

Brown Family Environmental Center at Kenyon College Newsletter



SPRING 2010



VOLUME 14/ NO. 2

Bringing Butterflies Home

Picture butterflies weightlessly fluttering around you as they wander towards brilliant flowers. They land delicately, and slowly open and close their wings, basking in the sun along with their human admirers.

The languid moment is disrupted, to your amazement, as two butterflies pursue each other in a dizzying upward spiral, 10, 15, 20 feet in the air, until they just as suddenly stop and drift to the ground.

While the BFEC Wildlife Garden has been a host to these scenes for over ten years, we'd like to invite you to try it at home! It's easier than you might think, and starts with a few of the gardening techniques we've shared here.

Add color to your landscape, entice the kids to explore backyard nature, support butterfly populations, and best of all, sit back to enjoy the show.

All Flowers Are Not Created Equal

Butterflies drink nectar from flowers with a long, straw-like structure called a proboscis. A few potted plants can be all it takes to attract them, though some plants work better than others.

The reasons often lie in a plant's origins. As plant breeders continually develop new varieties with bigger blooms in new colors, their value as food sources can be lost. Plants imported from other countries may also be less appetizing to our Midwestern butterflies.

As a rule of thumb, it's best to stick

with plants that are native to our area - we've listed some of our favorites on the next page. We do use a few non-natives in our garden that are especially good nectar sources, such as zinnias, cosmos, and Mexican sunflower (pictured below).

Here are a few more elements to keep in mind: most flowering plants and butterflies prefer a sunny location; arranging plants in clusters makes it easier for butterflies to find; and, including plants that flower at different times of the year provides continual nectar sources.

Hosting a Butterfly Family

The plants on which butterflies lay eggs are referred to as host plants. Once eggs hatch into caterpillars, they feed on the host plant for a few weeks, and then transform in a cocoon into adult butterflies.

Many host (and nectar) plants are very common and often thought of as "weeds." For instance, the spangled fritillary uses violets, which readily appear in most gardens. Welcoming such plants or living near a natural area is sufficient to provide host plants for many species - a few examples are listed on the next page.

Some butterflies need more specific or rare plants (and are often themselves less common and more vulnerable to habitat loss). The spectacularly striped zebra swallowtail, for instance, uses pawpaw trees found in the understory of woodlands.

Playing host to a butterfly brood requires tolerance of some caterpillar-chewed leaves, as well as limited pesticide use, which kills caterpillars and butterflies along with intended targets.

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Live Butterfly Exhibit
& Native Plant Sale at Earth Day Festival!

Shelter from the Storm

Butterflies are most active on warm and sunny days, and need trees or shrubs for shelter at night or during storms. Brush piles also provide great cover for overwintering butterflies, which, depending on the species, may pass these months as eggs, caterpillars, or adults.

If you decide that butterfly gardening is for you, it's ok to start small and simple. It's also a good idea to get to know common butterflies and the plants they prefer. We invite you to visit the BFEC Wildlife Garden to see our

native plant collection and the butterflies that frequent it. While you're here, stop in to peruse our library of field guides and gardening books.

Visit us at the **Earth Day Festival on April 25** to purchase plants from our native plant sale and check out our live butterfly exhibit. See page 6 for event details.

For more butterfly information, visit the BFEC website (bfec.kenyon.edu), or ODNR Division of Wildlife (www.dnr.state.oh.us/wildlife) and North American Butterfly Association (www.nababutterfly.com).



Plants for Attracting Butterflies

Listed below are a few common plants that serve as butterfly nectar sources and/ or host plants. Many varieties are available at nurseries, and most can be found growing wild. On a budget? Dig some from a fallow field! *Pictured above, left to right: spangled fritillary on butterfly weed; blazing star and black-eyed susan; monarch on common milkweed; silver-spotted skipper on purple coneflower.*

Plant Name	Nectar or Host Plant	Description
Aster - <i>Aster</i> spp.	Nectar Plant Host to Pearl Crescent	"New England" is our wild-growing favorite. Late season nectar source.
Bee Balm - <i>Mondarda didyma</i>	Nectar Plant	Blooms in early summer, also attracts hummingbirds.
Black-eyed Susan - <i>Rudbeckia</i> spp.	Nectar Plant	
Black Cherry - <i>Prunus serotina</i>	Host to Tiger Swallowtail, Azures, Red-spotted Purple	If you live near a young forest, this tree is likely found there.
Blazing Star - <i>Liatris</i> spp.	Nectar Plant	Also known as "gayfeather." Popular cut flower among florists.
Clover - <i>Trifolium</i> spp.	Host to Orange Sulphur	If you have a chemical-free lawn, you have clover!
Coreopsis - <i>Coreopsis lanceolata</i>	Nectar Plant	Also known as "tickseed"
Goldenrod - <i>Solidago</i> spp.	Nectar Plant	Not the allergen that many mistake it for. Late season nectar source.
Ironweed - <i>Vernonia gigantea</i>	Nectar Plant	Hard to miss in old fields, growing 5' tall with violet flowers.
Joe Pye Weed - <i>Eupatorium</i> spp.	Nectar Plant	Cultivated varieties are rare, but commonly grows wild in wet fields. Loaded with butterflies in our garden.
Milkweeds - <i>Asclepias</i> spp.	Nectar Plant Host to Monarch	Several milkweed species used by monarchs. Common Milkweed grows wild in open places, Butterfly Weed found in most nurseries.
Purple Coneflower - <i>Echinacea purpurea</i>	Nectar Plant	Very common in nurseries, a butterfly favorite!
Nettle - <i>Urtica</i> spp.	Host to Comma, Red Admiral, Question Mark	Common in wet woods, weedy areas. Stings when it contacts skin; cultivated by only the most self-sacrificing.
Plantains - <i>Plantago</i> spp.	Host to Common Buckeye	See "Clover"
Violets - <i>Viola</i> spp.	Host to Great Spangled Fritillary	See "Clover"

The Rule Breakers

In every group, there are, of course, the rule-breakers. While many butterflies hibernate, eat, and reproduce in predictable ways, flying about in summer months, feeding on flowers, there are those that defy generalizations.

The mourning cloak (pictured here) is one example. On warm winter days when snow melts and islands of wet earth emerge, you may find yourself startled by its flutter of yellow and black.

Most butterflies overwinter as eggs or larvae, and then spend weeks as caterpillars and in cocoons before emerging as the gloriously colored adult. Mourning cloaks, however, hunker down for winter in their adult form under flaps of bark or piles of brush, waiting

to surprise us during an unusual warm spell. A sixty degree day, and they're off! They live for ten months, and in the hot summer months that are the height of the season for other butterflies, they are thought to go into a form of summer hibernation, or aestivation.



Think butterflies are all sugar and spice? Morning cloaks and a few of its cousins charmingly feed on animal scat, and sometimes rotten fruit or tree sap. This is another characteristic that allows them to fly before many nectar sources are available in early spring.

And while we claimed earlier that most butterflies enjoy full sunshine, mourning cloaks are more often found in woodlands and the borders of streams and wetlands, though they sometimes comply with butterfly norms by straying into open areas.



Adopt-a-Bench! Check the box below to have a bench placed at a BFEC trail location of your choice with a plaque honoring your special contribution.

Support the BFEC

Now is the time to become a member or renew your annual membership! There are many reasons to give, perhaps foremost for the satisfaction of knowing you're a part of critical environmental education and conservation programs. Your membership entitles you to be the first to know of our offerings, receive a hard copy of newsletters, a 10% discount on high quality bird seed, and preferential RSVP status on workshops. Please use the form below or payment envelope to send your contribution today, and thanks!

Membership level: Student ____ \$20 Individual ____ \$35
Family ____ \$50 Friend ____ \$100 Patron ____ \$250
Benefactor ____ \$1000 +

Amount enclosed: _____

☐ My check, payable to Kenyon College, is enclosed

☐ Please bill my ____ Visa or ____ MasterCard

Card number _____ Exp. date _____

☐ Yes! I've enclosed a special gift of \$250 to have a bench placed along a BFEC trail of my choice, along with a plaque recognizing my contribution.

Name _____

Address _____

City _____

State, zip code _____

Telephone _____

Email _____

Your donation is tax deductible as allowed by law. The Brown Family Environmental Center at Kenyon College is a 501c(3) nonprofit organization.

Mail to: BFEC, P.O. Box 508, Gambier, Ohio 43022

On the Ground

by Facility Manager David Heithaus

Staring out the window at record-breaking snow, we found ourselves wondering if spring would ever come. We passed the time fantasizing about all the things we'd do once it did. All the fixes, changes, programs and events we'd pack into the spring and summer. Now, as the snow melts and flows south with the rising Kokosing, it's time to face the fantasy music. I'd swear I could hear one last chuckle from Old Man Winter. Hysterical, isn't he?

Each issue, before I ramble on, I like to take a look at the last newsletter to avoid overlaps. Let's see... what I was thinking three months ago... spring planning... planting trees... prairie stuff... bluebirds... trails, steps, rain gardens, *forbs*... Crap. Thanks *winter* newsletter. You stole my spring column. Again.

Okay; not the end of the world...Not a problem...Plenty to say... Plenty....

You know what? Take a hike. Really. Take a hike. Now. Get your boots; grab an extra layer and take a hike. I could tell you again about all the trees we're planting. About new benches or better garden beds. I could chatter about bluebirds, peepers, foxes, otters or eagles frolicking about the preserve.

I could digress into the minutia of our new land management plan, its invasive species management-priority grid, annual time/cost analysis by project or its riveting policy on geocaching. But you know what? I don't have to. You can see it all for yourself. Right now.

Face it: there's nothing like those first few hikes of spring. When else is so much changing so fast? Things emerging and re-emerging? The smell of thawing earth and air mixes

with a hint of nectar and creeps into frozen nasal passages, reminding us of what we love about lying in the grass and sun.



A majestic beech tree along the bishop's backbone trail

The wheels have already begun turning on improvement projects, the animals have long since started their spring cleaning. All you have to do is grab those boots and wander out to see for yourself.

Stop and think about it. What are you doing right now? Sitting somewhere I imagine. Holding the newsletter; maybe having some coffee? A *croissant*? Well stop it. Put the newsletter down. It's sunny, isn't it? Yes, yes, I know the butterfly article looks fantastic and the maple syrup kids are charming. There'll be time for them later. Now is the time to explore! This season is what it's all about. This season is the one that reminds us why we bother to go outside at all and how lucky we are to have an outside worth going to.

Look, last issue I may have made some inflammatory remarks about

central Ohio during certain seasons. I may have referenced other arguably unpleasant locations like the Atacama, Siberia... or Hoth. Well allow me to make up for it.

I've read some articles this winter about people who went to see an über-blockbuster about a pristine moon overflowing with fantastic tropical life. With a calculated and cruel December release for those in northern climes, these people spent the rest of the winter vacillating between frowning bleakly out the window, sobbing and eating ice cream. Suddenly aware of a deep, chromosomal and hitherto unknown connection with the natural world, they were thrust into the horrible reality of being unable to locate nature of sufficient quality to connect with.

I also read an article about a guy who saw the same movie and built a suit of robot armor and started shooting trees, but that just helps to support my eventual point: appreciate what you have, not what you want and not what you miss.

We're lucky here in rural central Ohio. Pandora may sucker-punch us from an unspoiled diversity and giant-blue-cat-person perspective but at least we have gorgeously-rendered 3-D plants, trees, water and earth you can touch and hear and smell. And breathable air; don't forget that.

So get out there! Touch it, hear it, smell it, taste it- no fancy goggles, no ticket required. And on a good day, you may not even want those boots. Nothing goes with the smells of early spring like a bit of cool mud between the toes... Just look out for ringworm. And robot people shooting at trees.

That's where I'm headed. See you on the ground.

NEWS from the BROWN

CHRISTMAS BIRD COUNT



*Sing a song of sixpence a pocket full of rye,
Four and twenty blackbirds baked in a pie.
When the pie was opened the birds began to sing,
Oh wasn't that a dainty dish to set before the king?*

Knox County is a big "pie" but even so, 3000 blackbirds (crows, starlings, grackles, cowbirds, etc.) is quite an impressive number. On December 20, 2009, the BFEC sponsored the annual Audubon Christmas Bird Count within a 15-mile diameter circle that includes Mount Vernon, Fredericktown, Gambier, Knox Lake and Apple Valley Lake. Nineteen volunteers carved this pie into unique areas to census the birds overwintering in our area. Data from our count are combined with thousands of other counts to look for trends in the diversity of birds. Twenty-one volunteers added their observations of home feeding stations. In total, 10,700 birds were identified from 79 species. The recipe for such a successful count includes a bit of snow for easily finding birds and open water in just the largest lakes so that waterfowl become concentrated. Our pie had some real treats, such as 9 Bald Eagles, hundreds of colorful Cardinals and Blue Jays, and some very unusual species to be here during winter (e.g., Common Loon, Blue and Rose-breasted Grosebeak). This was one of our best years ever, and we were glad that serious winter didn't start until mid-January!

SWEET HARBINGER OF SPRING

Sweet, sticky harbinger of spring and pancakes, maple syrup has a long and rich history in Ohio. With production rivaling Vermont itself, maple syrup has been a rite of the season here since pre-colonial times.

Native Americans slashed through bark to collect the sap, often letting it partially freeze before boiling it with hot stones dropped into hollowed out log containers. More pragmatic than the modern pancake aficionado, they would often process the sap through the syrup stage into easily stored sugar crystals. When European colonists arrived, they observed this process and brought their own technologies to sap harvesting. The traditional tap and hanging bucket employed today has seen very little adaptation since their time.

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KNOX COUNTY NEANDERTHALS



"Neanderthals: dull, dim-witted, hairy, beetle-browed, stooped, savage. These are among the images elicited from students in introductory anthropology classes when asked to describe our closest relative on the human family tree. Is this an accurate image? Did they really have trouble walking and chewing gum at the same time?"

This excerpt from the course description of a class taught by Anthropology Professor Bruce Hardy leaves us with a question... and not one that would be answered at the library. Professor Hardy and his students embraced the harsh climate to do some real-world testing of prevailing theories about Neanderthals' behaviors and capabilities. The group set out in freezing temperatures and blowing snow to see what it would have taken to survive in

the harsh northern range of the pre-historic Neanderthal. Building real shelters to survive real wind and snow, harvesting saplings and fashioning spears with teamwork and sharp stones, trekking through knee-deep snow in search of materials and sustenance; these daily necessities were reconstructed once per week here at the BFEC. And just like the Neanderthals for a time, the class prevailed. What will spring bring for these educated modern primitives? Only time will tell; I will report that the local deer herd seems... anxious.

Calendar of Events

All events start from the BFEC Resource Center at 9781 Laymon Road unless stated otherwise.

Please contact 740-427-5050 or dohertyh@kenyon.edu for additional information.

<http://bfec.kenyon.edu>

Wild Edible & Medicinal Plants

Saturday, April 3rd, 1:00pm. Take in the bright green of spring while discovering wild plants and "weeds" that offer a surprising array for the salad plate and medicine cabinet.

Wildflower Walk

Saturday, May 8th, 2:00pm



Stroll through the BFEC gardens and along trails to experience the delicate beauty of ephemeral spring wildflowers. A Mother's Day treat!

Bishop's Backbone Trail Hike

Friday, June 4th, 3pm. Brooklyn St. Trailhead. Take a hike on our northern trail system. Choose to go on either a 1.5 mile hike featuring many wildflowers, or a 4 mile hike through wetlands and woodlands of our Bishop's Backbone trail. Hiking boots or tennis shoes recommended. *From Mt. Vernon, follow Gambier St./Route 229 four miles east; turn left onto Wiggin Street / Route 308, and immediately left onto Brooklyn St. Trailhead located on left, proceed up hill to parking in Gambier.*

Breakfast with the Birds

Saturday, June 5th, 8:00am. Enjoy coffee and donuts before hitting the trails to see some of the 78 bird species that nest in the BFEC preserve. Field guides and binoculars will be available.

Night Hike

Sunday, June 25th, 9:00pm. Experience our trails from a new nighttime perspective. We'll search for insects that sing, fly, or make the night sky sparkle, and try a few techniques to attract moths (some of which are as big and colorful as their better known butterfly cousins). End the night with a bonfire and marshmallows.



Sunday, April 25, 2010

Kenyon Athletic Center

11am - 2pm

Healthy People Healthy World

The Festival is a FREE event that focuses on keeping ourselves and our world healthy - goals that go hand-in-hand! Features include:

- ♦ BFEC Live Butterfly Exhibit & Native Plant Sale
- ♦ Farmers Market & Petting Zoo
- ♦ Live Music & Door Prizes
- ♦ Healthy Cooking Demo
- ♦ Exhibitors & Vendors of healthy & green resources and products
- ♦ Kid's Activity Zone
- ♦ Earth Day Challenge Marathon finish line

Presented by the BFEC, Knox Community Hospital, Knox County Health Department, & Knox County Park District.

Thank You to...

Our Members (January - March 2010)

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Our Volunteers

In the office, classroom, gardens and on the trails: Dale Glass, Al Helser, Gary Moore, Brian

Zimmerman, MVHS Environmental Club



"Harbinger of Spring" continued from p.5

While the grand old sugar maples that line Laymon Road near the BFEC have been tapped in tradition for generations, a new group of sap-seekers ventured out with drill and bucket this year. In the melting snow and days before spring break, a group of fifteen Kenyon students embarked on what would become a crash course in ancient food science. Three of them, left behind by spring-breakers, would prove especially adept in their studies.

The sixteen taps they placed on twelve trees filled quickly and often. Almost 75 gallons of sap were collected in less than two weeks. The collection process tested both stamina and persistence as multiple trips up one of the preserve's steepest hills

was involved in reaching most of the taps.

In the words of senior, Matt Riley, "Once break started, Jamie [Katz], Joey [Johnston], and I were pretty overwhelmed by the amount of sap we were receiving. For a while we were experimenting with different methods of transporting it from the trees and we were making about three trips a day just to keep up."

Keep up they did, both on the collection front and in processing the raw sap. Using an open wood fire, an enormous pot and plenty of patience, Matt, Jamie, and Joey have reduced over half of the collected sap into delicious maple syrup. Impressive when you consider the sap-to-syrup ratio is 30 or 40 to 1. Having tested both the finished product and an outstanding granola made with it, I can

tell you without reservation that the three seniors have figured out exactly which ratio delights the palate.

Beyond giving pancakes purpose, the experience has meant more than some home-brewed calories. In Matt's words: "It's one of those rare and exhilarating joys to be presented with the overwhelming bounty of nature. We recognized that as something special. Things have fortunately slowed down since and we're looking forward to hosting an 'un-tapping' event when students return from break, complete with plenty of pancakes."

We have no doubt the un-tapping party will be appreciated by all. Hopefully the seniors will share their secrets with the next generation of maple tapsters before graduation!

THE BROWN FAMILY ENVIRONMENTAL CENTER *at Kenyon College*

9781 Laymon Road, Gambier, Ohio 43022 ~ (740) 427-5050 ~ <http://bfec.kenyon.edu>



Our Mission

The BFEC at Kenyon College exists to engage Central Ohioans of all ages with nature, and to support the goals of Kenyon College by conserving the natural diversity of the Kokosing River valley and providing opportunities for education and research.

Co - Executive Directors

E. Raymond Heithaus, *Jordan Professor of Environmental Studies & Biology*

Siobhan Fennessy, *Associate Professor of Biology*

Facility Manager

David Heithaus

Program Manager

Heather Doherty

Facility & Program Assistant

Jill Kerkhoff

Upcoming Events

- | | |
|----------|---|
| April 3 | Wild Edible & Medicinal Plants |
| April 25 | Earth Day Festival & Challenge Marathon |
| May 8 | Wildflower Walk |
| June 4 | Bishops Backbone Trail Hike |
| June 5 | Breakfast with the Birds |
| June 25 | Night Hike |



Live Butterfly Exhibit & Native Plant Sale
at Earth Day Festival! Info on page 6

DATE MAILED: April, 2010
CONTAINS DATED MATERIAL

The Brown Family
Environmental Center
at Kenyon College
P.O. Box 508
Gambier, Ohio 43022



