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News and Views from the Indiana Native Plant and Wildflower Society • Spring 2006

FIELD TRIP REPORT

Gillian Harris, INPAWS South Central Chapter

Plaster Creek Seeps Rich in Mosses and Lichens

On a brilliant morning last October, thirteen INPAWS members accompanied field trip coordinator Lynn Dennis and bryologist Bill McKnight to Plaster Creek Seeps in southern Indiana's Martin County.

One of only a handful of acid seep springs in the state, this Nature Conservancy Preserve is noted for harboring a number of plant species far south of their normal range. It is also known for the awesome sandstone cliffs that tower above the creek bottom forest.

On this day, Bill led us along the dry oak-hickory ridge above the cliffs, where he exuberantly pointed out the wide variety of mosses and lichens that carpet the forest glades there.

Bill McKnight shares his expertise, soon to be captured in a book on bryophytes (hornworts, liverworts, and mosses) of Illinois and Indiana. Photo by Gillian Harris.

Windswept moss (*Dicranum scoparium*) and pincushion moss (*Leucobryum albidum*) were among the most common, their verdant color and texture often accentuated by gray-green *Cladina* and *Cladonia* lichens, and by the creeping evergreen herb partridgeberry (*Mitchella repens*). Nestled in the cushions of moss were also numerous dark, glossy acorns that had fallen from the rock chestnut oaks (*Quercus prinus*) above us. Mosses, Bill explained, serve as an invaluable germination bed on the dry, sloping forest floor.

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INDIANA NATIVE PLANT
and Wildflower Society

INPAWS JOURNAL is published quarterly for members of the Indiana Native Plant and Wildflower Society. Material may be reprinted with the permission of the editor.

All are invited to submit articles, news items, and event postings of interest to our membership. Acceptance for publication is at the discretion of the editor. INPAWS welcomes opposing viewpoints.

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INPAWS Mission

To promote the appreciation, preservation, conservation, utilization and scientific study of the flora native to Indiana and to educate the public about the value, beauty, diversity, and environmental importance of indigenous vegetation.

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INPAWS is a not-for-profit 501(c)(3) organization open to the public. For membership information, visit www.inpaws.org.

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Among the Best

Karen Hartlep

Greetings Native Plant Enthusiasts!

Thank you all for the opportunity to serve as your president for the next two years. I'm excited to be working with such a talented, diverse, energetic group on a wide range of endeavors that enhance our lives and the health of our environment.

One of the interesting perks of my new position is receiving newsletters from native plant societies across the country—thanks to Janice Gustaferro and Ruth Ann Ingraham for setting up this exchange. It's been gratifying to realize that INPAWS' programs, activities, newsletter, annual conference, and plant sale rival the best of these other organizations. About the only thing we're lacking is horticultural humor in our newsletter ("Why did the botanist cross the road? To get to the other sedge.")

Old growth tuliptrees (*Liriodendron*) in North Carolina preserve. Photo ©C. Colston Burrell.

Our first Council Meeting has already taken place, and great things are in the works.

New plant sale co-chairs Melissa Moran and Tom Hohman are well on the way to coordinating a fabulous effort for Saturday, May 13, at the Indiana School for the Blind. Volunteering at this event was my introduction to INPAWS, and I highly recommend this frenetic, fun half-day of "work" with a bunch of like-minded people.

We also have a new Speaker's Bureau chair in Julie Beihold, who is actively scheduling for this spring and beyond.

Opportunities for INPAWS involvement abound. Please check the listing opposite or visit the website to make contact with our Committee Chairs. The members of our dedicated, hard-working core group of volunteers are eager to greet you!

I look forward to meeting and working with more of you over the next two years. Have a Great Spring.

Karen

"Plant-a-Million" Promotes Neighborhood Tree Planting

A new conservation project aims to educate the public about the value of trees and get one million trees planted in central Indiana over the next ten years.

Many newly constructed homes in the area are virtually bare of trees and shrubbery. They lack tree "canopy," though the America Forest Foundation recommends residential areas have about 60 percent canopy cover when the trees mature. The tree canopy cools the air around the house, reducing air-conditioning costs. It provides shade, improving the quality of life. Trees and shrubs add value, making homes worth 20 to 30 percent more than homes without trees.

Plant-a-Million is sponsored by Hoosier Heartland Resource Conservation and Development Council (RC&D), a unique organization providing a framework to develop partnerships and alliances among local citizens, governments, and technical experts to solve resource problems. Among the cooperating partners are the ten local Soil and Water Conservation Districts (SWCD), the Cooperative Extension Service Boards, and the County Commissioners.

Soil and Water Conservation District officers advise farmers on how to manage their natural resources, helping them reach production objectives while protecting the soil, water, plants, and animals. Through the Plant-a-Million project, they are now helping urban residents develop a similar plan for their backyards. They provide educational brochures and encourage neighbors to get together for a neighborhood effort.

For information, visit www.hhrcd.org/plantamillion.htm.

Plaster Creek Seeps, continued from page 1

When we weren't hunkered down examining bryophytes, we meandered through a wood of mature oak and hickory trees whose copious nuts crunched beneath our feet. In a more open area we came upon the delightfully named farkleberry (*Vaccinium arboreum*) which, unlike its congeners the blueberry and cranberry, grows treelike in size and habit and bears inedible fruit. Post oak (*Quercus stellata*) was also common, and we were awed by the blazing scarlet crown of a black gum (*Nyssa sylvatica*). Its bluish black drupes were profuse but so high in the tree that they were visible only through binoculars.

As Bill led us back along the ridge, sandstone outcroppings began to emerge, the stone layered and sculpted into intricate patterns. Some were bedecked with liverworts and ferns, including pleated liverwort (*Plagiochila porelloides*), lady fern (*Athyrium filix-femina*), and blunt-lobed woodsia (*Woodsia obtusa*). These sandstone shelves were but a hint of what lay beneath us down in the Plaster Creek bottoms, and incentive, all agreed**,** to revisit the geologically and botanically unique seeps another day.

Other mosses encountered on the walk were:

Woodland bald moss (*Atrichum angustatum*)
Tiny broom moss (*Dicranum montanum)*
Feather moss (*Fissidens* sp.)
Rock moss (*Grimmia* sp.)
Hoary moss (*Hedwigia ciliata)*
Woodland hair cap moss (*Polytrichum ohioense)*
Fern moss *(Thuidium delicatulum*)
Also the liverwort *Lophocolea heterophylla* (no common name yet)

Cladina lichens are fruticose (bushy in appearance) and collectively known as reindeer mosses. *Cladonia* lichens have a squamulose (scale-shaped) base from which an upright fruiting body forms. The most familiar *Cladonias* are British soldiers (*C. cristatella*) and pixie-cups (*C. chlorophaea*).

Partridgeberry creeps through a carpet of moss and lichen on the forest floor above Plaster Creek. Photo by Gillian Harris.

Annals of a Duneland Orchid, Part 2

Barbara E. Plampin, Ph.D.
Shirley Heinze Land Trust

Last issue, we followed the tribulations of a duneland orchid as members of its dense colonies faced annihilation by bulldozer or were ground to dust by creators of a new trail. The saga continues…. –Ed.

March, 2005. Our Pauline, downy rattlesnake plantain orchid (*Goodyera pubescens,* or DRPO), is again imperiled: The commuter station parking lot is extending still farther into its home. Fortunately, the railroad invites Indiana Dunes National Lakeshore (IDNL) to rescue plants—ASAP, construction imminent.

Early Summer, 2005. IDNL searchers are dismayed at their failure to find even one DRPO. No construction yet.

Mid-Summer, 2005. IDNL botanist allows that his crew mightn't have gone far enough in seeking the DRPO. Fearing construction wipeout, he nevertheless sends biotechnician Emily Palmquist with volunteers Myrna Newgent and me on a search.

August, 2005. Sharp-eyed Myrna, parting shrubbery with her magic walking stick, finds a colony of 100. Throughout the morning, cries of "More! More! More!" rend the air. Approximately 200 orchids are flagged by noon.

Later That Day. IDNL botanist is excited, will supervise transplant unless bulldozer intervenes. Where to put DRPO? I suggest orchids could join friends and relations near DRPO found elsewhere in 1995.

Later That Week. Emily and I reconnoiter sites.

Early September, 2005. Bulldozer still absent. IDNL crew of 11 digs orchids with spades and "installs" (Parkese for *transplants*) in suggested spots.

September 13, 2005. I'm taken to see the transplants. I meet biotechnician watering with backpack sprayer. One hundred seventy-five orchids divided into 25 "units" are scattered among three sites "where plants have been known to grow historically" in Park jargon. All units are provided with numbered stakes for monitoring. Sites are GPS'd. Only three plants show wilt from the move. Hooray! Will plants survive the winter?

Question: How to account for 25 or so missing orchids? We'd flagged 200; however, botanists can differ about what constitutes a single orchid plant. If a DRPO did get left behind, I hope the folklore associated with DRPO's cousin lesser rattlesnake plantain (*Goodyera repens*), unknown in Indiana, applies: People who step (drive?) on it become disoriented and lose their way.

November 23, 2005. Local paper reports 116 new parking places in use at the commuter station. Moreover, "additional land is available, if needed." The "additional land" has soil probably too heavily saturated for DRPO, but the curious little gentian cousin screwstem (*Bartonia virginica*) has been seen here....

A screwstem saga in the making? The author laments that a vacation and health problems made her less attentive to the orchids' plight than was desirable. But she also wonders why IDNL did not take action sooner. –Ed.

Goodyera pubescens in N.L. Britton and A. Brown. *An Illustrated Flora of the Northern United States and Canada,* 1913.

Some Books

Erichsen-Brown, C. *Medicinal and Other Uses of North American Plants: A Historical Survey with Special Reference to the Eastern Indian Tribes.* Dover, 1989.

Homoya, M. *Orchids of Indiana.* Indiana Academy of Science, 1993.

Swink, F., and G. Wilhelm. *Plants of the Chicago Region.* 4th edition. Indiana Academy of Science, 1994.

Yatskievych, K. *Field Guide to Indiana Wildflowers.* Indiana University Press, 2000.

Finding Plants on the Web

Some helpful hints from INPAWS webmaster Marcia Moore:

Today's sophisticated search engines (Google, Yahoo, Firefox, etc.) do not require complicated word strings to search for a site. In the past, when we wanted to research a card catalog or older computerized catalogs, we would look for "native plants, Midwest." Now we can simply enter "Midwest native plants"—no need for commas or other punctuation—and a list of sites will be revealed. This is true of any search engine on any Web browser.

The bottom line: Keep your searches simple and concise and you will easily locate any information on the Web.

Apiaceae = Umbelliferae = Carrot Family

Worldwide, the carrot family boasts 275 genera and 2,850 species. Indiana has 28 genera and 37 species.

Characteristics

Aromatic biennial or perennial herbs with hollow, furrowed stems. Leaves are compound and alternate with sheathing bases. Inflorescence is an umbel, with flowers opening from outer edge to center. Flowers with 5 parts, often with yellow or white petals. Stamens alternate with the petals.

Fruit is a schizocarp, a dry fruit that splits down the center to yield two 1-seeded parts.

Economic Importance

Parsnips, parsley, carrots, celery. Seeds with aromatic oils: caraway seeds, dill, coriander, cumin, anise, fennel, chervil.

Some Apiaceae in Indiana

Native

One of our earliest flowering plants:

Harbinger-of-spring, *Erigenia bulbosa*

Common summer bloomers in the woods with mostly inconspicuous flowers:

Aniseroot, *Osmorhiza longistylis*
Black-snakeroots, *Sanicula* spp.
Honewort, *Cryptotaenia canadensis*
Sweet-cicily, *Osmorhiza claytonii*

A few prairie plants:

Golden alexanders, *Zizia aurea*
Rattlesnake master, *Eryngium yuccifolium*

Marshes and moist woods:

Cow parsnip, *Heracleum sphondylium*
Water hemlock, *Cicuta maculata*
Poison hemlock, *Conium maculatum*
Purple-stemmed angelica, *Angelica atropurpurea*
Water parsnip, *Sium suave*

Non-native

Queen Anne's lace, *Daucus carota*. This is the distinctive wild carrot, a roadside and old field weed. Belongs to the same species as the carrot of commerce.

Wild parsnip, *Pastinaca sativa*. Avoid this plant! It is a biennial most easily identified by its flowers, but it also has distinctive leaves when you know what to look for. Many years ago INPAWS Vice President Ellen Jacquart and I were measuring royal catchfly (*Silene regia*) plants for a demographic study. These prairie plants persist in Indiana in some roadside ditches. Ellen and I broke out with a horrific rash on our arms. Turns out wild parsnip was also in the ditches. It can cause a contact dermatitis similar to poison ivy but without the itch. Weepy blisters appear after exposure to the plant, triggered by sunlight. I've read that beggars used to rub themselves with the plant in its native Europe to look pathetic. I now recognize the leaves.

Illustrations from J. Glimn-Lacy & P.B. Kaufman, *Botany Illustrated*. Chapman & Hall, 1984.

Reviewed by Michael A. Homoya

Plant Life of Kentucky

An Illustrated Guide to the Vascular Flora

By Ronald L. Jones. 2005.
The University Press of Kentucky.
856 pages, 7 x 10", Cloth. $75.00.
ISBN 0-8131-2331-3.

The Plant Life of Kentucky is described as the first comprehensive guide to the ferns, flowering plants, and woody plants of the state, and indeed it fulfills that description, and much more. The author clearly has a passion for the flora and a desire to instill it in others. The 105-page introduction, full of fascinating and useful information, could almost stand alone as a separate publication. The state of Kentucky has a rich history of botanical exploration, and Jones follows it from the Antebellum Period (prior to 1860) to the present day. I found the biography of Charles Short (1794-1863) especially interesting, as he was the discoverer (and eponym) of the federally endangered Short's goldenrod (*Solidago shortii*), a plant we just recently discovered in Indiana.

Most of Kentucky's approximately 2,600 taxa of vascular plants are addressed in the text with scientific name, common name, habitat, distribution in the state, a statement of abundance, and assigned wetland category. They are arranged in the text alphabetically by family, and then alphabetically by genus and species. I find this arrangement to be especially helpful because it allows for quick look-up but still places plants in a family context to show genetic relationships.

Jones accepts all species for which herbarium records are known to him. Also included are those based on reliable literature references and a "to be expected" category. Sometimes this gets confusing. For instance, Jones cites the occurrence of the bristly clubmoss (*Lycopodium annotinum*) for Kentucky—using a report by Wagner and Beitel (1993) in Vol. 2 of *Flora of North America*—then goes on to state that its current status is unclear but is to be expected in the state. Why is the status unclear? Did Jones not consider the report reliable, did he not find a specimen, or did he determine that the specimen was misidentified? Similarly, Jones states that a species of mermaidweed (*Proserpinaca pectinata*) is to be expected in Kentucky, but he fails to mention the report of it in the *Aquatic and Wetland Plants of Kentucky* by Beal and Thieret (1986). Specific critical analysis would have been helpful.

A very nice feature of the book is its illustrations. Almost all the species treated are illustrated with line drawings borrowed from the 1913 Britton and Brown *Illustrated Flora*. While several leave much to be desired—many are quite stylized—they are nonetheless valuable in species identification. Not all species are illustrated; just a few extra illustrations would round out the book and perhaps avoid some identification problems. For example, Jones offers an illustration of the blunt-lobed grapefern (*Botrychium oneidense*), an endangered species in Kentucky, but not one of the sparse-lobed grapefern (*B. biternatum*), a widespread species. The latter is similar in appearance to the blunt-lobed grapefern and difficult to distinguish from it (and from the common form of *B. dissectum*). While excellent keys are provided for identification of these (and all species) in the book, illustrations of both would have provided a much clearer depiction of the differences (and probably result in fewer false alarms about the discovery of the endangered species).

Species range within the state is given by physiographic region, namely the Mississippian Embayment, Interior Low Plateaus, and Appalachian Plateaus. While this is good science, it's not always so useful in understanding the actual range of a species. For example, the Interior Low Plateaus make up a huge physiographic region, within Kentucky occurring northeast to Ohio, south to Tennessee, and westward to Illinois. Although Jones indicates "widespread" for some species within a region, he commonly omits any annotation for the uncommon or local ones, leaving this reader desiring more precise location information.

Following the heading of most plant families is a section entitled Family Notes. In most cases I found the information there of interest, but much of it is general in nature and can be found in other sources. I would have preferred more commentary on the species as they occur in Kentucky, such as detailed habitat information and species associates, collecting history, detailed range, etc. I especially thought the toxicological information could have been omitted to free up page space.

Despite its limitations, the book is one well worth owning, especially for those Hoosiers who live in and/or botanize in southern Indiana. Being a "plant hunter," I think one of the more useful aspects of the book is for generating a wish list of expected species that might occur in our state. Although the book doesn't have an atlas, it is nonetheless quite helpful in providing clues about species to look for. And even though it is a technical work, I would recommend it to any and all interested in developing a better understanding and appreciation of our wonderful plant life.

Mike Homoya is a botanist/ecologist with the Indiana DNR Division of Nature Preserves and author of Orchids of Indiana *(IU Press, 1993).*

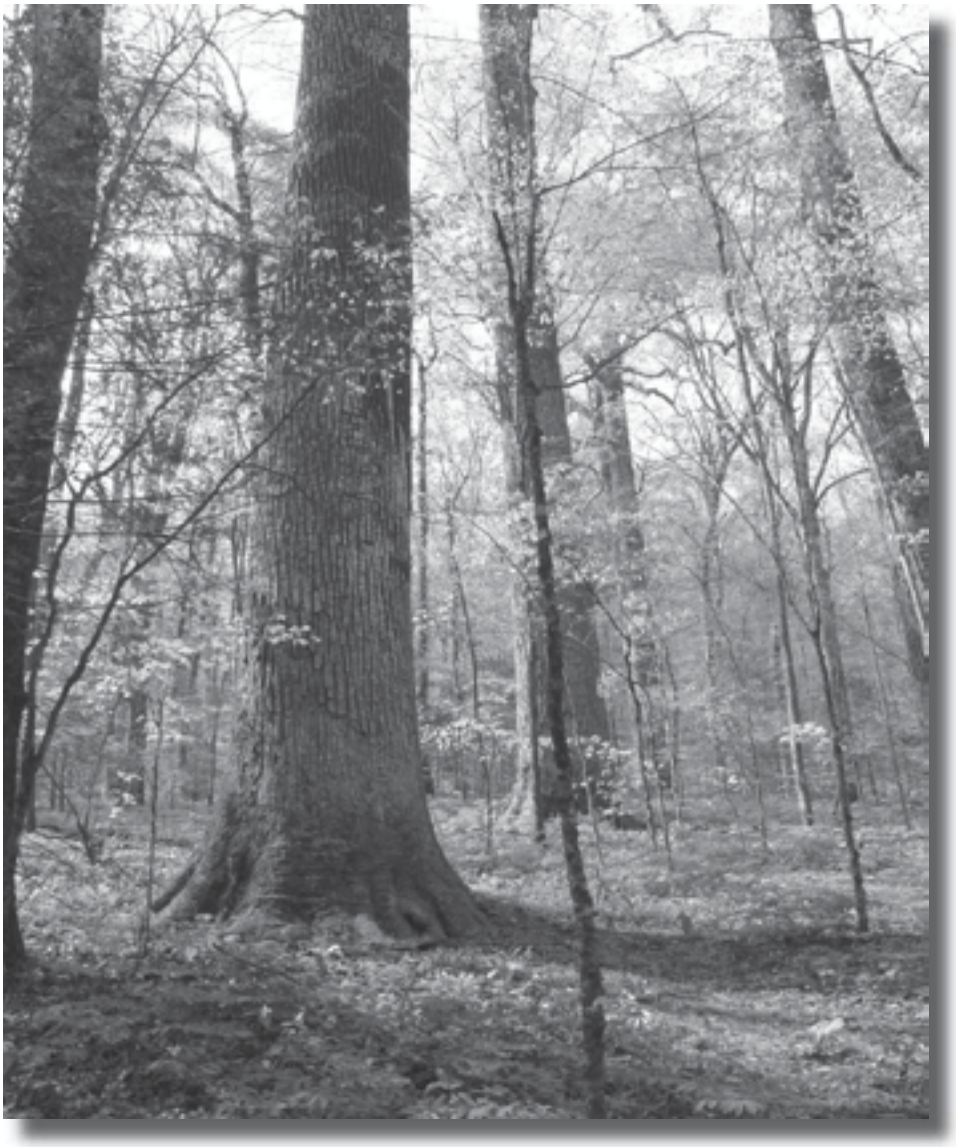
A Trillium Odyssey

Hilary Cox
Leescapes Garden Designs

Trilliums really only appeared on my radar screen when we moved to Indiana in 1989, and it was Bill Brink, a founding member of INPAWS, who introduced me to them.

Bill kept telling me about some woodland sites that were about to be developed and these plants needed rescuing. This was prior to INPAWS and rescue parties, and I regret now that I didn't take him up on his information, or I might have had a much more mature colony of trilliums than I do.

For those of you unfamiliar with trilliums, they are an unusual and, in some cases, rare plant in the lily family. Now given their own family, *Trilliaceae*, by some botanists, their name means "three lily." Trilliums are one of our more underrated spring-flowering woodland wildflowers and, because of their tolerance for dry shade, are yet another plant to add to the gardener's shade garden palette. We have at least seven species in Indiana of which the most familiar are probably *Trillium sessile* (toadshade) and *Trillium grandiflorum* (large flowered or great white trillium). The genus is easy to identify by the fact that it has three of everything—three leaves, three petals, three sepals, and a three-part ovary—although they only have one flower per plant.



Some of the species are easy to identify, too, such as the aforementioned local toadshade with its deep red flowers and the great white trillium with its large white ones. But there are some, especially the naturally occurring hybrids, which can take a good deal of expertise to identify, as I was about to find out last April on a trillium odyssey in four states!

Rich and Dee Ann Peine and I had already had a trillium-rich journey en route to North Carolina, encountering our first *Trillium luteum* (yellow wakerobin) by a charming wayside creek in north central Kentucky. We had no trouble identifying it: It had the requisite "three of everything," was larger than our Indiana trilliums, and had pure yellow flowers, but the deciding factor was the lemon Pledge scent! This was our first experience of seeing trilliums in numbers…but by no means our last.

Aged tuliptrees in a carpet of trillium at Joyce Kilmer Memorial Forest. This is how all the North American forest used to look. Photo ©C. Colston Burrell.

By the time we met with Cole Burrell and Bruce Ellsworth in the Snowbird Lodge at the southwest tip of North Carolina, we had already taken a turn around the trail that leads up into, and through, the nearby Joyce Kilmer Memorial Forest. We had wandered along in this tiny piece of virgin forest in awe at the sheer size of the trees and in wonder at the carpets of wildflowers. The understory magnolias were incredible, alongside rhododendrons the size of small trees (this is how I think of them from my childhood in England—not the scrawny specimens we grow here in Indiana, if we're brave enough to even attempt them in our alkaline soil!). This was how all the North American forest used to look.

But this was no time for nostalgia. We were here looking for trilliums, and the first one we saw by the trailside was the coveted *Trillium undulatum* or painted trillium, which is extremely site-specific, growing only in cool, acidic woodlands. We saw just two of this shy beauty, one in full flower, the other in bud, and we ooh-ed and aah-ed and took multiple pictures. Well, it *is* very pretty, too….

Elevation and soil conditions both have their impact on the various trillium species, and as we climbed higher we started seeing different ones, renewing our acquaintance with *Trillium luteum* and adding carpets of *Trillium grandiflorum* and scattered *Trillium erectum* to our list. The latter quickly became one of my favorites! With the sun shining low behind them, the alternating red petals and green sepals looked like a stained-glass window in miniature. Imagine several strewn through the undergrowth like shining jewels….

The author in hot pursuit of a closeup. Photo by Dee Ann Peine.

***Trillium luteum* (yellow) side by side with a hybrid of *T. luteum* and *T. cuneatum.* Photo by Dee Ann Peine.**

The following morning we made a second pass through the forest, this time with Cole and Bruce as our plant and bird experts, respectively. We spent a lot more time looking at *all* the spring wildflowers including a carpet of *Panax trifolius* (dwarf ginseng), plus identifying spring migratory birds. I have to say that having your own live "pocket field guides" with you on such a hike beats books hollow! Cole is just phenomenal in the plant field (as is our own Kevin Tungesvick, who joined us on our later expeditions in Indiana); and Bruce is equally expert when it comes to birds and can identify every bird call, whether he can see the bird or not! I was in my own personal heaven the whole trip. Field guides just don't give you the same hands-on (or noses-on!) experience.

That afternoon we headed off to Tennessee to spend the night at the home of Rich Peine's brother. Our road led us through magnificent scenery in the Appalachians and Smokies, and we stopped frequently to marvel at the carpets of wildflowers along the roadside. On one bank we spent

At Albright Grove we found showy orchid (*Galearis spectabilis*) along with tasty morels. Photo by Dee Ann Peine.

quite a while sniffing the various trilliums and their intergrades—naturally occurring hybrids—to see which ones smelled the worst! These were not even stinking Benjamin, but *Trillium simile* (jeweled wakerobin) which, to quote Gene Bush, "is fragrant and is often confused with other forms and species as it readily crosses with *T. vaseyi* or *T. erectum* in the wild." I'm certain other motorists passing by were wondering what these five crazy people were doing on their hands and knees at the side of the road, but we were having fun….

The following day we headed for Albright Grove, again stopping roadside to photograph and admire the wildflowers on the way. Albright doesn't have the same rich woodland floor as Joyce Kilmer, although we saw our first orchids here (*Galearis spectabilis*). We also found morels, which the lady running the Bed and Breakfast in Milltown, Indiana, cooked for our breakfast the next day! Suffice it to say that Albright Grove's trees more than made up for the lack of undergrowth. Think of the most awesome cathedral you have ever entered, imagine the sense of age and the deep peace which comes with it…. Well, these trees are a far cry above that and created, for me, indescribable feelings. The only other people we met on this 10-mile hike were the rangers responsible for conserving the Grove, and I thanked them for the job they were doing.

The final leg of our trillium odyssey was to be in the woodlands surrounding Indianapolis. As I mentioned earlier, Kevin Tungesvick joined us here as leader of the pack, taking us first to Turkey Run State Park and then to the Big Walnut Nature Preserve, 2,967 acres of land protected by the Nature Conservancy and the DNR's Division of Nature Preserves. We saw many *Trillium sessile* (toadshade), *T. grandiflorum* (large flowered) and *T. recurvatum* (bloody butcher) among a proliferation of other woodland herbs. However, after nearly a week of hiking in four states, up and down mountains, through various forests, on all kinds of trails somewhere between moderate and rough, I was tiring a little so skipped out on Big Walnut. I wanted to preserve my energies for our next and final day in north central Indiana, again accompanied by Kevin.

Up until now the weather had been unbelievably perfect: blue April skies, the right touch of warmth in the sun…. Now we needed the approaching storms to hold off for just one more day!

Kevin took us to Yuhas Woods, a piece of forest that had just been acquired by the Redtail Conservancy Land Trust. They hadn't really had the chance to assess the diversity and purity of the property, and we were in for an unexpected treat!

There were trilliums! Trilliums upon trilliums upon trilliums!! Cole was going crazy, trying to assess which pictures taken on our previous jaunts he could possibly do without to fit these in his digital camera. Toadshade, large flowered trilliums in carpets, more than we had seen even in North Carolina; and to top them all, *Trillium flexipes*, the nodding trillium. At first they were the typical white ones, scattered along the pathside, but soon we saw something different. We saw red ones among the white ones. These were *forma walpolei,* a unique color of smoky cerise. And then suddenly we were looking at something very unusual: Natural crossing had occurred, and the intergrades were…pink!

On our final day, right here in our own Indiana woodlands, we had the most trillium-rich experience of the whole excursion—and the threatened tornadoes held off until we made it home! Trilliums are now firmly established on *my* radar screen. I hope they will become more than a "blip" on yours too!

Visit Yuhas Woods yourself on April 29 with Kevin Tungesvick! See INPAWS Programs, page 15.

2006 Plant Sale and Auction

You don't have enough native plants in your garden!
You know you need more!

Why not satisfy your garden needs and help INPAWS at the same time?
Come to the INPAWS Plant Sale and Auction.

This year's sale will be held **Saturday, May 13**, at the Indiana School for the Blind, 7725 N. College Avenue, in Indianapolis. The sale starts at 10:00 a.m. Saturday morning, and the auction at 11:00 a.m.

If you have never attended the sale before, you are missing out on a rare opportunity. It's a great way to get unusual native plants for your garden, and the auction is tremendous fun even if you don't buy anything. Available will be woodland and prairie plants, native grasses, trees and shrubs, and maybe a few aquatic plants. We will also have for sale a nice selection of books related to native plants and wildflowers.

Volunteers

Volunteers are needed to help with setup on Friday night, and with the sale itself on Saturday. Your skills can be used pricing plants for the sale, helping customers carry their purchases to their cars, and many other related tasks. Anyone interested in helping should contact either Melissa Moran (morandan@iquest.net) or Tom Hohman (hohmantr@aol.com).

Donations

All the plants in the sale are donated by members and businesses or have been obtained in an INPAWS plant rescue. **We need your plants.** The nice thing about many native plants is that they readily self-seed and spread in the garden. This means that you probably have extra plants that you don't need.

Plant donations can be brought to the School for the Blind on **Friday night from 5:00 to 8:00 p.m.** Signs will direct you to the location of the sale. Please pot any plants that you are going to donate several weeks prior to the sale. Doing so will enable them to better withstand the stress of transportation and the sale itself. Labeling of the plants prior to donation is a big help, especially if it is an uncommon plant.

Business Donors

A number of businesses support INPAWS by donating items for the sale. We appreciate and want to give particular recognition to those nurseries and other businesses whose donations have helped make previous sales such a huge success. Businesses who donated to the 2005 Plant Sale included:

- Allisonville Nursery
- J. F. New Nursery
- Mark M. Holeman, Inc.
- Spence Restoration Nursery
- Wild Birds Unlimited
- Munchkin Nursery
- Woody Warehouse
- Altum's Nursery

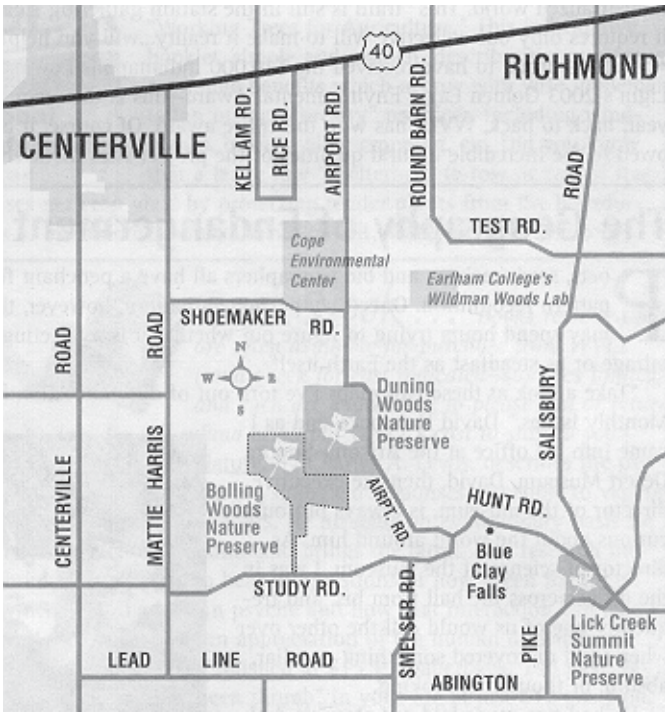
Michael D. Hoff, Treasurer
Whitewater Valley Land Trust, Inc.

Whitewater Valley Grant Helps Secure Nature Preserve

In fall 2005, the INPAWS Board of Directors authorized an award of $3,000 toward the purchase of Duning Woods by the Whitewater Valley Land Trust, Inc. As we went to press, news was received of the official closing on that property. –Ed.

Wayne County's Whitewater Valley has been the focus of major fundraising efforts to preserve a rare unspoiled natural area: the two-mile "corridor" linking the Cope Environmental Center to the east fork of the Whitewater River. Established in 2000, the Whitewater Valley Land Trust has targeted four properties: Neff Woods, Duning Woods, Bolling Woods, and Lick Creek Summit. All four sites are already approved to become Indiana DNR Dedicated State Nature Preserves.

Exceeding 315 acres together, these four heavily wooded tracts of steep "ravine forest" will provide a significant nucleus for a much larger preserved natural area. Neff Woods and adjoining Duning Woods (185 acres total) are located in Center Township. Earlham College's 40-acre Wildman Woods outdoor biology "lab," 6-acre Ferrell Woods, and the 101-acre grounds of the Cope Environmental Center are nearby. The corridor also includes the beautiful Blue Clay Falls, one of only two exposed sources in the world for a certain type of fossil.

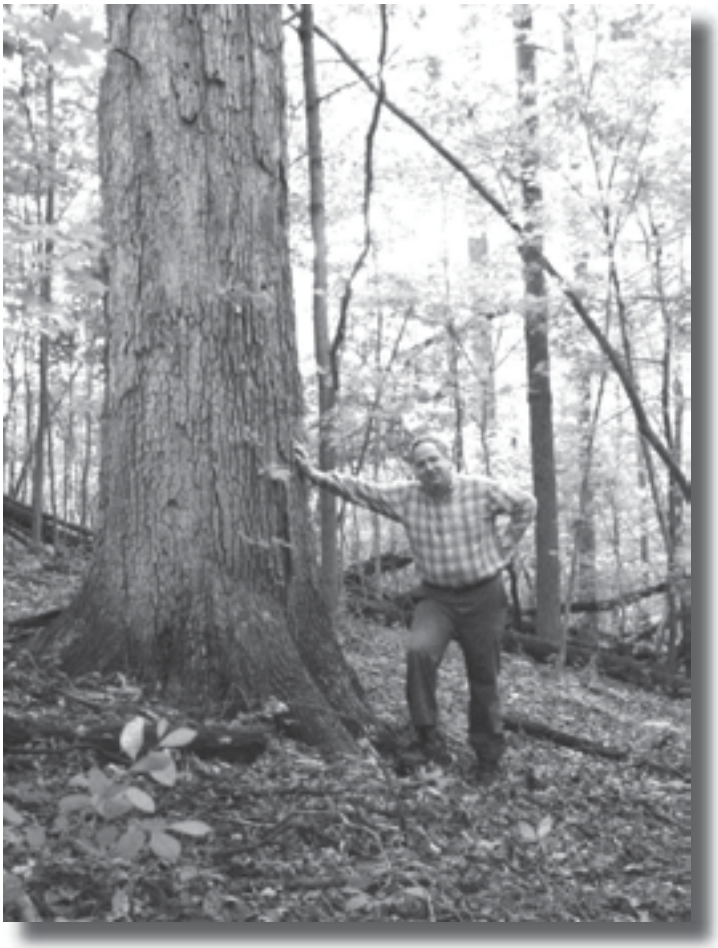


The southern third of Wayne County, especially its southeast portion, is notable for the rapid transition from Tipton Till Plain topography, which characterizes the terrain between Richmond and Indianapolis (and westward to Illinois), to Switzerland Hills topography, which extends from Richmond south to the Ohio River.

Securing these sites is a critically worth endeavor in its own right owing to their high quality, but together they establish a mutually reinforcing buffer for the core ravines, their flora and fauna. The Neff/Duning/Bolling/Lick Creek Summit complex will play a crucial role in the conservation of numerous species and provide great educational opportunities. Recreational hiking will be permitted to the extent deemed prudent and nonthreatening to that native remnant diversity; terrific hiking trails taking such concerns into consideration have already been established in Duning Woods and Lick Creek Summit.

Neff Woods and Duning Woods have great strategic value for future natural and scenic area preservation in their immediate vicinity, as virtually all large landowners in that 2-1/2 square mile block are absentee and, amazingly, are favorably disposed to their properties' preservation if someone else will take the lead.

Lick Creek Summit is joined to Neff, Bolling, and Duning Woods by the beautiful and charming Lick Creek and Hunt Road corridor, which is overarched with intertwined forest canopy as both road and stream follow within yards of each other for most of Hunt Road's length. Where Lick Creek swings away at right angles to Hunt Road, the road just there rises higher so that a refreshing view is presented of the series of random and irregular limestone "steps" in the creekbed with the usually crystal clear waters of Lick Creek splashing over them. These are the Blue Clay Falls, one of the most popular and surprisingly unspoiled natural area scenic views remaining in the upper Whitewater Valley, long known to the region's children "of every age" as a delightful place to go wading on a hot summer afternoon. Lick Creek flows year 'round; it originates in the runoff from and is also spring-fed from the Tipton Till Plan topography just to its north. The heavily wooded ravine forest through which it runs recharges



The author poses with an aged white oak in Duning Woods.

it continuously. Where it leaves Duning Woods, its gravel bottom changes to limestone bedrock, creating its numerous multi-step falls as it bisects hills and ravine bottoms on its way to the Whitewater River three-quarter miles distant.

The Lick Creek Summit project, completed in August 2005, has focused renewed and appreciable attention to this beautiful Hoosier natural area. Acquisition of Bolling Woods added greater momentum, advancing further the distinct possibility of a very substantial "conservation block" in the no-so-distant future. Adding now Duning Woods and Neff Woods enhances and consolidates the public's enthusiasm for this "work in progress."

Longtime residents recall this entire area as "Lick Creek Hills," a monicker we long to reincarnate as describing an on-the-ground fact and a wonderful preserved natural remnant area. The generous grant from INPAWS has moved that dream a big step closer to reality, not just with those needed dollars but also with the encouragement it has given, and by demonstrating that the Lick Creek Hills are a Hoosier treasure, not just a Whitewater Valley or Wayne County special place.

For more about the Whitewater Valley Land Trust, Inc., visit www.whitewatervalleylandtrust.org.

INVASIVES

New Program Certifies Forage and Mulch Free of Noxious Weed Seeds

A niche hay and straw market promises higher profits for Indiana growers if they can leave one ingredient out of each bale: invasive weeds.

The Indiana Noxious Weed Seed-Free Forage and Mulch Certification Program offers producers an opportunity to enter a market heretofore available only to growers in western states. Indiana is one of the first states east of the Mississippi with such a certification program. Developed in cooperation with Purdue University, the program is administered by the Indiana Crop Improvement Association (ICIA).

Demand for noxious weed seed-free hay and straw is growing, said Keith Johnson, Purdue Extension forage specialist. He has had calls from people who want to ride park trails and need forage that won't create horse manure with these noxious weeds. Interest also comes from contractors wanting weed-free straw for erosion control in highway construction.

For hay and straw to be certified "noxious weed seed-free," the pre-harvested crop—and areas where it will be stored—must not contain the seed of 67 invasive weeds. The noxious weed/undesirable plant list is a who's who of problematic vegetation, including Canada thistle, musk thistle, wild garlic, wild onion, cocklebur, johnsongrass, giant foxtail, buckhorn, pennycress, field pepperweed, and eastern black nightshade.

Certification inspections are conducted by ICIA personnel ten days before a crop is harvested. ICIA determines whether any noxious weeds have reached the flowering stage where seed maturation has occurred. If so, those fields or areas will not be certified.

To become a certified noxious weed seed-free producer, growers must pay a $500 lifetime ICIA membership fee and nominal application and inspection fees. But the return on investment can be worth the added expense. Depending on the market, a noxious weed-free bale of straw might bring $1-2 more per bale. Noxious weed-free hay sold by the national parks is said to bring twice the typical value of hay sold at Indiana markets.

For more information about this certification program, visit www.indianacrop.org/weedfreeprogram.htm or contact the ICIA toll-free at 866-899-2518 or icia@indianacrop.org.

F I E L D N O T E S

Did You Renew?

Just a reminder that it's time to renew your INPAWS membership for 2006 if you have not already done so.

Check the mailing label on the cover of this issue to see the year through which your dues are paid. You may print a renewal form from the INPAWS website, www.inpaws.org, or contact Mark Outcalt, Membership Chair, at 317-257-3574 or maryhel@earthlink.net.

INPAWS membership is your continuing link to programs and people working to conserve and raise awareness of Indiana's exceptional native flora. Renew now and be part of the action.

Conservation on Your Mind?

Even if you don't hunt and fish, you can help Indiana qualify for matching federal conservation dollars by purchasing hunting and fishing licenses. Every little bit helps!

Purchase your license at www.in.gov/dnr/fishwild/licenses/buylic.htm.

Spring beauty (*Claytonia virginica*). In N.L.Britton and A. Brown. *Illustrated Flora of the Northern States and Canada*, 1913.

Call for Photos

INPAWS webmaster Marcia Moore is collecting photos of past INPAWS field trips and events for a web-based photo archive.

If you have photos you'd like to share with the membership, email them to mmoore@butler.edu or, if you have lots, send a CD or disk to Marcia at Friesner Herbarium, Butler University, 4600 Sunset Avenue, Indianapolis, IN 46208.

Wildflowers That Flourish Under Walnuts

While looking through an old gardening magazine, INPAWS West Central chapter president Chris Brewster came across an article about plants that can survive under black walnut trees despite the juglone produced by the trees. She sorted out the Indiana wildflowers from the list and here they are:

Bergamot, *Monarda fistulosa*

Bloodroot, *Sanguinaria canadensis*

Ginger, *Asarum canadense*

Herb-Robert, *Geranium robertianum*

Jacob's Ladder, *Polemonium reptans*

Jerusalem Artichoke, *Helianthus tuberosus*

Merrybells (Large-flowered Bellwort), *Uvularia grandiflora*

Solomon's Seal, *Polygonatum commutatum*

Spiderwort, *Tradescantia virginiana*

Trillium, Large-flowered, *Trillium grandiflorum*

Trillium, Nodding, *Trillium sororia*

Violet, Canada, *Viola canadensis*

Violet, Common blue, *Viola sororia*

Virginia Waterleaf, *Hydropohyllum virginianum*

Help Promote INPAWS!

Even though INPAWS has existed for thirteen years, too many nature-oriented Indianans are still not familiar with our organization. One of the best ways to get the word out and attract new members is to participate in local nature- and gardening-related events.

In the past two months, your Education Committee set up INPAWS exhibits at the Governor's Conservation Conference at the Indiana Statehouse (February 20) and at the Indiana Flower and Patio Show (March 11-19).

Two more Indianapolis events coming up this month are:

Indiana Earth Day (April 22) in downtown Indianapolis

Orchard in Bloom (April 28-30) at Holliday Park

We need volunteers to staff our booth, tell folks about INPAWS, and supply information on invasives and native plant gardening using our handouts. You'll get free admission to these events, and the satisfaction of knowing that INPAWS will become a bit more familiar to concerned folks in our state.

To help out with one of these events—or set up an exhibit at a local event in your corner of Indiana—contact Dan or Sophia Anderson at 317-849-3105 or email danjand1@sbcglobal.net.

Another great way to promote INPAWS is to present a talk at your local library or garden club. Scripted slide shows on a variety of topics are ready for your use. Contact Julie Beihold at 317-852-8640 or iepdb@iquest.net.

Scratch That Writing Itch

INPAWS Journal welcomes your submissions. Deadline for the summer issue is May 23 for July 1 release. Direct questions or suggestions to the editor at wwford@comcast.net or 317-334-1932.

Rain gauge volunteers wanted. Purdue Agricultural Communication photo by Tom Campbell.

Every Drop Counts

The Community Collaborative Rain, Hail and Snow network is a unique, non-profit, community-based, high-density network of volunteers of all ages and backgrounds who take daily measurements of rain and snow in their backyards.

Thanks to a partnership between the Indiana State Climate Office and the National Weather Service-Indianapolis, CoCoRaHS is coming to Indiana!

With the great diversity of landscape and weather patterns in the state, accurate precipitation measurements are hard to achieve and forecast. CoCoRaHS will attempt to increase the number of collection points from 1-2 per county to 20-30.

With this detailed information, scientists and forecasters can provide more accurate information to all, especially those who depend on precipitation for their livelihood.

The network needs volunteers willing to spend a few minutes each day measuring and reporting precipitation.

Because reports must be as accurate as possible, local training sessions teach new observers how to install their instruments and accurately measure and record precipitation.

For more information or to volunteer, contact one of our Indiana CoCoRaHS coordinators:

Logan Johnson, National Weather Service, at logan.johnson@noaa.gov.

Bryn Takle, Indiana State Climate Office, at CoCoRaHS@purdue.edu.

Information is also available at these websites:

www.cocorahs.org
www.iclimate.org
www.crh.noaa.gov/ind

21st Annual Spring Wildflower Foray April 28-30

Monitoring habitat change over time sounds like serious business, but the Wildflower Foray makes it fun, as veterans of this wildflower count share their wisdom and experience and challenge fellow hikers to discover new species in bloom.

Hikes and programs take place in Brown and Monroe Counties, and some require preregistration.

To request a brochure, contact the T.C. Steele State Historic Site at 812-988-2785 or tcsteele@bloomington.in.us.

INPAWS PROGRAMS

April 15, 9 a.m.
Work Day at Portland Arch

Led by Tom Swinford, Division of Nature Preserves, and Chad Bladow, The Nature Conservancy.

Come help create an entire savanna! Trees to plant and beautiful wildflowers to see in this Fountain County nature preserve in western Indiana. The future oak grove will expand habitat for rare and unusual plants of the area.

April 29, 9 a.m.
Trilliums of Yuhas Woods

Led by Kevin Tungesvick, Spence Nursery

Hike through the trillium-rich forest Hilary Cox encountered at the end of her four-state odyssey (page 8). Located in Randolph County in east central Indiana, the site boasts a unique population of *Trillium flexipes*.

May 3, 1–3 p.m.
Shooting Stars and More

Led by Jim Peterson, Manager, Clegg Garden

Hike Clegg Garden in West Lafayette with INPAWS' West Central Chapter. According to Kay Yatskievych, the best shooting star viewing in the state.

TBA
Lupine and Paccoon in NW Indiana

Hike Prairie Border or Ober Savanna in late May or early June. Watch for announcement.

Watch your e-mail for details of these events. Contact Lynn Dennis, ldennis@tnc.org or 317-490-3010 for more information and directions, or visit www.inpaws.org.

No Poem as Lovely

Wendy Ford, Editor

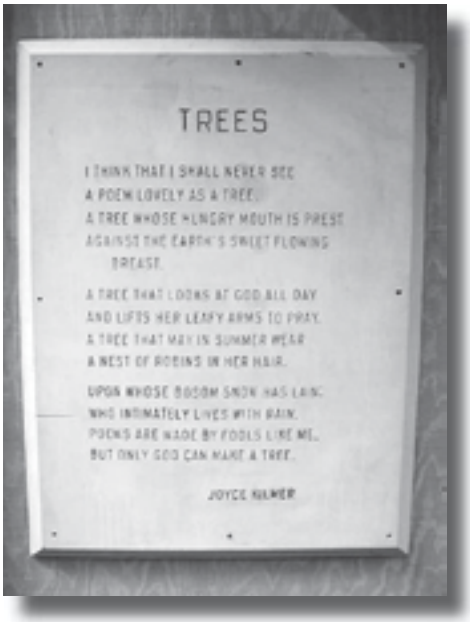
While Marion Jackson takes a well-deserved break from writing about his favorite trees—he's hard at work editing his biography, soon to be published by the Indiana Academy of Science—I'm putting in my own plug.

I got my start as a garden designer by circulating a flyer on my block of Graceland Avenue, offering free landscape plans to anyone who would let me use their lot as a learning lab.

I quickly discovered that I couldn't do justice to their landscapes with perennials alone. I had to learn annuals, bulbs, and shrubs—and I had to learn trees!

Twenty years later I'm still learning, with the help of Marion Jackson's regular column and many of the books that will be for sale at the 2006 INPAWS Plant Sale and Auction.

I'm excited about Hoosier Heartland's Plant-a-Million project, helping homeowners create new natural resources and habitats in their own backyards. By planting trees, they'll be enhancing their gardens and their quality of life at the same time. Trees and shrubs form the canopy and understory that marry earth to sky and create shelter for the garden's human, furry, and feathered inhabitants. The "herbacious" plants are lovely in their time, but they need the "woodies" to frame their display and hold the garden together in winter.



Plaque at Joyce Kilmer Memorial Forest. Photo by Dee Ann Peine.

When we landscape with native trees, and watch them grow and transform from season to season, we deepen our connection to Indiana's rich natural heritage. As Hilary Cox's trillium odyssey reminds us, sometimes the best can be found right in our own backyard.

April 28 is Arbor Day, so let's hear it for our native trees! They strive steadfastly to shelter us, house our native and migrating birds, provide our forest floors with leaf mold, and so much more. And thanks, Marion Jackson, for teaching us to appreciate these majestic denizens of forest and field. We look forward to your next treatise on another "favorite."

INDIANA NATIVE PLANT
and Wildflower Society

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