

THE ACRES

QUARTERLY

PRESERVING NATURAL AREAS
IN NORTHEAST INDIANA



LAKES Country Summerfest
Birdathon
New Nature Preserve
Ruth Kern Woodland Preserve
ACRES Along the Wabash
Volunteer Naturalists
Garlic Mustard
ACRES Archive

Summer 2007
Volume 46 - No. 3



LAKES COUNTRY SUMMERFEST

AUGUST 4TH 2007, 5 - 9 P.M.

SATEK WINERY
FREMONT

Join Northern Indiana *LAKES* Magazine in celebrating summer in *LAKES* Country and their one year anniversary. This inaugural event is being held in cooperation with ACRES Land Trust and Satek Winery and will feature:

- Live musical entertainment
- Select wine tasting & sales
- Food concessions
- Off-site parking & shuttles provided
- Silent auction benefiting ACRES Land Trust



Satek Winery



NORTHERN INDIANA
LAKES
MAGAZINE

For event information visit: NILakes.com or acreslandtrust.org
If you would like to volunteer for this event call ACRES at (260) 637-ACRE

118 SPECIES AT 2007 BIRDATHON

by Fred Wooley, Pokagon State Park Interpreter



Yellow throated vireo by Mike Hopiak

While it was not a record day for the Avocets Team, we did beat last year's total by one bird! Any day you can observe and record over 100 species of birds is a great day birding! Any day you can have that fun, plus raise money for a very worthwhile cause, is a great day period! For the 10th consecutive year, the ACRES Avocets Team participated in the 19th Annual Team Birdathon in Southwest Michigan on May 19, 2007, and we recorded 118 species of birds.

This year's birdathon attracted nearly 90 birders on 22 different teams, representing various conservation organizations. The record for the day was 152 species recorded by a top-flight team of birders. All 22 teams' results were combined, so a grand total of 184 species were observed. Every team got some unusual birds and missed some common ones. It is amazing that one team can see so many different kinds (152) over the 19 possible hours of birding, but still, 32 species were out there that they did not see!

Our team of Michael Klingerman, Brad Bumgardner, and Fred Wooley made our first stop in an area of forests, old fields, and farm ponds at 3:05 a.m. We were hoping for owls, woodcock, and maybe an early turkey. Instead we were greeted by the calls of spring frogs. As nice as they sounded, we were on the hunt for birds. We sped off for downtown Niles, Michigan and pulled up to the brightly lit, but deadly quiet U.S. Post Office. Normally it was an unlikely place to bird watch, but we had heard that our hopeful quarry was a nester on that rooftop. Sure enough, at 3:44 a.m., we got our first bird when through rolled down windows, we heard the characteristic, nasal "BEEZzh!"

"Nighthawk!" someone said. We were off and running.

By midday, we were in the quiet, birding doldrums, as most birds are settled down during the heat. We stopped at a small borrow-pit wetland near the highway and got four new species and the jolt we needed. The jolt was an absolutely beautiful black-necked stilt!

We went the whole day without a redheaded or hairy woodpecker. We tried valiantly for both at day's end and upon reaching the finish line at 6:45 p.m., picked up the hairy woodpecker at the bird feeders of the Love Creek Nature Center.

For those of you who pledged, thank you so much, and I hope we saw your favorite bird! The total estimate for all 22 teams at Team Birdathon 2007 was nearly \$38,000. Once the ACRES Avocet pledges are all in, we should be at a total of \$1,770.78!

You should have received by now, a card indicating our success and reminding you of your pledge. Again, we thank you for your support as we raise funds for the operation and maintenance of our beloved Wing Haven Nature Preserve in Steuben County.

Until next year, good birding and outdoor adventures to you all!

Pledges

Cover Shot by Shane Perfect

\$1.50/bird

Ked Ballinger

\$1.00/bird

John and Marcella Ellenwood
Leroy Johnson
William Lee
Robin Lemberger
Richard McNett
John Rullo
in memory of Nancy Rullo

Other Pledges

Warren and Barbara Barnes
Michael Bultinck
Brad Bumgardner
Bob Cablk
Robert and Marilyn Chambers
Evangeline B. Claphan
Willard and Nena Clark
Marilyn Creason
James Crouse
Jack and Anita Dierka

Art Eberhardt
Fred and Mary Anna Feitler
David and Heidi Finley
Delles Gerig
Marvin and Kate Hall
Frannie Headings
Ted and Pat Heemstra
Jerry Krick
Donna Lesh
Margien Lund
Charlotte Lund

David Lupke
Don Lutz
Pat MacWhorter
Mary McCormack
Dave and Holly Meyers
Sandra McNeil
Angie O'Neill
John and Linda Mowry
Ed and Cynthia Powers
Bill Regadanz
Jack and Carole Reynolds

Joel and Susan Scharter
Jim and Linda Seney
Stephen and Paulette Shambaugh
Phillip R. Smith
Nancy Vendrely
Frances E. Wilder
Fred Wooley
Peg Zeis
Kathy Zimmerman

New Nature Preserve



By Jason Kissel
ACRES Executive Director

ACRES' new nature preserve in Wabash County was acquired at auction in February of 2007. It is a magnificent property with great aesthetic appeal provided by mature forest and the numerous falls and runs of the Ross Run stream. If you can divert your attention from the obvious beauty of the gorge and its waterfalls, you will begin to discover other equally amazing features within the property. Ancient reef fossils, exposed bedrock, 75'

vertical cliffs, 57" diameter oak trees, a diverse understory, and spring wildflowers are some of the highlights.

Going into the auction, we had no funding sources committed to acquiring this property. Board members, staff, and others who visited the property prior to the auction all came to the same conclusion: the property was of such high natural value that ACRES simply must acquire it – we would worry about paying for it later. Since the auction, our excitement and interest in this property has been shared by several funding sources, including the Hathaway family.

The Hathaway family provided a generous gift toward this property in honor of the life of H. Russell Hathaway, M.D., who was born in St. Joe, Indiana, in 1902. His rural upbringing in St. Joe was spent on the St. Joe River and the open fields surrounding it, creating an abiding appreciation for the natural world.

It was through his eyes that his children learned to love the land. Today, his children live in Florida, Ohio and South Carolina, and some relatives still live in northeastern Indiana.

Dr. Hathaway was a traditional family physician, making house calls and administering compassion as well as medicine. He who died in 1975 after practicing in Lakewood, Ohio, for 50 years. His oldest son, H.R. Hathaway Jr, M.D., and members of the extended family carry the torch of medicine he kept so brightly lit.

The Hathaway family was compelled to contribute to this property in part due to its rich geological features. Excerpts from a report on the property prepared by Tony Fleming, a certified professional geologist, are included below:

"Ross Run is a tributary of the Wabash River located in eastern Wabash County. The recent

incision of local tributaries has been impeded by resistant rocks, producing striking, gorge-like ravines and valleys walled by steep bluffs of bedrock as high as 75 feet tall.

Additional scenic interest is provided by numerous small tributary ravines and abandoned oxbows, which have commonly cut small, box-like canyons along the edge of the gorge. At some places, small to medium-size cave-like alcoves and recesses are developed in the retreating faces below overhangs, and in at least one place, the juxtaposition of cherty and limestone-rich zones has produced a set of pillars that rivals those at the Seven Pillars Nature Preserve along the Mississinewa River.

The stream channel is continuously bedrock-floored through nearly all of the ravine, which results in a wide variety of bed forms, including small cascades and flumes, deep, clear pools, and a robust 10-foot waterfall about midway down the gorge.

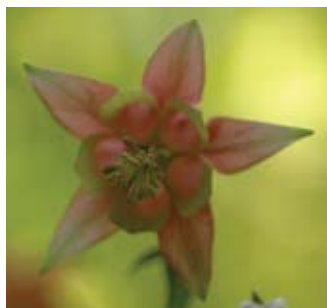
The combinations of substrate, aspect, exposure, and moisture availability are endless and result in a range of microhabitats that likely span the geochemical spectrum from very basic

(limestone) to extremely acidic (chert). Given this unusually wide range of habitats in such a concentrated area, it would not be unexpected to find a correspondingly great degree of biodiversity.

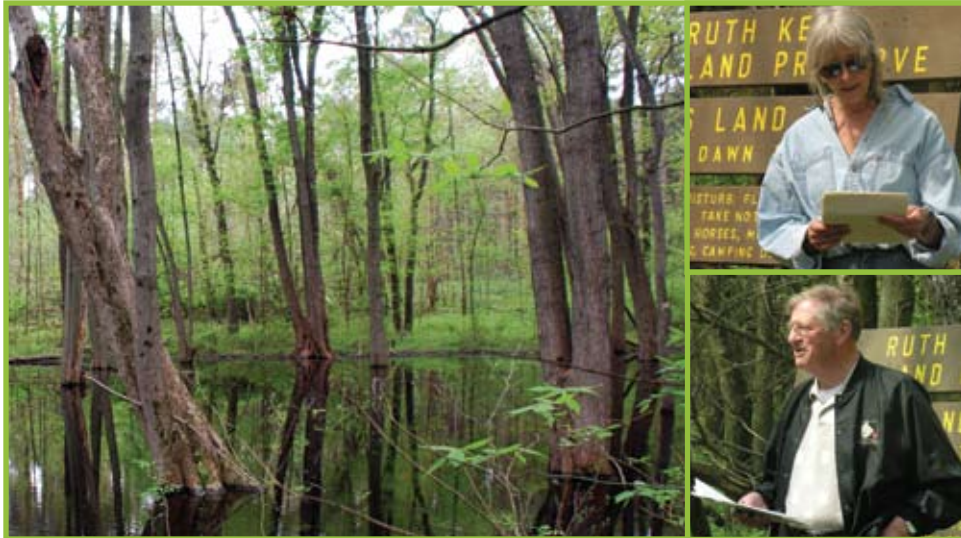
The Ross Run gorge is totally unique in my experience. The gorge is an unusual and valuable geologic locality in and of itself. There are few, if any, natural areas with so much bedrock exposure and topographic relief in the northern half of the state. It is certainly one of the most scenic places I know of in the region, and one of great personal scientific interest. In short, the gorge is an impressive natural feature that appears to be of uncommonly high value, geologically, ecologically, and aesthetically."

This preserve is yet another gem in ACRES' inventory of 61 nature preserves – take a trip to Wabash County and see for yourself why everyone is so excited about this natural masterpiece. This property will be open to the public on July 1st, 2007, with the grand opening event (and unveiling of the property's name) being held on September 16th – check events page for details.

All Photos by Shane Perfect



ruthkernwoodlandpreserve celebration



Wetland by Lloyd King

Gretchen Coplen and Harold Taylor by Rachel Sherman

There were over 75 visitors at the celebration of the Ruth Kern Woodland Preserve on May 5th, 2007. Representatives from the IDNR, county parks department, and the land donors themselves, Noel and Patricia Holmgren, Shirley Needham, and Bill Kern were in attendance. After avoiding early morning rain clouds, the celebration started with an introduction from Jason Kissel, ACRES' Executive Director, followed by heartfelt speeches. Harold Taylor

ended his recollection of memories with a song he used to sing as a boy scout visiting from Chicago. Ernie Hiatt, Chairman of the Fulton County Park and Recreation Board and longtime resident, followed with memories of his own. Then Gretchen Coplen, a friend of Ruth Kern, shared sentiments and lifetime lessons learned from Ruth. Patricia Kern-Holmgren followed things up with a short and heartfelt thank you to all.



THIS PRESERVE
OPENS TO THE
PUBLIC JULY 4TH!

Mark Your Calendar

ACRES 3rd Annual
winetasting
nature **photography** invitational

Saturday, October 6 5-8 p.m.



Portage students visit the ACRES ALONG THE WABASH

Featured here is a follow-up letter to an ACRES guided hike.

Thanks so much to Ethel and Dave for guiding our tour through the Acres Along the Wabash Nature Preserve on May 8th, 2007. [Ethel McClelland and David Homan are ACRES staff.] Just being in the woods was a wonderful experience for some of our thirty 7th grade students from Portage Middle School, Fort Wayne. Our goal was to allow the students a chance to see and experience the Wabash River. It played such an important role in this area in the early settling days and still does today. The students learned that ACRES' goal is to restore those natural areas and preserve them for generations to come. We walked in newly reforested

acres that will help protect the river from chemical run-off, hiked the 2-mile trail, and saw firsthand many beautiful wildflowers and trees that Ethel and Dave identified for us. The students enjoyed the outing so much that the first group of students waited in the woods rather than at the bus for the second group to finish up.

The ACRES Land Trust organization does wonderful things, and we are thrilled to have had the experience of seeing firsthand the preservation they are doing. We were so pleased with the information we got and the ACRES organization that the Portage 7th grade class has decided to become members of the organization.

Sincerely,
Sandy Kennedy, Sue Pape, and
the Portage 7th grade students
Class of 2007

Shortly after receipt of this letter, the Portage Middle School 7th graders sent in their organization level membership along with a \$37.82 donation for the Dustin house bird feeders and food. Thank you!



Portage Students

fieldtrips & SPECIAL EVENTS

For information on all programs, contact: ACRES office at (260) 637-2273 or visit acreslandtrust.org

BREAKFAST WITH THE BIRDS

1st Thursday of each month: (Aug 2nd, Sept 6th, Oct 4th)

Presented by: Ethel McClelland and David Homan, Wildwood Nature Preserve caretakers, and ACRES staff

Join Ethel and David for breakfast while enjoying the amazing view from Wildwood's picture window. A hike will be offered both in the morning and evening (for those who either have to work, or cannot break away from bed). Breakfast at 8 a.m., hike at 8:30 a.m. AND 7 p.m.

Where: Wildwood Nature Preserve, Kosciusko County. About 3 miles east of Silver Lake on State Rd. 14. Entrance is on south side of road. 1/4 mile east of County Farm Rd.



Brown thrasher by Mike Hopiak

BIRD WATCHING AT CONRAD GETZ'S BIRD SANCTUARY

Saturday, July 21st 10 a.m.

Presented by: Conrad Getz, bird enthusiast

Visit Conrad's bird sanctuary and learn how to increase the number and variety of birds visiting your backyard. Watch his video filmed onsite and learn the calls of birds such as bluejays, orioles, and indigo buntings. Conrad has a viewing window with over 17 feeders at his home in Allen County.

Where: 14002 Schwartz Rd. Leo. From Ft. Wayne, take Dupont Rd. (SR 1) to Leo. Turn right at the 4-way stop on Hosler Rd. Take the first right, Schwartz Rd. The Getz sanctuary at 14002 is the 3rd driveway on your left. **This tour has a 15 person limit!**

RSVP to ACRES at (260) 637-2273



White crowned sparrow by Paul McAfee

6TH ANNUAL WING HAVEN CANOE TRIP AND STEUBEN COUNTY LAKES COUNCIL LAND TRUST COOKOUT

Saturday, July 28th 2 p.m.

Presented by: ACRES and SCLCLT

Join us for the 6th annual Wing Haven Canoe Trip, our 2nd year partnering with SCLCLT. This year we will be throwing a party! Join us for a relaxing afternoon on the Seven Sisters Lakes followed by a bonfire and cookout. All paddling levels welcome. Free lessons available one hour prior to event. Canoe rental available; contact Tom Hazelette prior to this event at (260) 486-6484.

Where: Steuben County

To help us get a head count, **Contact ACRES** at (260) 637-2273 for reservations and directions.



Canoeing by Gary Darnell

LAKES COUNTRY SUMMERFEST

Saturday, August 4th 5 – 9 p.m.

Presented by: ACRES, Northern Indiana LAKES magazine, and Satek Winery

Join us to celebrate and benefit "LAKES Country." Concert selection includes folk, jazz, and bluegrass, to name a few. Satek Winery will provide a free wine tasting with an option to purchase and a silent auction will benefit ACRES. Come out and support your "LAKES Country!"

Where: Fremont, visit NILakes.com or acreslandtrust.org for more details.



WING HAVEN OPEN HOUSES

First Sunday of each month

Aug 5th, Sept 2nd, Oct 7th 1-5 p.m.

Feel like a hike? Before donating it in her will, Helen Swenson spent much of her creative time in Wing Haven's art studio. Stop in and see what inspired her wonderful talent by touring the studio and its surroundings.

Where: Wing Haven Nature Preserve, Steuben County. From Ft. Wayne, take I-69 north to exit 154 (SR 127/Pokagon). Immediately turn right (south) onto SR 127, and then turn left (east) onto 400N. For parking closest to the studio, follow the second sign on the right.

Helen Swenson

fieldtrips & SPECIAL EVENTS

For information on all programs, contact: ACRES office at (260) 637-2273 or visit acreslandtrust.org

VOLUNTEER APPRECIATION PARTY!

Saturday, August 18th 5 p.m.

Presented by: ACRES

We plan to celebrate and thank all of our volunteers. ACRES could not operate without your generous help at preserves, program events, and the office. If you have gone above and beyond for ACRES in the last few years, we would love to celebrate with you at a catered dinner compliments of the ACRES staff and Board.

Contact the ACRES office to RSVP!



Dr. Hick's volunteer wildflower hike

Where: ACRES office/Dustin Nature Preserve, Allen County. From Ft. Wayne, travel north on I-69 to exit 116. Turn left (west) onto Dupont Rd., right onto Coldwater Rd, then right onto Chapman Rd. After 3/4-miles, look on the right for the "ACRES Land Trust Office" sign.

LEAVE NO TRACE

Saturday, August 25th 10 a.m.

Presented by: Bill Houk, Leave No Trace Master Educator

Calling all backpackers, campers, and nature enthusiasts! If you find yourself exploring the natural world, you ought to possess the knowledge needed to "leave no trace." Bill's Leave No Trace Awareness workshops typically last one to two hours and present the Seven Principles of Leave No Trace using videos, skits, games, and experiential methods.

Where: Wildwood Nature Preserve, Kosciusko County. About 3 miles east of Silver Lake on State Rd. 14. Entrance is on south side of road. 1/4 mile east of County Farm Rd.

BOX TURTLES

Saturday, September 8th 10 a.m.

Presented by: Scott Beam, Naturalist at Maplewood Nature Center.

Box turtles are odd, at least in comparison to other turtles. Their habitat is different. Their shells are different. Their diet is different. All of these differences not only make them distinctive in the reptile world, they also have recently given them a protected status in Indiana.

Where: Maplewood Nature Center, LaGrange County. From Ft. Wayne, drive north on I-69 to exit 148 (US 20/Angola). Turn left (west) onto US 20. Go 15 miles, turn left (south) onto 525E, then right (west) onto 100S. Look for the Maplewood Nature Center entrance on your left.



Box turtle by Jason Kissel

GRAND OPENING OF NEW WABASH COUNTY PRESERVE

Sunday, September 16th 2 p.m. – 5 p.m.

Presented by: ACRES

Purchased at an auction in February, this preserve is another recent acquisition. Attend the grand opening celebration while recognizing all who contributed. Geologist Tony Fleming will guide you through the preserve and point out the many ravines

and bluffs which make this 72-acre preserve geologically significant and worthy of preserve status.

Where: Wabash County. From Ft. Wayne, take U.S. 24 west to Lagro. Turn left (south) onto Lagro Rd., go through Lagro then right (west) onto Baumbauer Rd. Parking lot will be on your right in 2 miles.

WILD WALKERS

Presented by: Fort Wayne Parks and Recreation

July 27th Indiana Purdue/Allen County Extension Tree Walk	8:00-10:00 a.m.
Aug. 10th Detering Nature Preserve, Noble County*	8:30-10:30 a.m.
Aug. 24th Lindenwood Nature Preserve, Allen County	8:00-10:00 a.m.
Sept. 14th Merry Lea, Noble County*	9:00-11:00 a.m.
Sept. 28th Little Cedar Creek Wildlife Sanctuary, Allen County	8:30-10:30 a.m.

*Carpooling from Salomon Farm parking lot, 817 W. Dupont Rd. Fort Wayne

This group will ensure a great hike. Every 2nd and 4th Friday of the month get your physical, mental, and social exercise.

Contact Renee Baines for additional information at (260) 427-6005



Wild Walkers by Phil Bloom

Volunteer NATURALISTS



Bob Weber by Art Eberhardt



Tony Fleming by Rachel Sherman



Beechwood volunteers by Marion Eberhardt

While reading a new book, *Last Child in the Woods* by journalist Richard Louv (Algonquin Press), I was surprised to learn that many children grow up with what he calls "nature-deficit disorder," a term that has stimulated enormous controversy and discussions about environmental education.

I remember many hikes with ACRES naturalists: Tony Fleming, Bob Weber, Helen Skelton, Dr. Larry Yoder, and Pat Bolman.

Bob Weber told us about what had happened to him while sitting quietly on the ground, back to a tree trunk. He inspired us to sit quietly, too, hoping that chipmunks or squirrels would come up and walk over our legs.

Tony Fleming led small groups to learn about different types of wetlands. One wetland on the south side of the Bicentennial Woods is vital to the recharge of our underground water supply for wells, where groundwater is held in an aquifer. Nearby, the mature hardwood forest in the Cedar Creek floodplain slows spring and fall floodwaters, holding it for weeks and letting sediments fall out in a pattern like currents that had stopped in parallel.

Over a generation ago, ACRES leaders arranged winter programs for members who brought a handful of slides to share by the fireplace at Concordia Theological Seminary. Saturday hikes were led by volunteer naturalists to trails in the preserves where we would probably not have gone ourselves.

Helen Skelton pointed out the silhouette and graceful curve of a great blue heron's neck as it flew back towards its rookery. She showed me a tiny hummingbird's nest just outside the front window of her private library at her home east of Fremont. She drove us to the Pigeon River east of Angola to the state Fish & Game area to view the migrating Canada geese from a raised platform at the edge of the refuge lands in the heart of the wildlife area. The geese knew that the refuge was there, since they came in at a high altitude and flew lower only when they reached the protected area. Helen had a wonderful personal library of natural history books, eventually donated to the Angola Public Library.

Pat Bolman and Dr. Larry Yoder led ACRES members on a hike at the Yoder farm in Allen County in early March one year. Jane Dustin said, "Listen," so we could hear the whistle blow at the sugar camp. We walked back down the lane with our little children in such deep mud that their boots came off.

by Karen Griggs, A technical writer who lives near Ashley, Indiana

Larry's students camped while they learned how to make maple syrup at the sugar camp in the maple tree forest, boiling their hot dogs in one batch of sap for a wonderful flavor. Pat and Larry led about 20 hikers to a big tree, Pat carrying an auger and a spile, and Larry with a bucket. Pat stopped and began to demonstrate how to tap a tree.

"Halt!" Larry shouted. "That's an elm tree." What a joke on all of us. They had planned the skit to give us some dramatic comedy.

Later on in the year, Pat took a group to the Ropchan Memorial Nature Preserve. A small glacial lake and carnivorous plants gave us all a wonderful experience. Following Pat's lead, we went into a deep wetland where we would never have ventured alone. Pat really gave us courage. We took off our shoes, tied the laces together, rolled up our jeans, and waded in the warm water, fully expecting to see wildlife from scary movies. Instead, we learned how beautiful and delightful deep wading can be on a warm day.

A winter hike was held in deep snow along the Metea Trail through Cedar Canyon. Landowners had given special permission for the group to hike above Cedarville along Cedar Creek. It was so cold that we had a thermos of hot split pea soup to share with our U. S. Congressman, J. Edward Roush. He slipped on the trail, and we almost lost him!

If you have a memory of a special hike with one of our volunteer naturalists, give us a call at (260) 637-2273. We would like to celebrate their leadership as we teach a new generation of children about nature and nature preserves in northeastern Indiana.

WELCOME
new members!

Stephen and Simone Alberding
Michael and Angie Beauchamp
Fanni M. Birky
John Carsten
Patricia Cowger
Alois and Jacqueline Dauer
Joe Devine
Marilyn Fahey
Bianca Graber
Nick and Crystal Harter
Gift of Randy and Pat Harter
Allan Johnson
Roy N. Martin
Portage Middle School
7th Grade Class
Margaret Suarez
Kirk and Linda Swaidner
Harold Temple
Ralph and Sheri Trine
Gift of Sam and Jill Boggs
Doug and Mary Waldman
Bill Walsh



Thanks!

BRAD BUMGARDNER AND AL McSWEENEY
GPS collection for new preserve trail maps

MARY ANNA FEITLER
membership secretary

TONY FLEMING
for geology expertise

BRAD GREENLEE
map creation and GPS collection

RALPH THIELE
for coordination of emergency
tree removal at Foster Nature Preserve

SORRY TO SEE YOU GO
Jennifer Kleinrichert, Board of Directors and Land Management committee member, has accepted a job in Santa Fe, New Mexico as an Environmental Education Specialist at the Randall Davey Audubon Center. She was elected to the ACRES Board in 2005 and has been a valuable asset the past two years. Thank you, Jennifer, for your time with ACRES!

Weed Using “Chemical Warfare” to Poison Fungi, Harm Trees, Study Finds

Printed with permission of the University of Guelph



Garlic mustard by Shane Perfect

An invasive weed that grows abundantly in Canada and the United States is engaging in underground chemical warfare, jeopardizing native trees by poisoning their best allies, a University of Guelph professor has discovered.

The research by University of Guelph ecologist John Klironomos, along with Kristina Stinson of Harvard University and a team of other researchers from Guelph, the United States and Germany, was published in the May 2006 issue of the Public Library of Science.

The scientists found that the weed garlic mustard (*Alliaria petiolata*) releases chemicals under the soil that are detrimental to the fungi that native trees depend on for growth and survival.

Once garlic mustard produces these compounds and has invaded an area, even removing the weed doesn't help much. "The compound is still in the soil, and it's hard to plant any native plants in the area and have them establish properly," Klironomos said.

It's the first study to show that invasive plants are hurting indigenous species by thwarting the ecological relationship between roots and certain fungi.

"This noxious weed is disrupting an intimate symbiosis between native species and fungi that has been going on for millions of years," he said.

Garlic mustard targets and poisons arbuscular mycorrhizal fungi, the main fungal allies

of native trees like maple, ash and other hardwoods. The fungi have long microscopic threads that create a subterranean network, allowing for the exchange of nutrients with indigenous trees. The fungi rely on the trees for energy, and the trees rely on the fungi for food. "Forest plants are very dependent on these mutually beneficial relationships," he said.

The researchers conducted tests numerous times to mimic different conditions in the wild: established forests, open fields, roadways, and ditches. Each time, the finding was the same: growth was stunted due to the diminished microbial activity caused by the presence of garlic mustard. "This is affecting current and future generations of trees and changing the habitat," Klironomos said.

Mature forest systems are normally resistant to invasive weeds, largely because of the strength of fungi-tree relationships, he said. Fungi are so efficient at extracting nutrients from the soil that weeds like garlic mustard, which don't form symbiotic partnerships with fungi, typically don't stand a chance.

Garlic mustard's guerrilla tactics have allowed it to get a foothold in some well-established forests. "There are entire carpets of this weed in some places," Klironomos said. "It has found a way to survive by knocking out the competition."

The researchers next plan to determine what chemicals in garlic mustard are killing the fungi, how these chemicals interact with

other soil microbes, and how plants and fungi co-exist with the noxious species in its native European habitat.

Klironomos, holds a prestigious Canada Research Chair in soil biology and was one of six Canadian scientists to receive a 2006 Steacie fellowship from the Natural Sciences and Engineering Research Council (NSERC), which allows him to focus full-time on research for two years. He has also received an Ontario Premier's Research Excellence Award and other NSERC discovery and strategic grants, which helped support this research.

ACRES strives to prevent the spread of garlic mustard by removal of plants by staff and volunteers. Join us on work days to help minimize the impact of this invasive species.

heritagetrustlicenseplate

If you drive a car, you can help protect woods, wetlands, and wildlife in Indiana. Buy an environmental license plate! Your donation of \$25 will go directly to land protection, and all 27 of Indiana's land trusts will benefit. Your plate purchase sends a message to our state legislators that we support the protection of natural areas. ACRES would like to recognize and support The Indiana Heritage Trust License Plate as it celebrates 15 years. The one-millionth "Eagle and Sun Plate" will be sold mid-way through 2007. Since the program began, more than 50,000 acres of land have been purchased and protected as part of 300 projects in 62 Indiana counties.

ACRES has benefited from license plate proceeds on 15 projects protecting over 1500 acres! Thanks to all who contribute by buying a Heritage Trust License Plate!



Memorials

MATTHEW BILLITTERI

From Stephen and Deborah Griebel

ROBERT GRIGGS

Land Acquisition and Management Fund
From James and Patricia Barrett

ALFRIEDA MACKEL

Land Acquisition and Management Fund
From James and Patricia Barrett

NELLIE MARKLEY

Acres Along the Wabash
From Kathleen Fuller

MATTHEW "MATT" ROY MORGAN

Land Acquisition and Management Fund
From Joanne A. Weber

EARL MORRIS

Tom and Jane Dustin Nature Preserve
From Phil and Phyllis Kaiser

H. RICHARD OLSEN

Land Acquisition and Management Fund
From the Fort Wayne Photographers Club

Tribute

IN HONOR OF SARAH VETTER

Land Acquisition and Management Fund
*From James B. Coffey and
Georgian C. Johnson-Coffey*



ACRES' MISSION

Dedicated to preserving natural areas in Northeast Indiana, ACRES manages and protects 61 nature preserves in 14 counties.



1802 Chapman Rd.
Huntertown, IN 46748-9723
260-637-ACRE (2273)
email: acres@acreslandtrust.org

acreslandtrust.org



ACRES ARCHIVE ARTICLE

EARTHWORMS

By Mary Appelhof

SPRING 1979 VOL. XVIII, NO. 2



"It may be doubted whether there are many other animals which have played so important a part in the history of the world, as have these lowly creatures." Charles Darwin, 1881.

Did you know that. . . The animal decreed by Cleopatra to be sacred, to be revered and protected by all her subjects, was the earthworm?

Picture a small walled garden in Bayswater, England. On a calm evening, Mr. D. F. Simpson heard an extraordinary rustling noise under a tree from which many leaves had fallen. Mr. Simpson used a light to see what was causing the noise – many worms dragging and squeezing leaves into their burrows. So reported Darwin in his treatise on earthworms almost a century ago.

In his many observations of earthworms feeding, Darwin found that night crawlers always grasp leaves by the pointed end. As the worm draws the leaf into its burrow, the leaf rolls to form a plug, which the worm eats safely at its convenience.

Earthworms eat many kinds of organic materials, most of which are already rotting or decaying. In natural habitats, they have been observed to eat decaying organic material such as leaf litter, dead grass, rotting roots or plants, fruits which have fallen on the ground, and animal manure. Domesticated worms thrive on manures, sewage sludge, poultry mash, chopped hay, fish mash, canning factory refuse, walnut meal, apple pomace, grape pulp – the list gets longer every year. Recent experiments by Edward F. Neuhauser indicate that earthworms will gain weight when they are fed bacteria, protozoa (microscopic animals), microscopic algae, and tiny fungi. An interesting observation was

that worms gained more weight when fed living organisms than when fed dead organisms. There is still much to learn about earthworm diets.

Food and soil that an earthworm eats moves through its digestive tract. Food is stored in a thin-walled crop, from which it passes to a thick-walled gizzard. Muscular contractions of the gizzard help to grind up the food with the aid of sand and mineral particles in the soil. Most of the digestion and absorption of food materials occurs in the intestine where cellulose and other enzymes break down the food into a form the worm can use. Bacteria and protozoa living in the intestine also help to digest the food. Grains of sand, clay, and dirt are not digested but are mixed with the organic residue and thousands of the bacteria and other organisms in the worm's intestine. These black masses are expelled as worm castings and can be seen as small irregular globs on the surface of the soil. These castings are valuable for plants because they contain many times more nutrients than an equal portion of dirt.

nominatingcommittee

It will soon be time for the election of Board of Director members. Current ACRES members in good standing are eligible to nominate an individual for the Board of Directors. Contact the ACRES office, (260) 637-ACRE (2273) or acres@acreslandtrust.org, before October if you would like to make a nomination.

Dick Hurley, Janet Kelly, and Bill Smith are serving on the 2007 nominating committee.

ACRESprojects

Completed Projects

Thank you David Deimling, Bill Smith, and Jack Stark for repairing the bridge at Bicentennial Woods!

Current Projects

Lance and Jacob Lothamer and Dave and Holly Meyers are done with stage one of the bird feeders outside the Dustin house sunroom and plan to finish this summer.

Future Projects

Visit the ACRES website for projects in need! www.acreslandtrust.org



Dave Meyers, Jacob Lothamer, Holly Meyers, Lance Lothamer
by Ethel McClelland



Shane Perfect, Jack Stark, David Deimling, Bill Smith
by Bill Smith



Butterfly feeder by Shane Perfect

Butterfly Feeder and Food!

This is a fun project that's easy enough for the kids to do, and it can be as elegant or as simple as you like. All you need is a small jar, such as a baby food or small jelly jar with a lid, and some cotton.

1. Make a small hole in the lid of the jar.
2. Fill the jar with butterfly food. (One part sugar to nine parts water, no color needed.)
3. Screw the lid tightly onto the jar and poke a small piece of cotton into the hole.
4. Invert the jar and hang it in the garden.

That's all there is to it! Of course, you'll probably want to decorate your jar with paint or decoupage. Butterflies locate their food sources by sight, so the more your feeder looks like a plant or flower, the better your chances of attracting butterflies. It may also help to cut out some fabric or plastic "petals" and fasten them to the lid of your feeder.

Source: <http://www.seedsofknowledge.com/butterflies2.html>



ACRES Project Manager Shane Perfect and wife Holly Perfect welcomed a new baby boy, Colton John Wildhorse, into the world on June 1st. Congratulations!



ACRES stock photo

The Wabash river runs through the heart of Indiana, and it drains more than two-thirds of the 92 counties. From humble beginnings near Fort Recovery, Ohio, the Wabash flows through both the natural and human history of Indiana.

Long before recorded history, a deluge of glacial melt waters broke through an earthen dam near Fort Wayne. That dam had held back the ancient lake modern scientists call Lake Maumee. The path of the flood carved out the bed of the Wabash westward, then south toward the Mississippi.

Later, Native Americans used the same pathway as a portage to link the Great Lakes watershed with the watery road south to New Orleans. The early pioneers learned about this shortcut and eventually starting digging the canals system to take advantage of this important trade

route. The railroads and the Wabash Cannonball put an early end to the canals, though.

The Wabash flows through our natural history, too. The name Wabash is the anglicized version of the native name *Wah-Bah-Shik-Ki* or "shining river." Today, the Wabash River is known more for the brown color of run-off and erosion than anything remotely reminiscent of something that shines. Yet you can't step into the same river twice, and recent times have brought improvements. Important wetlands are being restored and act as buffers to the Wabash watershed. The reintroduction of the animated and wily river otter further adds to a sense of time gone by.

Numerous nature preserves dot the shores of our state river, creating low-impact recreation opportunities as well as recharge areas for many plants and animals. Most of the important tributaries are receiving the same renewed respect.

The Wabash River. It skirts the divide between the Great Lakes and Mississippi watersheds. Its presence reminds us of the ancient past. It was a magnet to the natives as well as to the pioneers, and to a large degree inspired and encouraged the western expansion of European settlement. The river was a highway for canoes and flatboats, although it lost its place to the railroad. But while the rails are in decline, the Wabash still flows and renews itself daily. The river may have lost many of its native animals, but eagles, ospreys, and river otters are being seen in greater and greater abundance. In all ways, the river is a symbol of Indiana and America.

The Wabash River. It flows through Indiana in more ways than one!

ACRES Land Trust
1802 Chapman Rd.
Huntersville, IN 46748

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