much of the other snow run off has already come & gone. Glaciers store about 75% of the world's freshwater supply during winter.

Historically, early September sees more hurricanes than any other time of year. On the Atlantic Ocean, September 10 is the statistical peak.

Yes, I'd Like to Become a Member of Pfeiffer Nature Center

Membership Levels and Benefits

All members receive a subscription to *The Ovenbird*, our quarterly newsletter, delivered to your home.

|                     |         |                                                                            |                           |
|---------------------|---------|----------------------------------------------------------------------------|---------------------------|
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| Conservator         | \$100   | 4 free family program admissions                                           |                           |
| Patron              | \$250   | Same as Conservator, invitation to wine & cheese reception, 1 tree planted |                           |
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All members also receive discounted admissions and gift shop purchases at many other nature centers. Your contributions are tax deductible to the extent allowable by NYS Tax Law.

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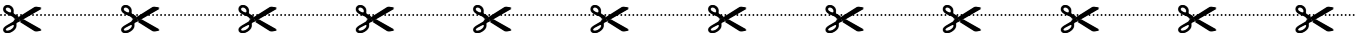
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May we contact you about volunteering? \_\_\_\_ Yes \_\_\_\_ No, thank you.

Send your completed form to: Pfeiffer Nature Center, PO Box 802 Portville, NY 14770



Bewitching Butterflies (Cont.)

(Continued from page 9)

one by one on different plants, where others will lay their eggs in masses on several plants. In the case of the Regal Fritillary, the eggs are laid sporadically around the ground, even if a host plant is not in the area. Butterfly eggs can be very small. In the case of the Monarch, they are the size of a pinhead.

When the egg hatches, usually after less than a week, a tiny caterpillar emerges. This little caterpillar spends almost all if its time eating and growing. It grows rapidly and sheds is old skin by splitting it and revealing a new, larger and baggier skin underneath. The caterpillar goes through this process about four or five times over the course of two to three weeks and can grow 100 times their size during this stage.

When the caterpillar is fully grown, it attaches itself to a support, often a leaf, for the next phase of its life. Now the caterpillar encases itself in a hard outer shell, called a chrysalis. In the case of a moth, it is called a cocoon and is not always a hard outer shell. It can be soft and almost cotton or web-like. Inside the shell, an amazing transformation is taking place. The tissues and structures of the caterpillar are broken down and replaced with the tissues and structures of the adult butterfly or moth. This process usually takes one to two weeks. Some species

have a pupa stage that lasts for a few months or even up to two years. These species use the pupa stage to survive winter or adverse environmental conditions.

When the adult inside is fully formed, the chrysalis splits open and the adult butterfly emerges. Butterflies are very vulnerable at this time. Their wings have been wrapped tightly around their body and now need time to expand and harden before they can fly. Once the adult butterfly has emerged from the chrysalis, it is done growing. It will not grow any larger but is a fully formed adult. The caterpillar's job was to eat but the adult's job is to mate and lay eggs. Some species of adult butterflies get energy by feeding on nectar from flowers but many species do not feed at all. Most adult butterflies live only one or two weeks, but some species hibernate during the winter and may live several months. An adult moth has a similar life and focus.

To find out more about butterflies please visit the website for the North American Butterfly Association (NABA) at [www.naba.org](http://www.naba.org) or the website for The Xerces Society at [www.xerces.org](http://www.xerces.org). A website of local interest is the Rochester Butterfly Club, found at [www.rochesterbutterflyclub.org](http://www.rochesterbutterflyclub.org). This site contains information about local butterflies, the clubs upcoming trips, as well as pictures and blogs about butterflies.





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You can honor your family and friends in ways that will have lasting impacts on Pfeiffer

### Pfeiffer Nature Center Mission

- To preserve the integrity of the old-growth forest
- To provide an area for scientific research
- To promote community-based nature study programs for grade school, high school, college and adult students
- To further natural resource stewardship

Nature Center and therefore the local community. Gifts can be either memorials or tributes to the accomplishments of someone still with us, and all gifts will be acknowledged in this newsletter.

Gifts to the ***Kay Pfeiffer Gerkin Endowment Fund*** are maintained and managed separately from our operating funds. The principle in this fund is retained exclusively for investments and income generation, with only interest and dividends available to support our ongoing activities. Check with your financial or legal advisor to name Pfeiffer Nature Center in your estate planning.

Gifts may be made specifically to our sugar bush expansion project. We will plant sugar maples on our Eshelman property annually. While donors will not be able to identify “their” tree, they will have the benefit of knowing that their gifts provided a source of ongoing income. Maple seedlings are \$35 each.

Gifts of any size may be made to the Nature Center to honor or memorialize relatives, friends, or pets. With no minimum donation, this option provides giving opportunities for all.

**We hope you'll make a gift soon!**

## Endangered or Extinct?

On a recent visit to our historic chestnut cabin, John MacRoy pointed out that there is a rare butterfly in our collection of insects. John showed Nature Center Board member Sarah Larson the specimen of a female Regal Fritillary, an orange and black butterfly that can be confused with a monarch if seen from a distance. This is a very rare butterfly, especially if it was caught locally. It used to be very spotty in our area around the 1950's but has become virtually non-existent east of the Mississippi River since that time.

The Regal Fritillary is currently found in the Great Plains and a few small pockets scattered throughout the eastern United States. Its original range covered most of the United States, from eastern Montana to Maine but is currently considered very rare in most of that range. This butterfly has no federal listing status as endangered but it is being protected locally by various states. The Regal Fritillary is listed as threatened in Illinois; New York and four other states list the Regal Fritillary as endangered. It is considered imperiled in five states and probably extirpated in fifteen other states, among which is New York State.

What has caused this sharp decline in the Regal Fritillary population? One factor might be habitat loss. Like most butterflies, the Regal Fritillary caterpillars have one primary food source—violets. So the butterfly's habitat consists of tall grass and open sunny meadows that contain violets. They can also be found in marshes and mountain pastures if there are violets in the area. Suburban sprawl has definitely had an impact on prairies

## Butterflies in Buffalo

Just recently, I was told a fascinating story about butterflies in Buffalo. Judy Tutuska (Peg Cherre's sister) shared this personal story about her experience with viewing thousands of butterflies one day while having lunch with her children in Buffalo, NY.

This story occurred over 25 years ago when Judy was working in downtown Buffalo. Her mother-in-law had brought her two young children downtown to have lunch with her. They decided to go to a restaurant that was at the top of a one of the highest buildings in Buffalo. This restaurant

over the past 40 years and coincides with the decline in Regal populations.

Another factor could be the haphazard egg-laying behavior of Regals. Most butterfly mothers will lay their eggs directly on the host plant that the caterpillar will consume. Regals, however, just wander around laying their eggs throughout their grassland habitat rather than directly on or next to the violets that the caterpillars will need. Then, the caterpillar will hatch before winter, but not begin feeding



until the following spring! This extremely risky strategy may explain why a Regal female may lay up to 2,400 eggs! This is far more than most butterfly females lay.

A third factor could possibly be disease. Captive populations being kept for reintroduction purposes have been hit by a virus that is transmitted from parents to young. If this is active in the wild populations, that would be a serious matter.

Chemical use could also be a factor in the decline in population of the Regal Fritillary. The disappearance of the Regals coincides with the onset of

has walls of windows so that you could enjoy the view from the top of the building.

As they entered the restaurant, they noticed that the windows were covered with orange butterflies, possibly monarch butterflies on their journey south to Mexico. Judy shared that, “It was the most amazing thing to watch. I never thought of butterflies flying so high before”. Throughout their entire lunch,, they watched the butterflies congregate on the windows and fly around the top of the building. The sky and windows were full of thousands of

widespread use of herbicides and pesticides in agriculture. No such relationship has been established, but the overlap of the two trends is suggestive and should be investigated.

If you are looking for a place to view these rare butterflies a good place to start would be at the Fort Indiantown Gap (FIG) National Guard Training Center near Gettysburg, Pennsylvania ([http://www.portal.state.pa.us/portal/server.pt/community/featured\\_topics/13476/regal\\_fritillary\\_butterflies\\_at\\_fort\\_in\\_diantown\\_gap/726675](http://www.portal.state.pa.us/portal/server.pt/community/featured_topics/13476/regal_fritillary_butterflies_at_fort_in_diantown_gap/726675)). They have the largest population of this species east of Indiana. It is also the largest documented population on a single landholding in North America. This sight has been striving to protect and study its current population. It seems the Regals love the training areas and ranges at the fort.

At FIG, habitat is created and maintained by repeated, frequent soil disturbance, patchy fires, and stewardship efforts that create diverse grassland dominated by native vegetation. Their current Regal Fritillary population is around 1,000 adults and has been secure since monitoring began in 1998.

Regal Fritillaries can be seen all summer long in the right habitat. If you see them, you know that you are in a high-quality tall grass prairie – a remnant of what used to be the most extensive habitat type in North America, but which is now reduced in area. Finding both together is a rare, precious and beautiful experience.

butterflies. “It was pretty to see them move as one”, Judy said. “It was like a cloud of butterflies”. As they exited the restaurant after their meal, they found many butterflies on the ground as well. There were so many that you had to be careful where you stepped.

This amazing experience is one that has stuck with Judy and her children throughout the years. It was a wonderful chance to view an enormous grouping of butterflies. This was a remarkable event that few people have experienced and I thank Judy for sharing it with me.



## Attracting Butterflies

Butterflies are an insect that most people enjoy spending time around. Young and old take pleasure in watching them flit through the air or alight on a nearby flower. Butterflies can be difficult to watch or attract when you are out for a hike. They seem to have no planned route as they flutter here and there between the scattered wildflowers of the forest and meadow. If you would like to increase your chances of seeing these wonderful insects around your house, here are seven suggestions on how to increase their chances of visiting your personal flower garden.

### 1. Plant Native Wildflowers

The butterflies are where the flowers are. Flowers and other plants are the basis for the butterflies life cycle and are needed for food at all stages. Because many butterflies and native flowering plants depend on each other for survival and reproduction, it is particularly important to install native flowering plants local to your geographic area. Native plants provide butterflies with nectar or foliage they need as caterpillars and adults. Adult butterflies may accidentally mistake a non-native, invasive plant for a good egg-laying site, which could prevent the survival of its offspring. The Lady Bird Johnson Wildflower Center has lists of recommended native plants by region and state at [www.wildflower.org/collections](http://www.wildflower.org/collections).



### 2. Plant for all stages of life cycle

To ensure that butterflies will take up residence in your habitat rather than just pass through, your garden should include “host plants” that serve as larval (caterpillar) food. Normally as gardeners we do not like things eating

our plants, but this is essential if you want butterflies to stay around. By supplying plants that provide food for the caterpillar and the adult you will have a steady supply of butterflies. For a list of local butterflies and what their caterpillars prefer to eat, check out the Rochester Butterfly Club’s website (<http://rochesterbutterflyclub.org>).



### 3. Avoid herbicides and pesticides

Because we want to keep caterpillars and eventually butterflies, we need to protect their safety. Butterflies are

delicate insects and these types of lawn care and plant maintenance products contain chemicals will kill butterflies and other beneficial insects in both their adult and larval phases.

### 4. Plant type & color are important

Now that we know to plant native wildflowers, we need to decide which ones to plant. Adult butterflies are attracted to red, yellow, orange, pink and purple blossoms. Each butterfly has a different taste, so select a variety of colors and bloom types. Make sure you have some flowers that bloom in clusters and others that have single blooms. Butterflies also look for plants that have short flower tubes.

### 6. Plant for continuous bloom

Butterflies need nectar throughout the adult phase of their life span. Try to plant so that when one plant stops blooming, another begins. This has the added benefit of your garden being beautiful all season long.

### 7. Garden placements is key

Now that we know what to plant,

where do we plant it? Choose a spot that is well away from traffic, cars and people. Butterflies are shy creatures and will not hang around a place where there is heavy foot traffic from people who are constantly walking by or moving. Just like to any other creature, cars can be deadly to butterflies. In addition to being away from traffic, choose a spot that has sun for about five to six hours a day. Butterflies need the warmth of the sun to help regulate body temperature because they are cold-blooded creatures. Third, make sure your garden is in a spot that breaks the wind. Butterflies are not going to hang around long if they are constantly fighting the wind to stay on a flower.



### 8. Provide a place to rest

So we have picked our plants and chosen a safe spot for our garden, now it is time to accessorize! Place flat stones in your garden to provide space for your butterflies to rest and bask in the sun. Butterflies need sun for orientation and to warm their wings for flight. Butterflies also like to congregate on wet sand and mud to partake in “puddling”, drinking water and extracting minerals from damp puddles. By placing coarse sand in a shallow pan and then inserting the pan in the garden soil you will create this needed part of the butterfly’s habitat. Make sure to keep the sand moist.

Now you can go out and create your own butterfly sanctuary. It will be a safe place for your butterfly friends and a place where you can relax and enjoy the beauty all around you.

## Can You Help? We Need...

Aquatic Collecting Net—D Frame

Replacement Sweep Nets Muslin 16” Diameter (2)

Replacement Sweep Nets Poly Mesh 14” Diameter (2)



## Thank You to Our Dedicated Volunteers

The rainy spring made it hard to get out and clear trails this year, but many thanks to those who braved the rain to help get our trails ready for the season.

Trail clearing began at the beginning of April with crews heading out to clear trails on our Eshelman Property. Muchas gracias to Mike and Judy Patton, Joe Schueckler, Mike Canada, and Jeff, Austin, Justin and Matt Reisman for helping to get the trails cleared.

Work began on part of the Children’s Garden. Thank you to Jim Pomeroy, Dick Woodruff, Ted and Mike Georgian, and Jeff Reisman, who helped clear out an area for group meetings. Once finished with that, we headed for the trails and cleared sticks as we travelled through ankle deep water.

A crew helped spruce up the garden and cabin at the Lillibridge Property. Thanks to Mike Ermer, Wendy Brand, Kathy Ross, and Mikki Cole who helped with clearing the weeds from the garden. Jeff McMullen, Nick Vaczek, and Carol Bradley all worked to tidy up the cabin for the summer. Thanks—it looks great!

Our sugar grove on Route 305 received a little tender loving care from Joe Schueckler, Mike and Judy Patton, and

Mike Ermer.

The Eshelman property is always full of birds in May. Thanks to Jeff Reed for leading Cattaraugus County Bird Club bird walks every Saturday in May. Many guests enjoyed learning about birds and getting a chance to see a few of their own.

Because of school budget cuts few schools could afford to visit our Lillibridge Property as part of our Adopt-a-Tree program. Smethport’s fourth grade classes joined us at the top of the mountain, and spent the day enjoying the outdoors and exploring our old growth forest. Thanks to Kathy Ross for helping with the 80 students who attended the program.

So many people lent their time and energy to making our fifth annual Woods Walk & Trail Run successful that we simply can’t name everyone here. We must identify the chairs of our Woods Walk committees, since they are the backbone of the operation.

- *Chris Piaggi & Carol Bradley* do an amazing job as the Trails Committee! They layout our three trails, make sure they well-groomed & maintained, and mark them all.

- *Vicki Schmidt* organizes the aid

stations, makes arrangements for the Fire Departments, and otherwise ensures the safety of our runners & walkers.

- *Sarah Larson* is responsible for the onsite check in process, making that process smooth and easy.
- *Judy Patton & Sue Stevens* make all the arrangements for the Finish Line Arena, from cooking delicious food to arranging for massages.
- *Colleen Kent* took on the stressful task of timing this year, running multiple stopwatches simultaneously.
- *Marcia Storch* is in charge of getting all of our sponsors and advertisers, critical to the event’s overall and long-term success.
- *Mike Ermer* arranges for the tents, parks all the cars, and gets us essential services—like electricity!
- *Wendy Brand* takes control over our publicity, keeping us in the public eye.
- *Jeff McMullen* provides the informational signs along the trails. Although runners barely see them, walkers enjoy the tidbits they provide.

**THANKS, EVERYONE—YOU MAKE US GREAT!!**

## Bewitching Butterflies (Cont.)

(Continued from page 1)

body is the “veins” that run from the body out to the edges of the wings. They are used to expand the wings when the adult emerges from the chrysalis, and they serve as structural supports for the wings.

Each butterfly and moth goes through four distinct states in its life; egg, caterpillar, pupa (chrysalis or cocoon) and adult. Most butterflies lay their eggs on a host plant, in the spring, summer, or fall. A host plant is a plant that is suitable food for the caterpillar once it has hatched. Over the course of their lives, some

butterflies lay only a few dozen eggs but most lay a few hundred. The Regal Fritillary can lay a few thousand. How many eggs a butterfly lays depends on how they lay their eggs. Some species lay their eggs

(Continued on page 11)



### Pfeiffer Nature Center & Foundation

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14 S. Main St., Portville, NY 14770  
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### Board of Directors

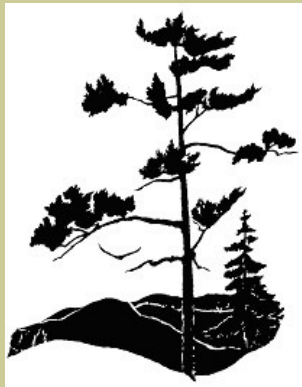
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# Ovenbird Extra

Pfeiffer Nature Center      **Summer Ovenbird 2011**  
Where Science, Art & Nature Come Together!

We know that black & white photos aren't great for butterfly ID. Scan this code into your smartphone, or go to our blog ([pfeiffernaturecenter.org/nature-blog/our-history/blog](http://pfeiffernaturecenter.org/nature-blog/our-history/blog)) to get to our full color pictures & butterfly ID details.



## Ten Butterflies for Beginners (Cont.)

### Viceroy

Although unrelated to the monarch, the viceroy takes advantage of the monarch's unpalatability by mimicking its appearance. At first glance, it looks very similar to a monarch butterfly. It is slightly smaller than the monarch, with which its almost identical orange and black pattern is easily confused. However, unlike the monarch, the viceroy has a black stripe on the hind wing that crosses the other lines.

### Gray Hairstreak

Hairstreaks are wonderfully vast group with more than 1,000 species found in the American tropics. About 60 species are found in North America, the most widespread being the gray hairstreak. Its caterpillars have one of the broadest tastes of any butterfly, but seem especially to enjoy various mallows, including hollyhocks. Some other hairstreaks have a similar bright orange spot on the hind wing below, but few are as evenly gray as this species.

## Butterflies for Beginners Checklist

\_\_\_\_\_ 1. Tiger Swallowtail



\_\_\_\_\_ 4. Orange Sulphur



\_\_\_\_\_ 7. Question Mark & Comma



\_\_\_\_\_ 9. Viceroy



\_\_\_\_\_ 2. Black Swallowtail



\_\_\_\_\_ 5. Spring Azure



\_\_\_\_\_ 8. Monarch



\_\_\_\_\_ 10. Gray Hairstreak



\_\_\_\_\_ 3. Cabbage White



\_\_\_\_\_ 6. Mourning Cloak



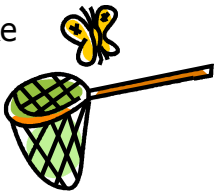
# Explore Summer Fun at Pfeiffer Nature Center!!



## Make & Take—A Butterfly Net & Mounting Plate ~ July 7 ~

The flit, they flutter, but do not be flustered! You too can learn to identify common butterflies in our area and be acquainted with their life cycles. Come see a demonstration of how to catch, preserve, and mount butterflies. Learn which butterflies can be selectively collected. Make and take your own net and mounting plate.

**6-8 pm x PNC Office**  
**General Public \$25/PNC Members \$20**



## Make & Take: Homemade Soap ~ July 23

Come & make your own soap using native plants. These native plants have wonderful healing qualities. Leave with the knowledge to make your own soap, a sample of soap, a jar of jewel weed juice, & a jar of birch leaf oil.

**10:30 am—2:30 pm x Lillibridge Property**  
**General Public \$35/PNC Members \$30**  
**~ includes all materials ~**



## Owl Prowl ~ July 23

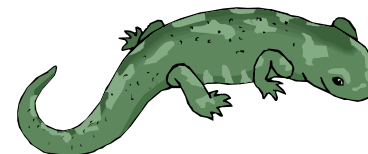
Join our wildlife rehabilitation specialist to learn about these elusive and beautiful creatures. It's a fascinating up-close look at owls and other raptors. There will be a live bird display.

**7-9 pm x General Public \$10/PNC Members \$5 x Lillibridge Property**



## Sala'Meander ~ August 27

Fall is the best time for a salamander hunt. Join us as we search for these fascinating creatures. Lillibridge has fifteen species of amphibians and reptiles that call the habitat of the old growth forest home. Come prepared to roll some logs and turn over some leaves.



**10:30 am—12:30 pm x Lillibridge Property**  
**General Public \$10/PNC Members \$5 x**

**All workshops require pre-registration.**

**Please Call 716-933-0187 or email [naturalist@PfeifferNatureCenter.org](mailto:naturalist@PfeifferNatureCenter.org)**

**Pfeiffer Nature Center**

**14 S. Main Street ~ Portville, NY 14770 ~ 716-933-0187**





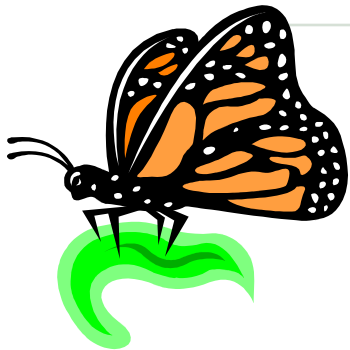
**Pfeiffer Nature Center**  
Where Science, Art & Nature Come Together!

#### Word Bank:

|               |             |
|---------------|-------------|
| metamorphosis | skin        |
| insects       | eyes        |
| leaf          | six         |
| flying        | adult       |
| butterfly     | caterpillar |
| egg           | chest       |

#### Answers:

metamorphosis, butterfly, caterpillar, egg, skin, flying, adult, leaf, chest, eyes, six, metamorphosis, butterfly, caterpillar, egg, skin, flying, adult



The monarch butterfly is sometimes called the "milkweed butterfly" because its larvae eat the plant. In fact, milkweed is the only thing the larvae can eat!

Adult female monarchs lay their eggs on the underside of

# Junior Naturalist Page

Summer Ovenbird 2011

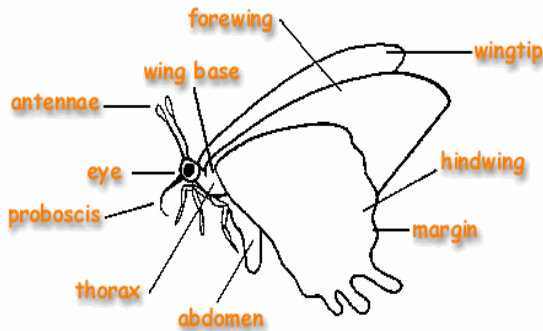
## Butterflies

Butterflies are beautiful, flying \_\_\_\_\_ that have large scaly wings. Like all insects, they have \_\_\_\_\_ jointed legs, 3 body parts, a pair of antennae, compound \_\_\_\_\_, & an exoskeleton. The three body parts are the head, thorax (the \_\_\_\_\_), & abdomen (the tail end).

The butterfly's body is covered by tiny sensory hairs. The four wings & the six legs of the butterfly are attached to the thorax. The thorax contains the muscles that make the legs & wings move.

Butterflies & moths undergo complete \_\_\_\_\_ in which they go through four different life stages.

- **Egg** - A \_\_\_\_\_ starts its life as an egg, often laid on a \_\_\_\_\_.
- **Larva** - The larva ( \_\_\_\_\_ ) hatches from an \_\_\_\_\_ & eats leaves almost constantly. The caterpillar molts (loses its old \_\_\_\_\_) many times as it grows. The caterpillar will increase up to several thousand times in size before pupating.
- **Pupa** - The caterpillar turns into a pupa (chrysalis). This is a resting stage.
- **Adult** - A beautiful, \_\_\_\_\_ adult emerges. This \_\_\_\_\_ will continue the cycle.



## Monarch Butterfly

milkweed leaves. These eggs hatch, depending on temperature, in 3 to 12 days.

The larvae feed on the plant leaves for about 2 weeks & develop into caterpillars about 2 inches long.

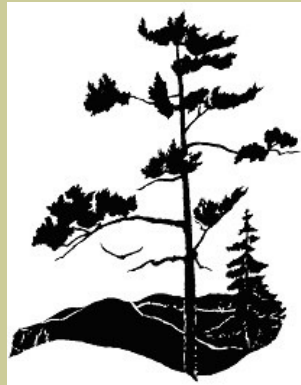
After awhile, the caterpillars attach themselves head down to a convenient twig, they shed their outer skin & begin the transformation into a pupa (or chrysalis), a process which is completed in a matter of hours.

The pupa resembles a waxy, jade vase & becomes increasingly transparent as the process progresses. The caterpillar completes the miraculous transformation into a beautiful adult butterfly in about two weeks.

Most predators have learned that the monarch butterfly makes a poisonous snack. The toxins from the monarch's milkweed diet have given the butterfly this defense. As a result, in both the caterpillar

and butterfly stage, the monarch needs no camouflage to protect it. Many animals advertise their poisonous nature with bright colors... just like the monarch!

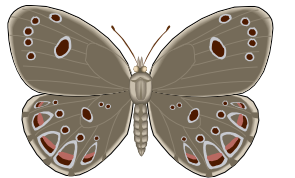
Eastern populations winter in Florida, along the coast of Texas, and in Mexico, returning to the north in spring. Monarch butterflies follow the same migration patterns every year. During migration, huge numbers of butterflies can be seen gathered together.



# Ovenbird Extra

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Summer Ovenbird 2011



They can sometimes be seen on an extremely warm day in January. They will become plentiful again in mid-July. The adults do not usually visit flowers but are partial to tree sap and various decaying organic matter. The caterpillars feed mainly on willows.

#### Question Mark and Comma

These butterflies are named for the silvery marks in the middle of the underside of their hind wings, which resemble certain punctuation marks.

#### Monarch

This is the best-known butterfly in North America. Large and brightly colored in orange and black, these butterflies cause everyone's head to turn as they migrate southward in large groups in the fall. They are such strong fliers that they colonized New Zealand, Australia, and the Canary Islands! Adult monarchs are distasteful to birds because the caterpillars feed on milkweeds and accumulate toxic chemicals. Because these butterflies retreat to Mexico for the winter, they are not common around here until late June. In fact, most entomologists agree that the "returning" butterflies are offspring of those that flew south last fall.

## Ten Butterflies for Beginners

Butterfly identification is a learning process. It is easier to start with the large, brightly colored species and gradually work down to the small, drab ones. Here is what to look for on some of the most common species of butterflies in North America.

#### Tiger Swallowtails

Just about every area has at least one of the five kinds of tiger swallowtails found in North America. It is a large butterfly, bright yellow with black wings edges and black stripes that run parallel to its body. Its tiger stripes give it its surname while swallowtail describes the narrow black wing extensions that trail behind it. Plant some wild cherries, such as chokecherry or black cherry (the caterpillar's host plant), in your yard and thrill to the sight of these spectacular beauties taking nectar at your garden lilies.

#### Black Swallowtail

These large black-and-yellow butterflies are at home in towns and gardens. Black swallowtails are found throughout the eastern two-thirds of North America. Plant a patch of parsley or dill in your garden and there is an

excellent chance that you can watch the brilliant green and black-striped caterpillars grow to adulthood – even if your garden is the terrace of a high-rise apartment in a major city! Males of the two swallowtail species are drawn to the tops of hills, where they wait for females.

#### Cabbage White

Our small white butterflies are almost all cabbage whites, an abundant and widespread species. One of only two non-native butterflies in North America, the cabbage white is now perhaps our most common butterfly. Its caterpillars feed on a wide variety of plants, including mustards and of course, cabbage. Look for black dots on the wings, one for a male and two for a female.

#### Orange Sulphur

Replace the white of the cabbage butterfly with lemon yellow to orange color and you have the orange sulphur. The sulphurs are medium-sized butterflies whose colors range from white to orange. This species is one of the most abundant in North America, sometimes swarming in vast

numbers in alfalfa fields. It is found throughout the United States and most of Canada. Its close relatives, including the common and widespread, clouded sulphur, are pure yellow above, with no trace of orange. The related giant sulphurs are much larger, almost the size of swallowtails, while the related "yellows" tend to be smaller.

#### Spring Azure

The brilliant blue of spring azures is a wake-up call for the winter weary butterfly enthusiast. Azures are one of the first butterflies to emerge in the spring to greet the new season and are found over most of the continent. Some of the 30 other species of blues are difficult to distinguish from this one, but only the tailed blues are likely to be found in your garden. They are darker blue above with fine tails.

#### Mourning Cloak

The mourning cloak is another large butterfly. It is the only black (or very dark brown) butterfly with yellow wing edges. Because it overwinters as adults, they are another early appearing butterfly.