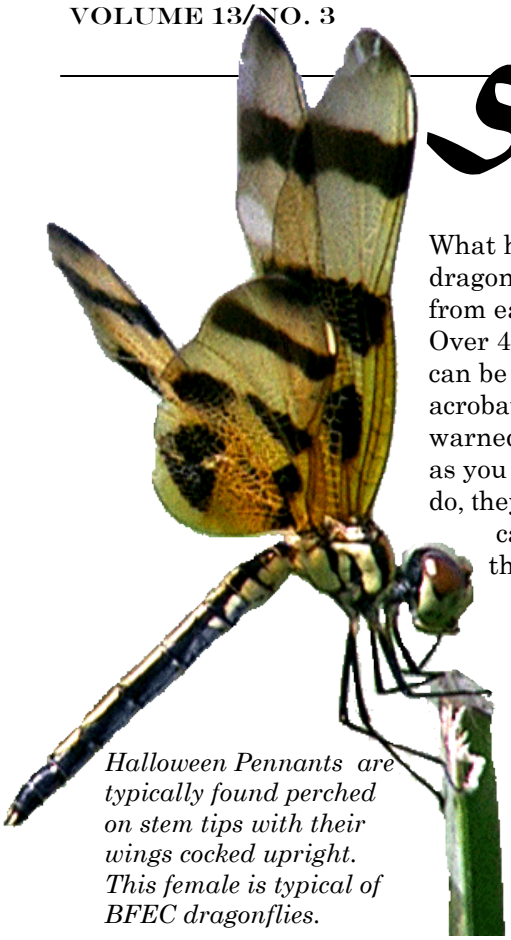
Brown Family Environmental Center at Kenyon College *Newsletter*

VOLUME 13/NO. 3 SUMMER 2009

Summer Dragons:

By Patricia and Raymond Heithaus



Halloween Pennants are typically found perched on stem tips with their wings cocked upright. This female is typical of BFEC dragonflies.

What has 6 legs, lurks under the water *and* soars through the sky? If you guessed a dragonfly, you get the gold star. These amazing and colorful creatures can be seen from early May all the way through October as they dart over pond, field and hilltop. Over 40 species of dragonfly have been reported in Knox County and many of these can be found at the BFEC. Whether or not you know their names, dragonflies' aerial acrobatics are a delight to any person who pauses for a moment to watch. But be warned; if you want a really close look, bring a pair of binoculars and a lot of patience as you may be in for challenge. Some of the largest species rarely land and when they do, they tend to perch high in a tree. Don't lose heart though, eventually nature will call and they'll dart across the surface of the ponds in search of mates, food or the defense of their territory.

The Birth of a Dragon

For a dragonfly, life begins in an egg that is dropped on the surface of the water, inserted into floating plants, or carefully placed in mud above the water line. Eggs laid into the water often begin development immediately while those deposited just above the waterline wait until the pond fills before beginning development. Eggs laid late in the season often enter a resting stage in which they wait through winter for an environmental cue, such as longer days, warmer water or rain to trigger growth. Most eggs hatch in a month and a larva emerges.

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Confessions of a Summer Gardener: Part 1

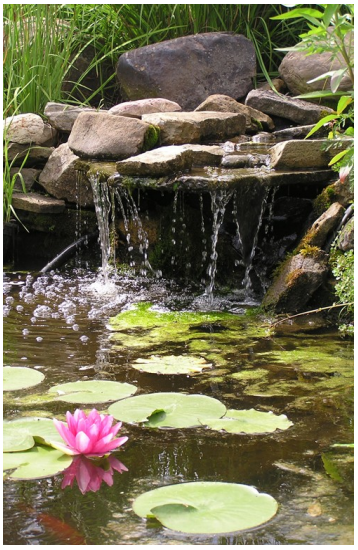
Laura Yakas and James Flaherty

Every summer, the BFEC welcomes two new student gardeners. They are an invaluable part of the summer team . Here are their thoughts on life in the garden. And I do mean life.

Laura: My favorite spot in the garden is that charming little pond in the center. Something about the irises, the rocks, the lily-pads and flowers (especially the single pink flower that popped up one day causing me to shriek in delight like a child in a playground), the "solar aeration" sign, and that one lone fish, seems to make me smile every time I pass by or sit there to read. In fact, that one bed could represent the sum of what I have thus far experienced in my 3-ish short weeks of being a

James: Today marks one month that I've gardened at the B.F.E.C. Here's what I've learned: the job is one part process, one part prayer.

On any given day, daylight will break through your blinds around 6:30 and promptly pry your eyes open. You'll experience a mix of pleasure and relief upon discovering that you still have a half an hour of sleep at your disposal. But it's short lived, that pleasure of yours. Because along with the sun, you've woken up to several other things , things that



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INSIDE...

The larva has an external skeleton, which means that it will have to molt 10-15 times before it becomes an adult. Despite the promise of wings to come, the dragonfly larvae will spend almost its entire life under water.

True to their name, dragonfly larvae can breathe fire… Not really. But they are voracious predators for their size. Newly hatched larvae feed on microscopic organisms such as protozoans. As they grow, their diet switches to larger aquatic insects, tadpoles, and small fish. Dragonfly larvae will eat anything that is the appropriate size and they use different strategies to capture prey. Some ambush their prey while others actively stalk them. Sit-and-wait predators hide in the mud or on aquatic vegetation as they wait for prey to wander by. They ambush prey by extending their labium (a long extension of the mouth) and piercing their victims with the spines protruding from the end of it. The victim is then drawn into the mouth and either crushed or swallowed whole. In species that specialize on small prey items, the labium is like a scoop with hairs that prevent prey from escaping. Dragonfly larvae are hard to keep in an aquarium because many species tend to be cannibalistic in addition to eating other residents. Good thing they're measured in inches instead of feet…

A discarded larval exoskeleton .

Passing through the larval stage can take anywhere from several months to five years. For the final molt the larva leaves the pond crawling onto vegetation or rocks near the water's edge. The exoskeleton of the larva splits along the back and the adult emerges. The larval exoskeleton ("exuviae") is left attached to the stem and can often be found by careful observation of vegetation growing out of the water. The exoskeleton of the newly-emerged adult is soft and the wings are folded.

Blood (hemolymph) is pumped into the veins of the wings which gradually expand under pressure. The exoskeleton of the new adult hardens and begins to darken, taking on the color of an adult. Newly-emerged adults will be light in color and have weak flight.

Taking Flight

Young adults are entering a dangerous world. Their longevity is far from guaranteed. They are eaten by birds, frogs, fish, and even other dragonflies. With luck they will live long enough to rid our skies of mosquitoes, mate and continue the cycle of life. Some such as the Green Darner may even live long enough to fly south for the winter. Large swarms of Green Darners have been reported and scientists are just now starting to learn more about the migration of dragonflies.

Dragonflies are divided into exotic-sounding family groups with names that tend to set the imagination in motion. Forktails, petaltails, darners, clubtails, spiketails, cruisers, emeralds, and skimmers aren't extras from *The Outsiders*, they're just a few of the dragonfly families that can be found in central Ohio. It doesn't take too much imagination to think about how a clubtail might differ from a spiketail but how do darners and skimmers differ? The names might not be *quite* as clear but they do offer clues: the former are large, brightly colored high-fliers that can be seen darting and swooping over fields while the latter average about 1.5 inches in length and have clear or brightly patterned wings. Unlike darners, skimmers spend much of their time perched near ponds and lakes.

Skimmers and other dragonflies differ from their small cousins the damselflies in that they cannot fold their wings over their backs. When they land their wings are extended out to the side. This exposes the entire wing surface to the sun and provides an efficient way for them to warm their flight muscles.

A Twelve-Spotted Skimmer rests on a cattail.

Dragonfly activity is highly dependent on the weather. Most species become active as the sun comes out and the temperature rises. A visit to the ponds early in the morning can often provide opportunities to view dragonflies before they take to the sky. Some species become more active at dusk when potential prey like mayflies emerge. In the fall, large aggregations of darners and saddlebags can be seen cruising back and forth across the wetland. They are feeding on small insects such as mosquitoes, so give them a "huzzah!" if you happen to be passing by.

Dragonflies have good eyesight and are able to recognize members of their own species. They use such characteristics as wing pattern, body markings, eye color and the size and structure of abdominal appendages.

In many species the male and females have distinct color patterns. Courting males tend to defend a small territory by chasing other males away. Depending on the species, territories are defended by the resident flying up from a perch or patrolling constantly on wing.

Dragonflies have been on the Earth for 325 million years – older than the first dinosaurs!

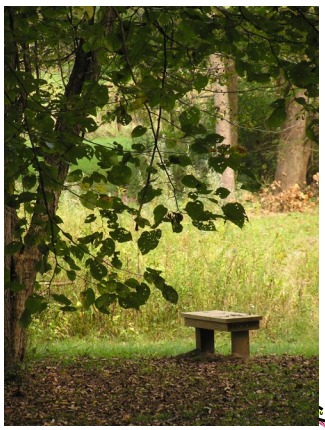
With luck you will be able to see reproductive behavior. Various techniques of mating are used. In some species mating takes only seconds while for others like the Green-eyed Prince Baskettail mating can last for over 20 minutes. The male Baskettail patrols the pond until a potential mate appears. He uses his abdominal appendages to grasp the female just behind the head and she rolls her body so that together they form a circle (or "wheel position"). In this position the female can remove the sperm from an accessory organ near the base of the male's abdomen. The pair may continue to fly in wheel position or land. The mating behavior of the large green darner, common at the BFEC, differs slightly. After briefly flying in a wheel position the female uncurls her abdomen. The male continues to hold the female and the pair fly in tandem until they land on floating vegetation. The male supports the female while she makes a slit in the stem and lays her eggs. The male stays with her until all the eggs have been laid. In other species, the male does not assist during the egg laying. After mating, the male leaves the female to deposit eggs while he patrols the sky overhead, chasing other potential mates away to assure that the offspring are his. Other species invest far less; males simply mate and fly away.

Dragonflies have been on the Earth for 325 million years – older than the first dinosaurs! Even so, many species now face conservation challenges. Their need to first grow in aquatic habitats makes dragonflies sensitive to a host of potential ills: water pollution, loss of wetlands, sedimentation or alteration of streams, clearing of pond and lake shores and drought. Also, adults of different species each require particular places to hunt and find mates: river corridors, grasslands, meadows or woods are essential and all-too-often wind up in the habitat-lost column. By ensuring that many types of aquatic and terrestrial habitat are protected, the BFEC is helping to conserve this ancient line of animals.

The next time you visit the BFEC keep an eye out for our soaring dragons. To learn more about the kinds of dragonflies commonly seen at the BFEC, visit our web site (bfec.kenyon.edu; click on "The Center," "Flora and Fauna," and "Dragonflies"). Even better, explore the BFEC and Knox County in person!

Support the BFEC ~ Become a Member

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



Membership is based on the calendar year. Please become a member or renew your membership for 2009 !

Adopt-a-Bench! We're also offering a new opportunity for members to have a bench placed at a BFEC trail location of their choice with a plaque honoring their special contribution. Please check the box below if you'd like to contribute to this project.

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 part of Kenyon College, a 501C(3) nonprofit organization.

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

On the Ground

by Facility Manager David Heithaus

Ah, summer. The season we look forward to complaining about almost as much as winter. When humidity replaces freezing rain and scorching rays drive us for cover as surely as the grey doldrums of February drive us to drink. Take heart though! Summer in Ohio offers heaping piles of outdoor fun and we at the BFEC are here with a dose of burn-free sunshine to get you motivated to find it. Or at least to stop the complaining for a few minutes… Weather-related complaining anyway.

HABITAT RESTORATION

In Habitat restoration news, around six acres have been planted with hardwoods along a drainage feeding Wolf Run just above its end point at the Kokosing River. Over 2,500 swamp white oak, black walnut, sycamore and buckeye saplings will create invaluable wildlife habitat while contributing greatly towards limiting invasive plant colonization over the long term. An additional two acres will be planted in the fall following the removal of invasive privet, barberry and multiflora rose. Of these two acres, one especially wet section is under investigation for a potential bald cypress grove. Thanks to the US Fish and Wildlife Service, the Philander Chase Corporation and the Knox County Parks District for their assistance with this project.

In nearby woody news, the mixed oak plantation continues to defy both modest expectations and the deer. The two new pawpaw groves are also doing well despite the dry spring. With a touch of luck, they're looking good to bear fruit in the next several years.

GARDENS ABUZZ

As for the gardens, what can I say? The Wildlife Garden continues its meteoric rise with a fresh new look and a battery of top-notch interpretive signage. As always, one of the best things about the garden is the wealth of ideas it offers; ideas that people can really take home with them. It showcases how native alternatives to popularly available and potentially nuisance plants can be used to beautiful affect while providing essential resources for wildlife. Thanks again to Jill Kerkhoff and the trusty student gardeners for shepherding the garden through an exceptional 3-year recovery process.

As we discussed in last summer's newsletter, biting off only what you can chew is one of the hardest and most important lesson a gardener must learn. The value of focus we've learned from the Wildlife Garden has spread to other BFEC beds. In order to better manage what we have, we've streamlined several ancillary beds as well as the medicinal garden which also features a new set of interpretive signage and the "grassy knoll" sculpture/sitting area.

New signage provides detailed information for visitors to the Wildlife or Medicinal Gardens.

Just next door, the community gardeners have been hard at work and are starting to see the fruits of their labors. When you stop by the Wildlife Garden, have a peek at their beds and take home some ideas for your own patch.

DRIPPING SUCCESS

On the fields where Pumpkings© fell (see last few issues), fresh strawberries now lie in solemn rows, waiting forharvest and eventual sale at reasonable prices in front of the BFEC Resource Center. So far, we're thrilled with this garden's progress and have two simple strategies to thank. Using straw in and in-between the rows has helped cut down on weeds and greatly improved the soil's ability to retain moisture. The source of some of that moisture is our other secret: the drip irrigation system we featured in our spring issue. The system has provided more than enough water running for less than two hours per week. Contact us here at the Resource Center for more information on drip irrigation; we can't recommend it highly enough!

BLUEBIRDS ABOUND

It's only July but don't tell the bluebirds. With the help of our trusty monitors, almost forty chicks have already taken wing over the bluebird trail. With several weeks left in the season, we're looking at our best year to date. In other bluebird news, scientists and graduate students continued their investigation of the effects of nest sanitation and nestling environment at the BFEC and around Knox County. Part of their study involved disinfecting a set of boxes and frequently providing the nestlings in these boxes with fresh, sterile nests. We'll keep you posted as results become available!

THE BATTLE RAGES ON

Something I spend a lot of time with in the summer is my deep and abiding grudge against the variety of invasive plants we play host to here at the BFEC. As a results-oriented person, my impulse to use the fastest and most direct whirring, slashing, tearing, scorching method available (ie- possible) is something that has had to become tempered over time… at least a bit. When it comes to going after invasive plants, you're going into battle and, as such, are going to need a battle plan. Just think *strategy*, not "*strategery*". Look for in-depth tips next issue.

NEWS from the BROWN

THE SPREAD OF THE EMERALD ASH BORER

First discovered in Michigan in 2002, this shiny, exotic, menace can now be found across the Midwest. Hailing originally from Asia, where it is not considered a pest, the emerald ash borer has wrecked havoc on countless ash trees in both the US and Canada. The insects' larva bore beneath the bark layer and can quickly destroy a tree's essential water and nutrient transport systems. Infected trees are often characterized by canopy dieback above the site of infestation.

While Knox County hasn't made the list yet, two of our neighboring counties have already been added to the emerald ash borer quarantine list. Watch future newsletters for updates. Call 1-888-OHIO-EAB to report an infestation.

For additional information visit: www.emeraldashborer.info

Adult Emerald Ash Borer. Courtesy Michigan State University

THE GOLDEN SCAPEGOAT

Goldenrod = non-allergenic

Ragweed = sneeze-worthy

For many, fields in summer bloom bring no joy. Waves of golden flowers conjure not poetry but the names of allergists and antihistamines. While we would never make light of the discomfort caused by seasonal allergy symptoms, we do feel it important to make a stand for an oft and incorrectly-maligned plant: goldenrod.

Routinely blamed for causing hay fever, goldenrod is in fact innocent on all counts. Its sticky pollen is transported chiefly by insects, not the wind as is the case with allergy-inspiring pollen. Less than 2% of wind-born summer pollen comes from goldenrod. When your allergies act up this year, consider placing blame on another plant: ragweed.

There are two types of ragweed in Ohio and, together, they are likely responsible for the majority of hay fever cases. Unlike goldenrod, whose brightly-colored flowers attract helpful pollinators, ragweed's small green flowers produce staggering amounts of pollen that is broadcast by air currents. One plant can produce literally millions of grains of pollen and cover an area over a mile in diameter. So this August, go ahead and pick yourself a nice golden bouquet and keep your eyes peeled for those inconspicuous pollen bombs lurking amongst the weeds. Catch them early and you'll save on tissues!

BFEC, BABY TO ACQUAINT

Shortly after a staff meeting rescheduled for the due date by Heather herself, our Programs Manager took an "am I in labor" stroll and ushered in the newest member of the BFEC family.

The email read "Heather and Matt are new parents as of 4:45 am this morning...little girl yet to be named". *You got caught slacking on the 'it's going to be a boy' bandwagon*, I thought, knowing darn well that nine months was more than enough time for our master planner to select a name for either likely outcome. Then the gravity of the situation hit me: Heather wasn't coming to work that week. Or the next one. Or the one after that. And Jill and I were alone. And the newsletter was due. And I don't know how to answer line three. After some hyperventilating and nervous shaking , Jill reminded me that we had actually been provided with considerable time to plan these three Heatherless weeks and that I should stop crying and come out from under the utility sink.. She was right; we had planned . But some things need to be experienced to be appreciated. Or named. Heather and Matt got Lucinda, we got Missing Heather. Having been without , we'll all appreciate having her back that much more– especially since she's bringing company.

Heather welcomes Lucinda,

Calendar of Events

All events start from the BFEC Resource Center at 9781 Laymon Road unless stated otherwise.
Please contact 740-427-5050 or kerkhoffj@kenyon.edu for additional information.

Wolf Run Exploration – Thursday, July 16th, 6:30pm

Cool your heals in the clear water and shade of Wolf Run with Kenyon Professor of Biology Siobhan Fennessy. Discover the diverse life of small streams with seine nets, and learn how creeks are vital to the health of the larger rivers they feed (in this case, the Kokosing River). All ages welcome! Please wear water shoes or old sneakers for walking in water. Participants will meet at the resource center and then drive to the Route 229 access to the BFEC preserve.

Nature's Keepers Summer Camp – August 5-8th

Calling all kids who have just finished 3rd, 4th, and 5th grades! You're invited to attend the Brown Family Environmental Center's day camp, this year featuring the theme "Here Comes the Sun." Campers will explore the BFEC's 400 acre preserve while learning how the sun's rhythms affect us and the life around us, investigating topics from solar energy to how the sun fuels Ohio ecosystems. Call 427-5050 for registration information - deadline July 17th.

Dog Days Trail Running Festival – Saturday, Aug. 8th

If you like to run, anyone in your family likes to run, or you just need to tire out the kids, this is for you! The BFEC and KenyonFit have a whole series of races designed to challenge everyone from the most hyperactive toddler to accomplished runners.

Wildlife Garden Tour – Sunday, August 16th, 6:00pm

The center's Wildlife Garden has been designed for both beauty and habitat for a variety of wildlife. Tour the Garden to view butterflies, native bees, birds, and frogs, and learn about the colorful plants and other features that attract wildlife and how you might incorporate them into your landscaping. Free Ohio DNR Butterfly Guides while supplies last!

Pollinators - Part of our Natural Capital – Saturday, September 5th, 1:00pm. Walk BFEC gardens and trails with Kenyon's Jordan Professor of Biology Ray Heithaus to learn about honeybees and beyond and how they provide the valuable service of keeping us in food and flowers.

Lecture: Environmental Photography — Wednesday, October 7th, 7:30pm, Higley Hall Auditorium Edward Morris and Susannah Sayler of The Canary Project will give an image lecture on their work photographing landscapes around the world that are acutely affected by global warming. The Canary Project produces visual media, events and artwork that build public understanding of human-induced climate change and energize commitment to solutions.

11th Annual Photography Contest - "*Our Environment: People and Nature*"

All community members are invited to take part in the BFEC's annual photography contest, this year featuring the theme "*Our Environment: People and Nature*." When we take the time to look, photographs of the natural world can remind us of both the beauty to be found and the challenges we face. Photographs are due by October 13th. Prizes will be awarded in Children's and Adult Divisions. A reception will be help at the BFEC Harvest Festival on Saturday, October 17th. Please contact the BFEC for contest rules, and stay tuned for information about a visiting environmental photographer in September!

Harvest Festival - October 17th

This free event featuring a host of activities for the whole family, including pumpkin decorating, horse-drawn wagon rides, live music, kid's crafts and environmental education, cider press, races, games, local food concessions, bonfire, nature hike and the BFEC's annual community photo contest show.

Laura: The first time I saw the pond in the morning, I was surprised that the lily-pad flowers had closed up for the night, and had not yet opened. Lesson one – apply common knowledge about flowers to those in front of you. The solitary fish is a rather elusive character, whilst the little tadpoles constantly nuzzle up as close as they possibly can to the edge of the pond, as if trying to climb out without quite grasping the fact that they do not yet have legs (maybe they are afraid of the deeper water?). I have seen frogs in that pond too, and once, a woman and her little girl told me they had sat on the chairs and watched one of the frogs as it "spoke to them". Frogs, tadpoles, microorganisms, plant matter, charming lilies, solar aeration pumps, and the fish - a tight little community.

My toughest experience with weeding comes from that pond's bed too. The day we cleared the mound of all the heinous weedery and invasive grasses, was one of sweat, dry dirt dust in eyes, sore backs, and a scream-worthy final product (Jill's scream, not mine - this was one of her babies). The weedery had been so intense, and the soil so rock hard, that the topsoil was a nasty pebbly mess afterwards, and required trip after trip of wheelbarrow-to-compost-to-bed-to-compost-to-bed (ad nauseum) to make it habitable for the native grasses that we intended to plant there. Once we had finished, we put in the new grass (grass out, grass in) and stood back to admire our handiwork.

I didn't get to use a mattock to remove any tree roots like I had in one of the other beds, which had made me feel Herculean and ox-like, but it was satisfyingly difficult nevertheless. And I still hollered on occasion - my power holler - because sometimes the sheer production of sound gives that final burst of energy necessary to tug out that clump of goldenrod, dock, or poison hemlock. Jill dislodged a pipe that temporarily killed the waterfall, and I will have nightmares about goldenrod for years, but it was a beautiful day, and the fish didn't mind our presence one bit.

James: ....they don't mention when they interview you for the student gardener position: sore back, hands the texture of tree bark, and the inescapable itch of chigger bites. Naturally, getting back to sleep, as much as you want to, is difficult.

But once you're in the garden, you begin the cycle: weeding, planting, seeding, edging, thinning, transplanting. You do it again and again, until the week is done and your hours logged. That's the process. Along the way, you'll ache and moan and find ample evidence to suggest that your lanky body is oversized for the tasks at hand; that the gardens were not designed for you and your kind.

But eventually you will realize there is more to your job than process. There's prayer as well. And you're doing it most of the time, even when you don't realize it. Because by prayer I mean what happens when you are challenged to look outside of yourself and are struck speechless by what you see—and speechlessness happens often in these gardens. You step out, you go to work, you get your hands dirty. Doing so requires courage, I've learned. It takes a bold imagination to dig your hands into the soil and make something happen. Because whether you succeed or fail—and I've done my share of both by now—the result emerges right in front of you. So it goes: prayer in a one-acre chapel of throwing down, pulling out, and laying rocks along the edge.

It's easy to keep reminded of these things. Anytime you're slacking, just glance out the farmhouse window. Consider the way the light holds the prairie around dusk, as the fireflies begin to float. Look skyward in the minutes before a thunderstorm, and you will find yourself aware of what a figurine experiences inside a snow globe—you're so close to the storm, you could touch it. Thunder clacks, draws away. And you feel that you're just a trespasser on someone else's property, someone's vast, incalculable land. Even if you don't believe it. You still feel it... Then you get back to work.

Thank You to...

Our Members...

New Members:

Patrons: Robert & Jeanette Burns, Evelyn Newell, Florence Short **Friends:** Charles & Linda Findlay, Susan & David Hall, Rita & Richard Kipp, Mark & Denise Ramser, Rebecca Reimbold & Bryon Thomas **Families:** Jean Cline, Cinda Davis, Eric & Judy Holdener, Charles & Patricia Leech, Jessie Lord, Dean Sheldon, Jr., Janice Smith, Linda & Peter Smith, Harlow & Carole Walker **Individuals:** Kathleen Carpenter **Donors:** Judith Fisher, David Heithaus, Mesa Ulman

Our Donors...

Adopt-A-Bench Sponsors
Charlotte & Ted Thomas
Rebecca Metcalf
Maureen Tobin & Douglas Downey
Pat & Ray Heithaus
Bob & Buffy Hallinan
Sarah Gill-Williams
Bev Actis, *for her donation of books*

Our Volunteers...

In the office, classroom, gardens and on the trails: Jane Crosby, Tim Shutt, Chris Gillin, Buffy Hallinan, Drew, Willa & Harper Kerkhof, Ray and Patricia Heithaus, Joyce Klein
Bluebird Monitors: Keith Kitchen, Jan Ellis, Sarah Goslee-Reed, Susie Fish

Field Trip Volunteers
Thank you to the nearly 50 Kenyon students and community volunteers who volunteered to lead over 400 elementary school children on field trips this spring.

Earth Day Health Expo & Earth Day Challenge Marathon: Our sincere thanks to the many individuals whose contribution was invaluable, they include: Mt. Vernon High School Environmental Club, Theta Delta Phi , Mt. Vernon Amateur Radio Club, Archon Society, Kenyon Football, and many, many more.

THE BROWN FAMILY ENVIRONMENTAL CENTER *at Kenyon College*

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

Our Mission

The Brown Family Environmental Center at Kenyon College is dedicated to research, environmental education, and the preservation of the natural habitats and cultural heritage of the Kokosing River Valley.

Co - Executive Directors

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

Facility Manager	*Program Manager*	*Facility & Program Assistant*
David Heithaus	Heather Doherty	Jill Kerkhoff

Upcoming Events

See page 6 for more information

July 16: Wolf Run Exploration
August 8: Dog Days Trail Running Festival
August 16: Wildlife Garden Tour
September 5: Pollinators: Part of Our Natural Capital

DATE MAILED: July, 2009
CONTAINS DATED MATERIAL

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