

THE ACRES QUARTERLY

Spring 2013 | Vol. 52 - No. 2



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ACRES
LANDTRUST

Letter from the Executive Director

Dear Friends,

Most days, I wear a shirt with an ACRES' logo on it. I drive a truck with a personalized license plate that says ACRES. I write articles and give interviews as an ACRES' spokesperson. Every day I represent ACRES in ways both blatant and obscure.

I pay close attention to my conduct and attitude while representing ACRES, including how I drive my vehicle that advertises ACRES, how I shop for groceries in an ACRES' shirt, etc. When I'm representing ACRES, I am always aware of the added responsibility.

Even though many people associate me with ACRES, many more people associate ACRES with someone else—like you. You are the ACRES' spokesperson to your friends, colleagues and family. Your ACRES' membership, the static sticker on your car, your ACRES' clothes, or this *Quarterly* on your coffee table identifies you with ACRES. Your friends don't call me to learn about ACRES. They ask you.

ACRES' new and ambitious strategic plan goals (acreslandtrust.org/plan) cannot be achieved without more ACRES' supporters. We will try to attract new supporters, but you personally have a greater ability to influence than we as an organization do. You as a collective group of ACRES' supporters can reach a huge number of people. Think about the number of people you associate with—that you could reach out to, then multiply that by all the other ACRES' members reaching out. You, and those like you, are ACRES' greatest spokespersons.

So I ask that, as an ACRES' spokesperson, you share some of the responsibility I feel. When someone asks about your ACRES' hat, seize the opportunity. Rather than "yeah, it's a good organization that preserves land," guide them into a conversation about why you are involved. No sales pitch needed—they already respect you and will respond to your enthusiasm. Your explanations of the value of ACRES are exactly the words they need to hear. No marketing firm could create a slogan to rival the sincere words you share with a friend. You have a unique and powerful ability to help ACRES.

Your reasons for supporting ACRES are compelling—please share them.

Sincerely,



Jason Kissel
jkissel@acreslandtrust.org



P.S. Stop by ACRES' website or office to get your ACRES' apparel or static stickers. Or, you diehard ACRES' supporters, keep in mind that your local tattoo shop would be happy to ink ACRES' logo on you so you'll always have a great ACRES' conversation starter available!

WELCOME

81new members!

Bob and Janet Barge
gift of Art Eberhardt
Matt Beer
gift of Stanley and Beth Beer
Jo Bennett
Bermes Family
gift of Tim Gerardot
Peg Boswell
gift of Art Eberhardt
Ralph Brinkman
Brady Bubb
Doug and Maureen Campbell
Don and Sally Clevenger
Don Collis
Roger and Sue Dammeier
Paul Demaree
Lesley Douglass
Brenda Drayer
Gary Dyarman
Jake Eberly
gift of Luther Eberly
Eric English
Jim and Linda Fraley
gift of Max and Janet Fraley
John and Cathy French
gift of Art Eberhardt
Michael Fromholt
Brady Garrison
from Paul Demaree
Melvin Gillespie
Joel Gramling
Richard and Pat Hardick
Daniel Hauser
Albert and Ruby Hochstedler Family
gift of Josephine Hochstedler
Pete and Janet Hunter
Troy Jordan
Rita Koontz
gift of Ruth Bracht
Steve and Anne Lawrence
Adam Loeffler
Paul Marques
Debra McClintock
gift of Larry and Janet McClintock
Mike and Debbie McConnell
gift of Mindy McConnell
Mindy McConnell
Heath McCreery
Kevin McKelvey
William Miles
Cory Miller
from Heath McCreery
Dave Mills
Shirley Moor
Phyllis Morrison
Sister Rita Musante, OLVM
from Helen Gallagher
Tracy Musser
gift of Art Eberhardt
Bill and Susan Nash
Daryl Novak

Betty Owens
Judie Panoch
Linda Parr
gift of Cliff Parr
Linda Peterson
John Peterson
Rod and Chris Pranger
Alan and Donna Resetar
Glenn and Becky Robinson
Kent and Debbie Roe
Dave, Teresa, Andrew and Emily Royer
gift of Mike and Nancy Smith
Merlin Schlabach
Bert Schulz
Elizabeth Selman
gift of Art Eberhardt
Kerry Sharpe
David and Beth Smith
Mike, Nancy, Eric and Brent Smith
Maurie and Leslie Sperry
Mark Stverak
Mitchell Van Zuilen
gift of Karen Griggs
Ryan and Michelle Voorhees
gift of Russell and Sandy Voorhees
David Walker
Barbara Webb-Smith
Wehrle Family
gift of Tim Gerardot
Devonn Werder
Rita Whitman
Barry Wiggins
Jonathan and Betsy Yankowiak
Barry and Candice Yeakle
John Yoder
Stan and Barb Yoder
gift of Art Eberhardt

new life members

Tim Gerardot
Edward Hobbs
Brandon Juergens
Donna Streeter
Robert Streeter



STILL NOT A MEMBER?
Scan this QR code with your smart phone to join today!

tributes

Sean Carroll
from Elizann Carroll
Jack Phipps
from Rick and Peg Schilb



Bob Weber by Jason Kissel

Bob Weber, one of ACRES' founders, died February 16, 2013, at the age of 89. Bob's love of nature was readily apparent. As a teacher, he spent 38 years instilling in his students respect for, knowledge of, and interest in the natural world. His personal life often revolved around his involvement with ACRES, The Fox Island Alliance, The Nature Conservancy, The Audubon Society and any other group that provided outdoor experiences.

What I appreciated most about Bob was his patience. He invested in things that got better over time—first edition and rare books, fine wine, his marriage of 54 years to Janet, his students, and of course nature preserves. When speaking about ACRES' management of the preserves, I often state that we have the "luxury of patience." As an organization we can manage our preserves for centuries, realizing we don't have to manage for results achievable within our lifetimes. Bob would eagerly forego today's reward for a greater one in the future, and he helped instill this patience within ACRES. I had the opportunity to know Bob for only the last seven years. On the next page are remembrances by some in the ACRES' family who have known him longer.

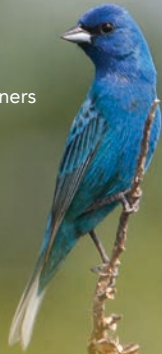
Bob's life left a wide wake of influence—knowledge and interest within his students, love and lessons learned within his family and friends, and an instilled respect for nature within all the people he encountered. The rewards of his patience endure: his photos will continue to inspire, the trails he installed continue to introduce people to the preserves, and the preserves will forever continue the mission that he and eleven other amazing people created.

memorials

Bob Weber

from Fred and Mary Anna Feitler, Beau Jones, Larry and Judy Esterline, Ted and Pat Heemstra, Kenneth and Mary Scroggum, Amy Beatty, Joseph and Marianne Deitche, Art Eberhardt, John and Marcella Ellenwood, Jacqueline Foelber, Karen Griggs, Robert and Melanie Hall, James and Dorothy Hilmert, Tom and Beverly Kneller, Paul and Marla McAfee, Dan and Angie O'Neill, Richard and Joyce Pacer, Randy and Carol Roberts, Richard and Carolyn Sage, Mary Stump, Norma Thiele, Fred, Jackie and Joseph Wooley, Ethyle Bloch, Janel Avery Rogers, Doug and Lenore Perry, Lee and Pat Casebere and Ken and Susan Till

Marian Hedrick
from Fort Wayne Gardeners
of America
Gerry Stratman
from Tim Gerardot
William Freking
from Kevin Leech and
Deborah Hoehn
Bob Frantz
from Barry and
Arlene Deardorff

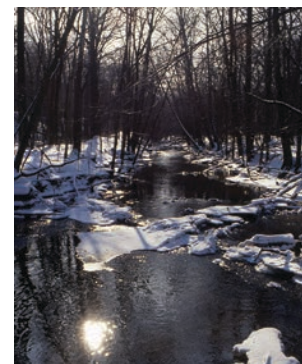


Indigo Bunting by Dave Fox



Ethyle Bloch (an ACRES' founder) – One of Bob's hobbies were his ongoing snapshots of plants, even weeds. One can remember him always lying down on the ground or propped up on an elbow to photograph an unusual plant or small creature. One picture I witnessed him taking was of a green frog in his vegetable garden. When I asked him how in the world he could take a good picture of such a wiggly critter, he told me his "secret." He put the frog in his wife's freezer for just a few seconds, then took that frog out and posed it for the picture. With his camera ready, he took a picture of the still frog, and then, moments later, the warmed frog jumped away. The frog was fine but probably never hopped near Bob's garden again!

John Ellenwood – I met Bob when I joined ACRES in 1965. I learned about trees, flowers and other plants in the forest by working beside Bob in the preserves. With the help of other board members, Bob laid out many of the trails in the early preserves. One memory still makes me smile whenever I think about it: Bob wanted the trails to be cleared to out-stretched arm length so the growth wouldn't rapidly close in and cover the trail. Jane Dustin, another ACRES' founder, wanted the trails just wide enough for a body. Well, they got along, and things worked out. I am fortunate to have known Bob as a teacher and a friend. I will miss him greatly.



Art Eberhardt – I remember Bob as a good friend who would rather be out in the woods hiking than most anywhere else. I was on the ACRES' Board for all the time Bob served as board president. His meetings were always meaningful and usually just plain fun. We met in board members' homes then, and it was a joy to meet in Bob and Janet's home (there was always a great dessert at the end). It was Bob Weber who got me involved with ACRES, and I shall always be grateful to him for his kindness.

Photos by Bob Weber



5,000th Acre Preserved!

by Jason Kissel, *photos by Shane Perfect*

ACRES Land Trust reached another milestone: preserving our 5,000th acre of land! With the acquisition of the 87-acre Blue Cast Springs Nature Preserve in northeast Allen County, ACRES increased its holdings from 4,959 to 5,046 acres.

We are very pleased that Blue Cast Springs is the property containing the 5,000th acre. Not only were we able to preserve a significant natural area, but it is most fitting having this milestone occur in Allen County where ACRES began in 1960.

Blue Cast Springs contains deep ravines, over 3,000 feet of frontage along the Maumee River, a heronry (large grouping of active blue heron nests), mature hardwood forests, and diverse plant life. The property has several springs whose waters have a blue cast, and it is part of the historic Black Swamp—an area once dominated by wetlands that extended from Allen County all the way to Lake Erie.

ACRES' new strategic plan (acreslandtrust.org/plan) calls for Preserve Management Plans to be created for all new properties, as well as for five existing preserves, each year. These plans use inventories to document current conditions of the preserves and to develop management goals. We are excited to discover what studies of Blue Cast Springs' plants, animals and history will reveal.

Blue Cast Springs will be opened to the public this summer, complete with hiking trails and scenic overlooks. A special designation of the 5,000th acre will be erected on the property.

A milestone such as this 5,000th acre reminds us of the tangible and significant difference we all make together through ACRES. The 5,046 acres in the preserves will always be preserved in their natural state.



BLUE CAST SPRINGS DONORS

Indiana Heritage Trust
Bicentennial Nature Trust
Mary C. and Perry F. Spencer Foundation
Jerry and Diane Mackel
David and Judy Ruoff

Cheryl Allen
Jimmie and Beulah Allman
Jerry and Conny Amstutz
Patricia Barrett
David and Jacqueline Beard
Mark and Mona Berghoff
Larry and Karlann Bieberich
Michael Biesiada
Robert Binder
Thomas and Mary Jo Bland
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Craig and Nancy Bobay Family
Sam and Jill Boggs
Noor Borbieva
Ruth Bracht
Nancy Brammall
James Brenock
Kathryn Brogan
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Jeanine Herold
Ed and Mary Lou Hutter
Dr. Jon and Mrs. Judy Ingleman
Terry and Caroline Kindsvatter
Kiwanis of NE Fort Wayne
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Louise Larsen
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Jay Wilson
Carol Winters
Fred and Jackie Wooley and Joseph
Frances Wright
Phil and Marcia Wright
Jonathan Wuepper
Don and Cheryl Wyckoff
Becky Zimmerman

Blue Cast Springs

by Tom Castaldi

Travel east nineteen miles from Fort Wayne into Maumee Township on U.S. 24 heading for the Indiana-Ohio state line, and you'll pass near Blue Cast Springs. Back in 1901, New Haven resident Henry Schnelker was attracted to an 87-acre plot with a flowing mineral spring, and he decided to purchase the land.

Once described by a local newspaper as a "magnificent natural beauty spot nestled on the lofty banks of the Maumee," the name "Blue Cast" came from the mineral spring's bluish color. In addition, it seemed to have evidence of a unique magnetic force not typical of mineral water. People discovered its attractive drinkable qualities seemed to be an invigorating tonic with metabolic properties. Those rumored to know the place said iron or steel left in the water for a time became magnetized.



Photo by Shane Perfect

In 1902, after installing a pump to access the deep ravine where the spring was found, Schnelker began producing over a hundred cases per day. It wasn't long before Schnelker's blue and yellow bottle label was seen throughout the United States and around the world. Bold letters proclaiming "Blue Cast Mineral Water" surrounded an illustration of the "Fire Proof Sanitarium." The six-fluid ounces were described as being "Carbonated and Bottled at the Springs," coming from "the Blue Cast Company, Woodburn, Ind.," and the waters had received the "Highest Award at St. Louis Exposition."

To satisfy demand, Schnelker built a large reservoir, holding some 5,000 gallons of the ever-growing-in-popularity beverage, to collect the waters twenty-four hours a day all week long. The spring offered up a steady stream of water which served the business well for over a decade. In fact, thirty-five cement steps placed in the side of a hill accessing the ravine to the reservoir are still present on the property.

South of the mineral spring, another spring was found that produced sulfur water and mud, which spawned still another business—this one to attract people seeking the benefits of therapeutic baths. Although Henry Schnelker intended to open a sanitarium to take advantage of the newfound opportunity, in 1912, A.C. Hogue of Toledo, Ohio, bought the property. Initiating a financing strategy selling stock at \$1 per share, he found a ready market among the region's farmers and businessmen. Hogue moved his family into a large farmhouse on the property. An established building contractor with the necessary equipment and machinery, Hogue had the wherewithal to use the ground's sand and gravel to construct a large sanitarium made entirely of cement and steel. As L. Kathryn Moser, Mildred Becker and Gilbert Souder wrote in a history titled *Home Community, U.S.A.*, the sanitarium had a large lobby and dining room, a modern kitchen and two small lounge rooms on the first floor. On the second were sixteen bedrooms.

John Beatty and Delia Bourne wrote about Blue Cast in the History of Fort Wayne and Allen County, noting that a wing was added for mud baths and guests could tour the beautiful grounds with visitors.



After opening the Sanitarium for business on July 1, 1913, Mr. Hogue continued expanding the Blue Cast Mineral Water bottling operations and found a buyer in 1926. It was sold to a group of Cleveland businessmen who closed the business in 1955.

Beatty and Bourne wrote, "the broker who had sold the original \$1 shares of stock kept 60 percent of the proceeds for himself, passing on to the company only 40 percent. Capital was soon exhausted, and stockholders refused to invest any more money." The sanitarium remained closed until a Mr. Beiberschiemer of Toledo purchased the property, intending to re-open it. Soon afterward, the Great Depression hit, forcing a second closure. The property went through several owners and periods of vacancy.

During the years the building stood vacant, nearby youth imagined the place to be haunted, and soon after, the structure suffered at the destructive hand of vandals. Nancy Venderly, writing for the Journal Gazette, noted that during Prohibition days the sanitarium was alleged to have been used as a "speak easy," and rumors circulated that Al Capone frequented the place. In 1939, the sheriff's department arrested forty-two people between the ages of fifteen and twenty-six and took them before the county prosecutor who gave them a scolding before permitting their release. Gradually, all evidence of the sanitarium has disappeared other than the footprint of the old cement foundation.

This article first appeared in the March, 2013 Fort Wayne Monthly.

Allen County Historian Tom Castaldi, is author of the Wabash & Erie Canal Notebook series; hosts "On the Heritage Trail" which is broadcast at 6:35 a.m., 8:35 a.m. and 6:30 p.m. Mondays on WBOI, 89.1 FM, and "Historia Nostra" heard on WLYV-1450 AM and WRRO 89.9 FM.

Center Spread: Kokiwanee, Wabash County, Patricia Hendrickson

BEHIND THE SCENE

Redbud trees in bloom take me back to childhood when Grandpa taught me what certain spring birds sound like and the names of trees. Grandma taught me when to plant vegetables according to the moon, how many seeds per hole, and which to plant with flowers so bugs wouldn't bother as bad. These teachings "grew" my love for the outdoors. Every time I see redbuds in bloom, my mind returns to that special time.



field trips & SPECIAL EVENTS

For information on all programs, contact the ACRES office at 260.637.2273 or visit acreslandtrust.org
ACRES programs are held rain or shine.

24TH ANNUAL ADOPT-A-TREE FESTIVAL

Saturday, April 20, 10 am – 3 pm

Presented by: Art Eberhardt, Laurie Eberhardt and Peter Martin, Jim Shearer, David Syler, John Eddy, David and Bonnie Snyder, Paul Nailor and Lee Sauer

Enjoy a variety of fun events for children and adults: make a bluebird house or suet feeder, look at pond water under a microscope, and adopt a northern white cedar, chinkapin oak, or red maple tree. Entertainment will be fiddle and dulcimer music and caricature drawings.

WHERE: Wing Haven, Steuben County
180 W. 400 N., Angola, IN 46703

VOLUNTEER ORIENTATION COOKOUT

Saturday, April 27, 4-7 pm, Meeting at 5 pm. *See next page for details.*



Adopt-A-Tree by Shane Perfect

WILDFLOWER HIKES

Spurgeon Woodland Reserve

Sunday, April 14, 3-5 pm

Presented by: John Smith from INPAWS North Chapter and Tony Fleming
Spurgeon Woodland Reserve, Noble County, 9478 N. 600 W. Ligonier, IN 46767

Ruth Kern Woodland Preserve

Saturday, May 4, 1 pm

Presented by: Shirley Needham and Laura Snipes
Wildflower identification and history of the preserve property.
Ruth Kern Woodland Preserve, Fulton County, 3681 W. 450 N, Rochester, IN 46975

Bicentennial Woods

Saturday, May 11, 10 am

Presented by: Naturalist Gary Helmke and Bill Smith
Bicentennial Woods, Allen County, 340 E. Shoaff Road, Huntertown, IN 46748

Docents Ready To Guide

There will be docents ready to guide you on a hike this spring at various preserves. Visit the ACRES' website at acreslandtrust.org for preserve locations, dates and times.

MARION'S WOODS GRAND OPENING

Sunday, June 2, 2-4 pm

Presented by: ACRES and Art Eberhardt

Join us as we remember Marion Eberhardt and celebrate the opening of our newest nature preserve in Steuben County.

WHERE: 805 Calvary Lane, Angola, IN 46703
Parking at The Church of Jesus Christ of Latter-day Saints, 1508 Williams Street (SR 827), Angola, IN 46703. Located on the northwest end of Marion's Woods.

Need a speaker at your next meeting or event?

ACRES offers a wide variety of nature-based presentations. For a complete listing of topics and speakers, visit www.acreslandtrust.org/speakers

Advertising your event

Many birding, walking, and social groups use ACRES' preserves for their own events. If you would like to encourage ACRES' members to attend your events, provide event information to the ACRES' office and we'll post your event on our website.

call for Volunteers

Trail Monitors, Preserve Stewards, Office and Event Workers

If you are a current volunteer or would like to get involved with ACRES, please join us for a cookout to learn about volunteer opportunities at ACRES.

Saturday, April 27, 4 – 7 pm Meeting at 5:00

Presented by: Brett Fisher, David Homan and Tina Puitz

Because we will be depending on our volunteers more than ever in the coming months, we are implementing some new programs to assist and reward your efforts. Join us for hotdogs, hamburgers, and vegetarian offerings as we kick off 2013 with a volunteer orientation and hike through the Dustin Nature Preserve.

Please make your reservations with David, Brett or Tina by Earth Day, April 22.

David Homan	Brett Fisher	Tina Puitz
dhoman@acreslandtrust.org	bfisher@acreslandtrust.org	tpuitz@acreslandtrust.org
517.677.6238	260.450.0603	260.637.2273

If you are unable to attend, please contact David, Brett or Tina so they can pass along the updated information.

WHERE: Dustin Barn, Allen County
1802 Chapman Road, Huntertown, IN 46748,
just east of the main nature preserve entrance.

Find more volunteer opportunities by visiting www.acreslandtrust.org/volunteer

acres' wish List

Post driver 2" – 4" mouth
Work gloves
Birdseed
Paper cups, napkins and sturdy plates

NATURE'S CALENDAR

by Fred Wooley, Park Interpreter, Pokagon State Park

Early April – Watch for migrating waterfowl in preserves near big bodies of water. Bufflehead and common goldeneye ducks, pied-billed and horned grebes will dive in deeper waters. Blue-winged teal and wood ducks will seek quiet backwaters of cattail marshes.

April 8 – Male purple martins are back! Look for them along lakeshores.

April 15 – Listen for the buzzing of the recently returned blue-gray gnatcatchers! Spot them high in trees—long tails with white edges, flitting.

Early May – Hooded warblers, scarlet tanagers, and Acadian flycatchers return to their summer haunts.

May 20 – Bluebirds are feeding young! Look for them in natural dead snags or your bluebird boxes.

June 3 – Aquatic turtles are on the move! Now's the time females leave their wet worlds and travel seemingly ridiculous distances to lay eggs.

June 23 – Full moon, the "strawberry moon" as both colonial America and Algonquin people knew it.



Photo by Fred Wooley

Ground Water Dependent Ecosystems

by Tony Fleming, Geologist

Ground water accounts for about two-thirds of the world's total freshwater, playing a vital role in both human societies and ecosystems. This immense and frequently underappreciated resource is mostly hidden from view, but where it does appear in the landscape, the results for biodiversity are often remarkable.

Ground water dependent ecosystems (GWDE) are one of the hottest topics in conservation science today—and for good reason. Once largely overlooked, places where ground water interacts with the landscape are increasingly recognized as biodiversity hotspots, often hosting plants and animals, and sometimes entire communities found nowhere else on the planet. In an era of emerging water scarcity, GWDE are the focus of growing research, monitoring, and protection efforts by a host of land management agencies across the nation.

Natural areas in northern Indiana showcase a remarkable range of GWDE, but their distribution within our landscape is rather uneven and results from the confluence of several specific geologic factors. Obviously, the first prerequisite is the presence of sufficient ground water at the land surface to influence natural community composition. Major ground-water discharge areas typically coincide with portions of the landscape that intersect one or more significant water-bearing zones, commonly known as aquifers. In our region, most aquifers consist of bodies of sand and gravel deposited by glacial meltwater. Their sizes range widely, from small, tabular lenses a few feet thick and underlying less than an acre, to vast sheets of outwash hundreds of feet thick and covering several townships. Aquifer size directly influences the biology of ground-water-fed wetlands by controlling the volume of ground water

available as well as the hydroperiod. Small aquifers typically produce extremely localized, intermittent springs and seepage swamps that may be dry for much of the growing season, whereas widespread, thick aquifers commonly discharge thousands of gallons per minute on a continuous basis, supporting spectacular wetland complexes covering hundreds of acres.

Aquifer (ak-wa-fur) – A geologic formation capable of yielding an economically- or environmentally-significant volume of water to a well or spring.

An example of the latter is the vast complex of fens, springs, seepage swamps and other ground-water-fed wetlands along the Pigeon River in Steuben and LaGrange Counties—one of the largest GWDE in the eastern US — which receives millions of gallons per day of ground-water discharge from an outwash aquifer that covers parts of several counties. While the Pigeon River complex is the supreme example of a GWDE in northern Indiana, it is the exception—most GWDE are localized features ranging from less than an acre to a few tens of acres in size.

A typical location for GWDE is along the lower parts of long, concave-shaped slopes which act like a bowl, focusing the flow of ground water inward towards a common point, where it discharges to the surface. This process, known as ground-water focusing, often amplifies

the biological effects of a relatively small amount of ground-water discharge by concentrating the flow and extending the hydroperiod of a given wetland. Springs and seepage faces are commonly found in this landscape position, but hillsides also are favored sites for fens, seepage swamps, and wet meadows. Prominent examples of such ground-water-slope wetlands are visible at several ACRES' preserves along Cedar Creek and in the upper Wabash Valley, notably at Kokiwanee and Asherwood.

Ground-water chemistry has a major influence on the biology of GWDE. Unlike rivers, whose currents are commonly measured in miles per hour, ground-water flow rates are seldom greater than a few tens of feet per day. Thus, while the

residence time of water in a large river system is typically less than a few weeks, it may take ground water tens or hundreds of years to flow through a large aquifer system. During this extended residence time, ground water dissolves the aquifer media, often becoming enriched in elements such as calcium, magnesium, iron, sulfur, and many others. Low levels of minerals are essential to most life forms, but many common elements become limiting, or even toxic, at high concentrations, leading to GWDE dominated by unique plants and microbial communities that tolerate such chemical extremes.

Fens exemplify this dynamic. They are found in some of ACRES' northern preserves, typically adjacent to lakes

(continued on p. 16)



Productive aquifers occur far more commonly in permeable geologic formations with large, well-connected pore spaces between individual mineral grains, such as the sand and gravel aquifer behind the scale in the photo above. Another important kind of aquifer in our region consists of fractured limestone, which only rarely lies close to the surface, except in the upper Wabash Valley. The opposite of an aquifer is an aquitard, or confining unit, represented by the massive, poorly permeable, clay-rich glacial till overlying the sand and gravel aquifer in the upper part of the photo. The contrasting colors of the two formations are directly related to the residence time of ground water: the permeability of the till is painfully slow — inches per year — and ground water in some parts of the formation is thousands of years old and dates from the glacier that deposited it! The long residence time leads to a lack of oxygen and reducing conditions, producing the gray, gleyed colors. In contrast, ground water flows rapidly through the well-sorted sand and gravel, carrying enough oxygen with it to oxidize the particles, producing the rusty appearance.

Photo by Tony Fleming.

and in large depressions. Unlike springs and seepage swamps, which can have any kind of chemistry, fens are, by definition, alkaline, meaning they have a basic pH (similar to baking soda). Their unique geochemistry results from the discharge of ground water containing high concentrations of dissolved calcium, magnesium, and bicarbonate, which become insoluble and precipitate on the surface of the fen when the ground water encounters atmospheric oxygen at the

point of discharge. The mineral deposits take the form of tufa—a wiry, sponge-like form of limestone and dolomite that encrusts leaves, mosses, and rocks—and marl—a dense, stratiform type of calcium carbonate deposited in cold water lakes. Only a comparatively few specialized plants tolerate the extreme alkalinity and low nutrient availability, among them insectivorous plants like sundews and pitcher plants, and several species of orchids, sedges, and mosses.



"Hanging fens" are one of the most unusual GWDE, typically being fed by springs that emerge on the sides of limestone bluffs. They are marked by curtains of tufa that hang off the bluff, and are occupied by a select group of mosses, vascular plants, and microbes adapted to a near-vertical, hyper-alkaline growing environment. Kokiwanee Nature Preserve hosts several hanging fens—the only known examples in the entire region. *Photo by Tony Fleming.*

promotions/announcements

BIRDATHON 2013

Birdathon 2013 will be Saturday, May 18. Make a pledge or donation and help support Marion's Woods. See the pledge/donation form at acreslandtrust.org/birdathon or mail your donation to ACRES, 1802 Chapman Road, Huntertown, IN 46748

Eastern Bluebird by Dave Fox

*Coming Soon!
ACRES updated
Preserve Guide.*

Watch the ACRES website and Facebook for more information.

WOODLAND BOG NATURE RESERVE

by Terri Gorney

In 1965, Burtis Elliott Horrall and his wife, Bernice Moody Horrall, generously donated 20 acres of land that would become ACRES' third preserve. Art Eberhardt had approached the Horralls about purchasing the old bog which could be obtained for less than \$1000 at a tax sale. The Horralls bought it with the intention of gifting it to ACRES.

This land, which became known as the Woodland Bog Nature Reserve, became a state dedicated nature preserve in 1972. Part of an old bog that took centuries to develop, the property is dominated by pin oak, red osier dogwood, swamp white oak, big tooth aspen, red maple, red elm, and a few tamaracks. Many species of birds find this swamp forest a good place to nest. Stands of cinnamon and royal ferns with fronds as tall as six feet, give the area a tropical appearance.

Burtis and Bernice were a fascinating couple, devoted to one another for 60 years. They passed on their passion for education, family history and the natural world to their two children, Louise and Ross.

Bernice was born in Mount Etna and graduated from high school in Angola. She studied two years at Tri-State College, then transferred to Purdue University—the first woman from Steuben County to attend Purdue. She received her B.S., M.S. and Ph.D. from the university and published professional papers in "The Journal of Genetic Psychology" and "Genetic Psychology Monographs." Bernice taught in the public schools and at the college level.

Bernice had a natural curiosity about her ancestors. She descended from some of the first white pioneers who settled in Steuben County in the 1830s. Her grandmother, Lydia Welch Moody, told her that their land was once covered with trees, especially walnut. When she met Burtis, his family shared information about his forebears. He was a native of Knox County in southern Indiana where his family had settled in the first half of the nineteenth century.

This lively couple met on a blind date October 4, 1918 and went canoeing up the Wabash River with the friends who introduced them. Burtis was also an alumnus of Purdue University and taught there. Beginning in the 1920s, he was involved in dairy research at the university. His published research involved

studying factors affecting the body and texture of ice cream, milk and its products, and Indiana butter. Later, he taught at Tri-State University.

In 1982, Bernice and her daughter, Louise Horrall Rogulic, used Bernice's lifetime study of their family lines to write "The Life and Times of Burtis Elliott Horrall and Bernice Moody Horrall and Their Ancestors." Burtis died in 1978 and Bernice in 1989. One of her favorite quotes was by Edmund Burke: "He only deserves to be remembered who treasures up and preserves the history of his ancestors."

Both Burtis and Bernice deserve recognition for preserving one of Steuben County's natural treasures, now called Woodland Bog Nature Reserve. An easement to Woodland Bog which allows for easy access to the preserve was graciously given by Hershel and Virginia Cole.

Woodland Bog Nature Reserve
2600 E. 100 N., Angola, IN 46703



River Otters

by Jason Kissel



Otter at Kokiwanee by Tim Kahn

North American River Otters continue to expand their range and abundance throughout ACRES' service area due to a successful reintroduction program by the DNR begun in 1995. Otters are members of the weasel family, but unlike their relatives, they have gained very favorable public opinion in large part due to their playful, curious, frisky and intelligent behavior.

DESCRIPTION: Adult otters have brown, three-to-four-foot-long bodies. Their backs are dark brown, while belly and face are a paler shade of brown. Otters have stout, short legs, highly webbed feet, and a long thick tail tapering to a point.

River Otters:

- Can run as fast as 18 mph and swim up to 6 mph
- Like to slide for transportation — apparently just for fun!
- Have a set of clear eyelids that aid underwater vision
- Are able to close their ear canals and nostrils while under water
- Can easily hold their breath for four minutes, often up to eight
- Use sensitive whiskers to help locate prey in murky waters
- Live an average of about 10 years
- Stay active all winter
- Have two layers of fur: an inner coat for warmth, and an outer waterproof coat
- Are very vocal: chuckling is common, but they can also whistle, buzz and chirp

HABITAT: Otters are most often found along rivers and streams, but they will occupy any location that provides permanent water, food and shelter. While otters usually find shelter in burrows, they will also take advantage of hollow logs, log jams or other shelter near water.

DIET: Otters are carnivores feeding on whatever is easiest to catch on a particular day. Fish, crayfish, frogs, and insects are commonly on the menu, while turtles, mussels, snakes, small mammals, and the occasional bird add variety.

VIEWING OTTERS: Otters are considered nocturnal, so late evening through morning provides the best chance to encounter an otter. However, since otters are not strictly nocturnal, daytime sightings are possible. Consider yourself lucky if you spot otters without actively seeking them out: their presence is usually evident only by their tracks and slide paths. If you do catch them in action, sit back and enjoy the show. When not occupied by eating or sleeping, they are usually wrestling, chasing each other, or sliding down hills (hmm...sounds a lot like my children's daily schedule). When visiting ACRES' preserves with large streams or rivers, be sure to keep an eye out for otters!

SPECIAL thanks

Allyson Ellis, Barb Gorney and Volunteer Center Volunteers Helen Bassett, Barbara Boston, Marge and Ron Costa, Don Thornton and Paulette Szkudlarek collating the *Quarterly*

Carol Roberts editing the *Quarterly*

Our *Quarterly* distributors

Ted and Tedra Hemingway, Barb Clark, Allyson Ellis, Ed and Cynthia Powers, Pam George and Kate Ferguson helping at the annual dinner

Taylor and Molly Puitz cleaning the office

University of St. Francis faculty David Brandon, Trina Herber, Danny Powell and Bryce Wiseman and students Gus Hancock and Carli Powell clearing trails at Bicentennial, Dustin and Vandolah preserves and helping in the office

Bill Smith, Cindy LeMaster, Kate Ferguson, Mark Maffey, Angie O'Neill, Joann Smith, John Smith, Katia Cook, Bruce Johnson, Neil Case, Toni Mowery, Sue Walkup, Warren Mead, Doug Rogers and Kathy Rogers volunteering at the ACRES booth at the Outdoor Sports, Lake and Cabin Show

Warren and Sharon Mead donating a telescope and kitchen pots and pans

Louise Pomeroy donation of coffee for the office and the homemade cookies

David and Faith Van Gilder donation of coffee for the office and a refrigerator for the Dustin barn

Tony Fleming creation of Preserve Management Plans

Al Diefenbach plowing the ACRES office driveway

Dave Brumm, Bill Smith, Betsy Yankowiak, Pamela Oleson, Deanna Vazquez, Ellsworth Smith, Cindy LeMaster, Liz Hincks, Deb Landa, John Landa, Jane Martin, Arnie Snipes, Laura Snipes, Jeff Bleijerveld, Ed Crago, Pam George, Mary Lou Hutter, Warren Mead, Art Eberhardt, Jim Shearer, Larry Weidman, Luther Eberly, Will Wendling, Dan Zweig, Ted Hemingway, Tedra Hemingway, Thom Maher, Ronnie Greenberg and Sean Nolan volunteering at the Home and Garden Show

Thank you to all who help in the preserves or help ACRES in other ways.



ACRES' MISSION

Dedicated to preserving natural areas since 1960, ACRES manages and protects 85 nature preserves totaling over 5,046 acres.



Like us on Facebook



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McNabb-Walter Nature Preserve

by Matthew Brown

*A tall tulip tree decked with red-wing blackbirds
clattering, storming the news.*

Ancient high maples, too—

*Sugar maples have hidden the
drilled holes where sap was taken.*

*Beech trees on matte-finished bark
show every event of their lives.*

*Springtime, the forest rises up;
collapsed sap-house goes down a little more,
rusted buckets and lost stories.*

*A tiny pool of water between the roots of a beech
containing the whole forest and every thing
The pathside floods with water streams and green.*

Golden gentle sunlight and a quiet wind.

*Utter peace of a field greening slowly,
surrounded by trees.*

Light rain falling all night while we sleep.

*A strong wind making the trees dance slow
and seductive like seaweed, clouds
sail by in full rigging.*

*A ravine with talking waters, shining sycamores,
babbling frogs.*

*Give me a path in springtime where it is wild, and bends
to accommodate trees.*

*At the border of field and wood, low branches
and plants of every description reach outward,
form the wall of the woods, porous, with holes
and sunlight.*

*Trilliums that appeared overnight
now about to open.*



Green Frog by Jason Kissel