

THE ACRES QUARTERLY

PRESERVING NATURAL AREAS

SINCE 1960



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Fall 2009
Volume 48 – No. 4





Photo by Shane Perfect

Letter from the Executive Director

Dear Friends,

"ACRES programs are held rain or shine." You'll notice this phrase on the events page of this issue and those going back to the 1960s; it's always been our policy to hold events no matter the weather. The primary reason is ACRES' position that there simply is no such thing as "bad weather."

Each weather condition is required by nature. Rain, sleet, snow and fog provide the moisture necessary for plant growth, fill the lakes and rivers, and replenish the water cycle. Wind carries pollen, allows birds to glide, strengthens tree trunks, and brings new weather events. Cold temperatures fulfill cold germination requirements of plants, provide ice bridges for animals, and slow metabolisms. Every weather event serves its purpose.

Each weather condition also provides unique experiences. When it's hot, you gain first-hand experience of the cooling effect of shade, wind and water. When it's cold, you shiver under layers of clothes and gain an appreciation of the insulating qualities of feather and fur coverings that wildlife enjoy. On wet days, you're rewarded with the enhanced scents of a forest, the increased speed of water in streams, and the ability to move about quietly.

Precipitation, wind, and temperature extremes are normal. Isolating ourselves year-round in constant 68 - 72 degree surroundings is not. So get outside and enjoy the wonderful weather!

Sincerely,

Jason

Jason Kissel

P.S. ACRES recognizes that some weather events can be life-threatening. In these cases, event participants wait out the threat from lightning, flash flood, or tornado in appropriate shelter.

Cover Photo: Leaf by Shane Perfect

WELCOME 29 new members!

Greg Batten
Steve and Sue Beres
Mr. and Mrs. Joe Brunson -
gift of Rhonda Whitacre
Michelle Kaufman and Joel Byrd
Sarah Crismore
Rob and Nancy Drummond
Eissey Family - gift of Harvey
and Frances Hathaway
Amy Ewers
Hank Firnhaber
J. Tyler Handwork
Eric Hathaway - gift of Harvey
and Frances Hathaway
Julia Hathaway and Drue Deberry -
gift of Harvey and Frances Hathaway
Thelma Hoffmann
The Hughbanks Family
Kent and Dawn Martz
Robert Mills
Douglas Pinner - gift of
Thelma Hoffmann
Brett Quinn
Suzanne Rogers
Rick Sonda
Michael and Melinda Walters
Cathi Rowand and Kathi Weiss
Ken Yake

new life members

John and Marcella Ellenwood
Jack and Cherie Stark

new corporate members

Indiana Michigan Power
Lake City Bank
Petroleum Traders
Wild Birds Unlimited

corporate members

Britton Marketing and Design
Data Print Initiatives
Dekko Investments
Excell Color Graphics
Fort Wayne Metals Research
Steel Dynamics
Zeigler's Window Coverings

ACRES wish list

- Gas barbeque grill for office deck
- 5' scarifier for three-point hitch tractor
- 100' spool of 1/2" wire rope for parking lots
- ACRES is in need of a new copier. If you would like to donate funds towards the purchase of a copier, please write "copier" in the memo line of your check.
- Wall mounted outdoor hose reel
- 15 matching banquet table linens in neutral or earth tones
- 3 desktop computers for our two new interns from Leo High School and one work study student from IIT

Memorials

Mitch Michelini
from Deborah and Stephen Sarrazine

Margaret Gorney
from Don Gorney

Wendell Dygert
from Mike and Dana Baker

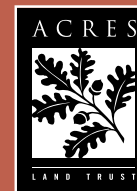
Jerry Stratman
from Mike and Dana Baker

Earl Davis
from Leelia Cornell

Tributes

To Shirley Needham
for rescuing an injured Great Blue Heron
from Carolyn Swagerle's wetlands

Photo by Jerry McCoy



ACRES' MISSION

Dedicated to preserving natural areas since 1960, ACRES manages and protects 71 nature preserves totaling over 4,580 acres.

1802 Chapman Rd.
Huntertown, IN 46748-9723
260.637.ACRES (2273)
email: acres@acreslandtrust.org

acreslandtrust.org



The Long and Short of It by Gary Tieben



Photo by Mark Kuechler

In our past, the longest day - the summer solstice, and the shortest day - the winter solstice, were the cause of concern or celebration. Here in the Midwest, the longest day of the year has about 15.02 hours of daylight while the shortest day has only 9.20 hours of daylight. Today, a loss of nearly six hours of daylight is barely noticed by people living in the modern world. Humans are the only organism able to alter the length of light in their day, and they have only been able to do it since they first started using fire. All organisms outside the influence of modern lighting must deal with the seasonal changing of the length of the day. The shift from days with about 15 hours of sunlight, near June 20th, to days with nine hours of sunlight, near December 20th, is very gradual. The physiological shifts that accompany

photoperiod shifts also occur slowly. The changes that occur in birds that are brought about by photoperiod shifts are among the most spectacular in the animal kingdom.

Birds, as flying creatures, developed into very lightweight organisms. Their bones are light; their feathers are light; and even their reproductive systems undergo changes to make them as light as possible. Female birds have only one ovary and fallopian tube while most organisms have two of each. The ovary of birds is irregular and difficult to measure, so we will use a measurement of the length of the reproductive system as seen by the naked eye. The reproductive system of the female House Sparrow is typically about 2-3 mm long during the late fall and winter, but will

enlarge to 160 mm in length during July. The reproductive systems of both male and female birds atrophy in the non-breeding season. In the male House Sparrow *Passer domesticus* the testes are about 1 ½ mm long by 1 mm wide during the short days of late fall and winter, but they grow to as large as 13 mm by 10 mm during the long days of July, soon after the summer solstice. These are tremendous changes in size. The amount of reproductive hormones present in birds is closely associated with the size of the reproductive organs. These hormones set a variety of internal and external changes into motion.

Most birds grow new plumage at least once per year. The quantity of reproductive hormones present interacts with the developing feathers and in some species cause incredible shifts in feather color. For instance, the body feathers of the American Goldfinch breeding male molt from golden yellow and black in the spring and summer to a grayish olive in the fall and winter. A few minutes spent paging through a bird guide will illustrate the great difference between breeding and winter plumage in the Indigo Bunting, Scarlet Tanager, Bobolink and others. Many warblers have winter plumages that are recognizable but are much duller than their breeding colors. While bright plumages are especially useful to males setting up breeding territories, the bright colors make them more subject to predation. The duller colors present in the non-breeding plumage helps reduce predation during the half of the year not devoted to any aspect of reproduction.

The final aspect that we will consider is migration. Photoperiod shifts prepare

migratory birds for their northern or southern flights. One of the most interesting ways that birds prepare to migrate is by increasing their weight and amounts of stored fats. Birds do not suffer from obesity, but they do "put on the pounds" when they get ready to migrate. This is especially true of the birds that migrate non-stop across the Gulf of Mexico from the southern U. S. to the Yucatan peninsula of Mexico and visa versa. The Ruby-throated Hummingbird weighs about 4.5 grams in the fall. Of the 4.5 grams of body weight, two grams are stored fat (44% of their body weight). Fat percentages in the 50% range are not at all uncommon for other migrating birds. Research has shown that Ruby-throats can fly non-stop at an average speed of 40 kilometers an hour for up to 26 hours. This gives them a flight range of about 1040 kilometers, enough to cross the Gulf of Mexico with a little to spare. Ruby-throats and other birds that cross the Gulf of Mexico come close to exhausting their fat reserves. Storms and severe head winds can slow them enough so that they exhaust their energy reserves before reaching their destination bringing about their death in the Gulf waters.

As you read this article the days are getting shorter. Perhaps you, like the birds, will begin to "put on the pounds." If this happens, you might want to consider a non-stop flight across the Gulf of Mexico. While it is unlikely that you will lose most of your body fat enroute, the Gulf beaches are a wonderful place to be in the fall.

Gary Tieben is a retired professor from Saint Francis University and an ACRES board member.

Acquisition Update

INTRODUCING ACRES' 71ST NATURE PRESERVE ORION WOODS

Orion Woods is a 30-acre forest located along Cedar Creek in Allen County. The property was a gift from the Orion Foundation, Inc. in memory of Marsha Hunter. The property includes forested wetlands along with dry forests dominated by oak and hickory with sugar maple and beech trees forming the understory. The terrain is rolling and includes deep ravines leading to the floodplain of Cedar Creek.



by Shane Perfect

Orion Woods is adjacent to the 120-acre Meno-aki State Dedicated Nature Preserve, which is part of the 250-acre Metea Park owned by Allen County. So, the property is not only significant in its own right: it also adds to an existing preserved area and helps achieve ACRES' goal of preserving additional portions of Cedar Creek, one of only three Indiana Scenic Rivers.

The property surrounding Orion Woods is under heavy residential development pressure and therefore the land has a very high monetary value in addition to its natural value. The donation of this property resulted in the second largest gift to ACRES in our 49 year history.

Jack Hunter, President of Orion Foundation, Inc. states. "We are very pleased to entrust the continued preservation of Orion Woods as a nature preserve to ACRES with its long history of success in this area. Marsha discovered this property when it came on the market and felt strongly about protecting the forest from development, so it seems particularly appropriate that we make this gift to ACRES in memory of her."

Orion Woods is not open to the public at this time.



by Jack Stark

Stark Nature Preserve in LaGrange County is Now Open to the Public

by Jack Stark

For fifty years I've been visiting the Pigeon River for activities such as hiking, camping, fishing and canoeing. In 2001, I was thrilled to find forty-two acres for sale directly on the river, and I bought the property immediately. During the first year after the purchase most of my time was spent removing trash from the farm dump and clearing the trails. Now the property has about a mile of trails.

For me, the land is a getaway destination. It is my natural church and I visit there at least once a week in warm weather and once or twice a month in the winter. June and July visits were less frequent because of the mosquitoes, so I visited only enough to keep the trails open.

One of the interesting features of the preserve is the oxbow pond denoting an old river course through the land. I've seen deer, turkeys, geese, ducks, box turtles, squirrels and lots of slugs at certain times of the year. Fortunately, I've never encountered ticks.

Near the highway where the ground is fairly damp year round, most of the trees are silver maples. As you approach the river the ground is drier and you can find ash, hickory, walnut and various kinds of oak with one venerable old burr oak. Large cottonwoods and sycamores line the river. My favorite trees on the property are the groves of paw paws. In the spring they have black flowers and in the fall their golden leaves are incandescent in the sunlight.

I've always believed that natural areas cannot be owned and should be shared with others. From the beginning I wanted this land to end up in the hands of ACRES so it could be held forever for public enjoyment.

A new parking lot and entrance has been installed thanks in part to a grant by the Olive B. Cole Foundation and a donation by Jack Stark. Come enjoy the preserve this fall.

Directions: From LaGrange, take SR 9 north for 5.5 miles to SR 120. Turn left (west) and travel 2.5 miles to the preserve entrance on the left (south) side of the road.

Annual Dinner

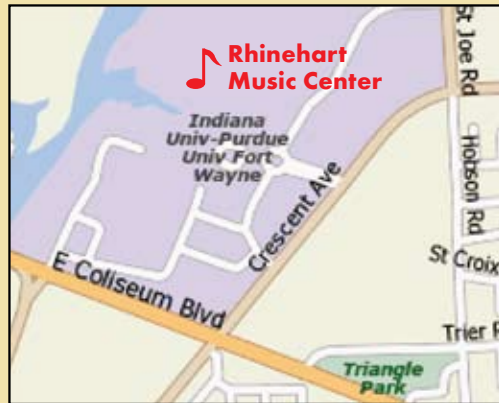
Friday, November 13

Rhinehart Music Center at the
IPFW campus, 2101 E. Coliseum
Blvd., Fort Wayne

Dinner at 6 p.m.

Cost: \$20/person – members only

Call the Rhinehart box office at
260.481.6555 by Friday, November 6
to reserve your tickets.



Dinner Menu

Station I

Mashed Potato Martini Bar with
Chives, Cheddar, Bacon, Sour
Cream, Sundried Tomatoes and
Parmesan Cheese

Mac n Cheese with Orzo Pasta,
Sweet Peas, Truffles, Mascarpone
and Brie Cheese

Beef Tenderloin Kabob with
Portabello Mushroom
Chicken and Artichoke and
Roasted Pepper Kabob

Catered by Catablu

Drinks: Wine, Beer, and Non-Alcoholic Beverages

Station II

Imported and Domestic
Cheeses with Grapes
and Berries

Flatbread Sticks with
Olive Spread

Fresh Vegetable Tray
with Basil Aioli and
Creamy Parmesan

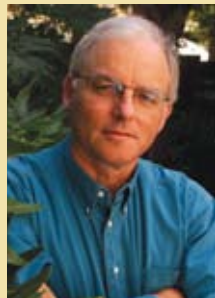
Apple, Pear, Red Onion
and Gorgonzola Salad

Station III

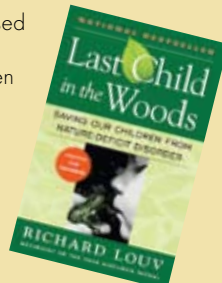
Carmel Apple Cheesecake Bars
Chocolate Turtle Bars
Mixed Berry Cobbler Bars

Thank You To Our Sponsors

Indiana and Michigan Power
Ian and Mimi Rolland
Foundation
Indiana University – Purdue
University at Fort Wayne
Mary Scroggum
Diane Humphrey



Richard Louv is a futurist and journalist focused
on family, nature and community. His most recent
book, *Last Child in the Woods: Saving Our Children
From Nature-Deficit Disorder*, has stimulated
an international conversation about the future
relationship between children and nature. Louv is
the chairman of the Children & Nature Network,
an organization helping build the movement to
connect children with nature.



5th Annual Wine Tasting and Photography Exhibit



SATURDAY, OCTOBER 3, 5-7 p.m.

ACRES will present nature-based
photographic artwork from local
artists in this year's exhibit at the Artlink
Gallery. WineTime Fine wines and hors
d'oeuvres catered by Catablu will be
served.

Tickets: \$40 per person or \$75 for
two. Discount rates are available for
groups.

Where: Artlink – Contemporary
Art Gallery, 437 East Berry Street
downtown Fort Wayne

Call the ACRES office to order your
tickets: 260.637.2273

Thank You To Our Sponsors

Ian and Mimi Rolland Foundation



A unit of American Electric Power



Hosted By



ROPCHAN WILDLIFE REFUGE

The glaciers sculpted this preserve, creating rolling hills, gravel and sand kames, and a kettle hole lake, known as Cemetery Lake. The preserve has an upland oak-hickory forest, formerly cultivated fields now in different stages of succession, and wetlands by the lake. This is a natural sanctuary for birds, other wildlife and plants. A platform by the creek is used by visitors looking for ducks, great blue herons and other water birds, muskrats and beaver.

Due to the foresighted vision of early ACRES' pioneers like Sam and Adeline Ropchan, ACRES has a permanent endowment bearing their name that contributes to the land acquisition and land management needs of ACRES' preserves. The Ropchan Foundation was also established to carry on the lifetime wishes of Sam and Adeline in preserving and protecting natural areas in Northeast Indiana. Thank you!

Center spread photo at Ropchan Wildlife Refuge by Jay Solomon



fieldtrips&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. Call the ACRES office for carpooling information.

5TH ANNUAL WINE TASTING AND PHOTOGRAPHY EXHIBIT

Saturday, October 3, 5-7 p.m.

Presented by: ACRES

ACRES will present nature-based photographic artwork from local artists in this year's exhibit at the Artlink Gallery. Fine wines and hors d'oeuvres will be served.

Tickets: \$40 per person or \$75 for two.

Discount rates are available for groups.

Reservations are required. Please contact the ACRES office to order your tickets: 260.637.2273.

Where: Artlink - Contemporary Art Gallery, 437 East Berry Street downtown Fort Wayne.



by Shane Perfect



by Shane Perfect

VOLUNTEER APPRECIATION DINNER

Saturday, October 10, 6 p.m.

Presented by: ACRES

We would like to express our appreciation to our volunteers. We are only able to accomplish what we do with the generosity of your time and talents. If you are one of our many volunteers, we would like to celebrate your efforts with a catered dinner, and live music.

Reservations are required. Please contact the ACRES office to make your reservation by Monday, October 5.

Where: The barn at the Salomon Farm, 817 W. Dupont Road, Fort Wayne

KIDS SENSORY HIKE

Sunday, October 11, 3 p.m.

Presented by: The Kissel Family

Enjoy a fall hike while we see, hear, taste, touch, and smell our way through the forest. Geared toward children, but all ages welcome!

Where: Mary Thornton Preserve, Wabash County

From Wabash on SR13 travel 2.6 miles north of US 24 to 300N and turn right (east). Preserve is on the right in 1.4 miles.

MAPLEWOOD OPEN HOUSE

Thursday, October 15 - Chili supper 6 p.m., Concert 7 p.m.

Presented by: Scott Beam, Maplewood Nature Center and ACRES

Celebrate the 20th anniversary of the Maplewood Nature Center next to ACRES Maplewood Nature Preserve. Enjoy a chili supper, night hike and concert by Foster Brown of Nature Theater.

Where: Maplewood Nature Preserve, LaGrange County
From LaGrange take US 20 east four miles to 400E. Turn right (south) and travel one mile to 100S and turn left (east). Preserve entrance is on right in 0.5 mile.



by Shane Perfect

fieldtrips&SPECIAL EVENTS

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

SPOOKY STORIES IN THE WOODS

Saturday, October 17, Fall color hike at 5 p.m.,

Storytelling at 7 p.m.

Presented by: Carol Knarr, David Homan and Ethel McClelland

Take a fall adventure by enjoying an evening hike looking at the fall colors, then sit around the campfire roasting hot dogs and making s'mores while local storyteller, Carol Knarr, tells spooky stories.

Where: Wildwood Nature Preserve, Kosciusko County
From Warsaw take SR 15 south for 12 miles to the town of Silver Lake. Turn left (east) onto SR 14 and travel three miles. Preserve is on the right (south) side of SR 14.



by Shane Perfect

PHOTOGRAPHY WORKSHOP

Saturday, October 24

10:00 a.m. - 1:00 p.m.

Presented by: Sunny Schick Camera Shop, led by Master Photographer - Jarrid Spicer

This will be a hands-on nature photography workshop. We will start with a lecture/presentation and then go outside to explore the Dustin Nature Preserve with our cameras, followed by a critique and discussion session. Bring your camera and questions, and we will spend one-on-one time to help you become more familiar with your camera and discuss composition and techniques.

This event is full. We do plan to have another workshop next year.

Where: Tom and Jane Dustin Nature Preserve, Allen County

From Fort Wayne (I-69 exit 112B) take Coldwater Rd. north for approximately 7.5 miles to Chapman Rd., turn right (east) and go 0.75 mile. The entrance is on south side of road at 1802 Chapman Rd.



by Shane Perfect

WING HAVEN FALL FESTIVAL

Saturday, October 24, 11 a.m. - 5 p.m.

Presented by: Bill and Dawn Spurgeon

Come join us for our third annual Wing Haven fall gathering. There will be artists demonstrating their talents including blacksmiths, chainsaw carvers and primitive skill demonstrators. Dulcimer music will be performed in the studio by the String-A-Longs and Friends, and there will be activities for children. Hike the beautiful trails while you are here.

Where: Wing Haven Nature Preserve, Steuben County
From Angola take SR 127 north 4.5 miles to 400N and turn right (east). Preserve is on the left in 0.4 miles.



by Shane Perfect

fieldtrips&SPECIAL EVENTS

For information on all programs, contact the ACRES office at 260.637.2273 or visit acreslandtrust.org
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by Shane Perfect

POPP OPEN HOUSE

Sunday, October 25, 1 p.m.

Presented by: Larry Biggerstaff

Hike the old-growth woods in the Emanuel M. Popp Nature Preserve, open only once a year. Enjoy a cozy afternoon by a bonfire eating hot dogs or walking the brisk fall woods.

Where: Emanuel M. Popp Nature Preserve, Allen County

From Fort Wayne take Dupont Road east of I-69 to Tonkel Road. Turn left (north) on Tonkel Road and go about 1.5 miles. The preserve is on the left (west) side of 12129 Tonkel Road.

WING HAVEN STUDIO OPEN HOUSE

Sunday, November 8, 1-4 p.m.

Presented by: Bill and Dawn Spurgeon

Stop by the studio to learn about the latest ACRES news and activities, or just stop in to warm up by the wood stove after a brisk hike in the preserve.

Where: Wing Haven Nature Preserve, Steuben County

From Angola take SR 127 north 4.5 miles to 400N and turn right (east). Preserve is on the left in 0.4 miles.

ANNUAL DINNER

Friday, November 13, Dinner 6 p.m. Annual Meeting and Lecture 7:30 p.m.

Presented by: ACRES with Guest Speaker, Richard Louv

To reserve your tickets call the Rhinehart box office at 260-481-6555 by Friday, November 6.

Where: Rhinehart Music Center at the IPFW Campus.

Dinner: \$20/person - members only

Lecture: \$10 for the general public. Free for ACRES' members. Seating is limited, so order your tickets early. Please see **page 8** for more details.

WORK DAY

Saturday, November 14, 2 p.m.

Presented by: The Kissel Family

Spend a productive afternoon building boardwalks, preserve benches and mixing up a huge batch of bird suet (you can take your share home). Refreshments will be provided. Feel free to bring along your cordless drill.

Where: Mary Thornton Preserve, Wabash County
From Wabash on SR13 travel 2.6 miles north of US 24 to 300N and turn right (east). Preserve is on the right in 1.4 miles.



by Jason Kissel

fieldtrips&SPECIAL EVENTS

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

SIGNS OF WINTER PREPARATION

Sunday, November 15, 2 p.m.

Presented by: David Homan and Ethel McClelland

Join Wildwood caretakers David and Ethel on the trails and look for signs of animals preparing for the cold winter ahead.

Where: Wildwood Nature Preserve, Kosciusko County
From Warsaw take SR 15 south for 12 miles to the town of Silver Lake. Turn left (east) onto SR 14 and travel three miles. Preserve is on the right (south) side of SR 14.



by Shane Perfect

DINNER WITH THE DIRECTOR

Saturday, December 5, 6 p.m.

Presented by: Jason and Amy Kissel

Spend an evening enjoying great food and company. Jason will tell of the latest ACRES news, answer any questions about ACRES, and will seek your input about the organization. **Menu:** Corn chowder, mixed greens salad, beef roast, glazed carrots, crème brulee. Wine, water, tea and coffee will be served.

Cost: \$10 / person. Call the ACRES office to make your reservations. Limited to 12 guests.

Where: Mary Thornton Caretaker Residence, Wabash County
From Wabash on SR13 travel 2.6 miles north of US 24 to 300N and turn right (east). Preserve is on the right in 1.4 miles.

15TH ANNUAL CHRISTMAS SING-A-LONG

December 6, 2 p.m.

Presented by: Art Eberhardt, Jim Shearer, and Jeanine Samuelson

Get in the holiday spirit by singing around a wood burning stove and enjoying holiday refreshments. We invite you to enjoy the sights, sounds, and smells of Christmas at the Wing Haven Studio.

Where: Wing Haven Nature Preserve, Steuben County
From Angola take SR 127 north 4.5 miles to 400N and turn right (east). Preserve is on the left in 0.4 miles.



by Bob Walton

POLAR BEARS IN INDIANA?

Saturday, December 12, 3 p.m.

Presented by: Bob Walton

Join Bob Walton as he describes his one-week visit observing polar bears at Churchill Manitoba. The program includes polar bear biology and behaviors. Bob also describes his tourist experience and the excitement of seeing polar bears up close.

Where: Wildwood Nature Preserve, Kosciusko County
From Warsaw take SR 15 south for 12 miles to the town of Silver Lake. Turn left (east) onto SR 14 and travel 3 miles. Preserve is on the right (south) side of SR 14.

projectPAGE

If you are interested in volunteering for any of our projects, please call the ACRES office at 260.637.2273.

COMPLETED

30 ft. boardwalk at Badger preserve.

Addition to the boardwalk on the Wetland Trail at Beechwood and repair of bridge and boardwalk.

CURRENT

Tree plantings for 2010 at Seven Pillars, Hathaway Preserve at Ross Run, Robb Hidden Canyon, and Wing Haven preserves.

Construction of 12 cocktail tables for events – contact the ACRES office for plan details.

Assistance relocating signs at Mengerson and Fogwell.

Workdays to control autumn olive, multi-flora rose and honeysuckle at Little Wabash River NP.

Repair boardwalk at Ropchan Wildlife Refuge.

WILD WALKERS FALL HIKING SCHEDULE

For more information, call Fort Wayne Parks Outdoor Recreation Coordinator, Renee Baines at 260.427.6005.

Oct. 9 Hathaway Preserve at Ross Run 8:30-10:30 a.m.

Oct. 23 Ropchan Wildlife Refuge 9-11 a.m.

Nov. 13 Bicentennial Woods 9-11 a.m.

Dec. 11 Metea County Park 9-11 a.m.



by Brenda Willis

promotions/announcements

We are enhancing the bird feeding stations at the ACRES office. ACRES' members will receive 25% off the purchase of items at Wild Birds Unlimited that are donated for this project. Needed items include birdseed, bird feeders, and other bird items that will be on a list at the Fort Wayne store. Improvements to the feeding stations will be part of a Girlscout project later this fall.

ACRES was successful in its recent fundraising appeal to increase its endowment at the Kosciusko County Community Foundation. Thanks to all our donors who helped increase the endowment by \$10,000! ACRES members contributed \$4,000, which the Kosciusko County Community Foundation matched with \$6,000. Thank you!

Kosciusko County Community Foundation
Kirk and Linda Swaidner
Carl and Jane Bock
Ethel McClelland
David Homan
Theodore Harris, Jr.
Alan and Peggy Grossnickle
JoAnn Martin
Mr. & Mrs. Terry Armstrong
Angela O'Neill

Richard Walker
Christopher Dunn
Anonymous Gift
William and Sally Smith
Rachel Sherman
Richard and Carolyn Hurley
David and Faith VanGilder
Gary and Sharon Tieben
Richard and Penny Phillips
James and Helen Haddock

SPECIAL thanks

Tom Stucky

pro-bono legal representation

Brad Greenlee

website mapping

Cheryl Noyer

donating paper birch planters for office

Karen Griggs

purchasing barn door hardware for the Dustin barn and donating wooden posts

Camp Lutherhaven's

Noble County Servants

work at Badger and Detering Preserves

Scout Troop 2839's Thomas Miller,

Hunter Martin, Tim Despair,

Robin Bork

working on boardwalk and bridge at Beechwood Preserve

Neil Anderson

donating picnic table for the office deck

Wild Birds Unlimited

donating birdseed

American Electric Power

for their support

Bob Chambers

donating hand tools

John Gross

programming for our new Land Management Database

Nate Simons

leading the 8th annual Wing Haven canoe trip

Terri Gorney, Barb Gorney, Carolyn Linsenmayer, Dave Reichlinger

staffing booth at the Gene-Stratton Porter Chautauqua Days

David Brumm

organizing files, building maintenance

Sherman Gray

various help at the Wabash County preserves

Heartland Restoration Services

discounted seed mix for the Stark Nature Preserve

Norm Cox, Bill Smith, Ted Heemstra

presenting to area groups on ACRES' behalf

Roberta Archer

helping with our Wine Tasting and Photography Exhibit mailing

Mary Scrogam and Diane Humphrey

for Annual Dinner support

M.E. Raker Foundation

support of the Annual Dinner lecture speaker Richard Louv

IPFW and the Rhinehart Music Center staff

assistance with the Annual Dinner

Kosciusko County REMC

grant for preserve road signs



by Shane Perfect

Jesse Raquel Colleen

Dylan Theodore

Jesse Roth,
Raquel Brandt,
Colleen Bishop,
Dylan Jones,
Theodore Pearson,
Dee Bishop,
Karen Griggs,
Annika VanGilder,
Cindy LeMaster
assisting with
collating the
Summer Quarterly

Constructed Wetland for Advanced Wastewater Treatment

by Ken Russell

When ACRES began converting the Dustin home into their office, they fell under different rules for 'On Site Wastewater Treatment' (septic systems). The requirements in Indiana, established by the Indiana State Department of Health (ISDH), provide different rules for residential systems than for commercial systems. If a system is not residential, then it falls under the commercial requirements.

ACRES could have gone with a 'conventional' septic system; a septic tank discharging to an absorption field. This would have meant a septic tank to collect solids, and an absorption field (or 'leach bed') to dispose of the liquid waste, allowing it to be absorbed into the top layer of soil where the soil bacteria help reduce the dissolved nutrients (typically carbon and nitrogen compounds).

Instead, ACRES chose to take this opportunity to create a learning center focused on advanced treatment using wetland plants in a constructed basin. This is considered advanced or secondary treatment because the constructed wetland cells follow the septic tanks. As before, the septic tank captures the solid components in the wastewater, but this time the dissolved constituents in the wastewater are considered nutrients for the wetland plants in the basin. After the plants absorb the nutrients, and a good share of the water during dry weather, the remaining wastewater - which now contains much less dissolved material, is discharged into an absorption field in the top layer of soil.

The wetland cells at the ACRES office were designed with the following features:

1) A dual cell basin design, required by ISDH for commercial systems, allows one cell to be taken out of service for maintenance; it also allows the flexibility of using one cell for low



flow conditions, or both cells for peak flow situations.

2) Each cell has a vinyl liner, to keep the wastewater 'IN' as well as to keep groundwater and any solids it might carry, 'OUT'. The water quality of advanced treatment systems is tested under ISDH rules; solids, even fine clay particles from groundwater intrusion would be seen as an indication of poor performance.

3) The inlet side of each cell has distribution manifold piping to evenly disperse the waste flow from the septic tanks. The outlet side of each cell has a collection manifold and an overflow structure to allow for adjustment of the water level. The wetland cells are filled with pea gravel, then planted with a variety of wetland plants (variety is important). The ACRES cells are planted with the following

species: River Bullrush, Blue Joint Grass, Porcupine Sedge, Prairie Cord Grass, Carex Emoryii and Hardstem Bullrush. The water level is maintained at about one inch below the top of the gravel.

In addition to the wetland plants, a film of 'biomass' (natural bacterial culture) grows on the surface of the pea gravel. This biomass also assists in treating the waste flow, and becomes the major treatment constituent in the fall and winter when the wetland plants become dormant.

Systems are sized with one square foot of surface area per gallon per day of average waste flow. In summer, when the wetland plants are in full growth, the uptake of water by the wetland plants might be great enough that there is zero discharge to the absorption field.

Ken Russell is the Professional Engineer who designed our system and an ACRES member.



photos by Shane Perfect

THE **BACK** PAGE

by Richard Louv

AN EXCERPT FROM *LAST CHILD IN THE WOODS*

One evening when my boys were younger, Matthew, then ten, looked at me from across a restaurant table and said quite seriously, "Dad, how come it was more fun when you were a kid?"

I asked what he meant.

"Well, you're always talking about your woods and tree houses, and how you used to ride that horse down near the swamp."

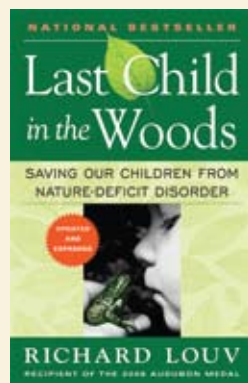
At first, I thought he was irritated with me. I had, in fact, been telling him what it was like to use string and pieces of liver to catch crawdads in a creek, something I'd be hard-pressed to find a child doing these days. Like many parents, I do tend to romanticize my own childhood – and, I fear, too readily discount my children's experiences of play and adventure. But my son was serious; he felt he had missed out on something important.

He was right. Americans around my age, baby boomers or older, enjoyed a kind of free, natural play that seems, in the era of kid pagers, instant messaging, and Nintendo, like a quaint artifact.

Within the space of a few decades, the way children understand and experience nature has

changed radically. The polarity of the relationship has reversed. Today, kids are aware of the global threats to the environment – but their physical contact, their intimacy with nature, is fading. That's exactly the opposite of how it was when I was a child.

As a boy, I was unaware that my woods were ecologically connected with any other forests. Nobody in the 1950s talked about acid rain or holes in the ozone layer or global warming. But I knew my woods and my fields; I knew every bend in the creek and dip in the beaten dirt paths. I wandered those woods even in my dreams. A kid today can likely tell you about the Amazon rain forest—but not about the last time he or she explored the woods in solitude, or lay in a field listening to the wind and watching the clouds move.



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