



Ripple Effect Ruth Ann Ingraham

The Brown County Public Library Ravine Project

INPAWS grant money does make a difference. Here's an illustration.

From the expansive east-facing windows of Nashville's handsome public library, recently constructed of native stone, visitors may look down upon a small stream meandering through a gently sloping, wooded ravine. Not so earlier. Only three years ago, invasive species screened this natural area from view during the entire growing season.

In 2002, members of the Brown County Public Library board and its director Yvonne Olinger committed themselves to be good stewards of this woodland on library property. They formed a committee of community citizens, including myself, and sought the funds needed to eradicate the array of exotic invasives and replace them with shade-loving plants native to the region. Thus was born the Brown County Public Library Ravine Project.

INPAWS stepped forward and made a significant contribution to help launch the project. With this grant and others, we hired Eco Logic from Bloomington to apply herbicides against the invasives—multiflora rose, oriental bittersweet, privet, Japanese honeysuckle, creeping euonymus, and burning bush—and to reseed with a cover of native grasses and sedges. A crew of community monitors coordinated by INPAWS member Donna Ormiston was charged with keeping ahead of the above-named culprits

that kept reappearing and, more recently, dame's rocket, *Miscanthus sinensis*, and Japanese stilt grass.

To guide us as we introduced new plants to the area, I compiled an extensive historical list from Charles Deam's *Flora of Indiana*, Butler University's Friesner Herbarium collection, a 25-year compilation of observations by DNR's Division of Nature Preserves, and personal observations. (When sorted by genus and species, poison ivy headed the list of sightings!)

To the library's woodland environment we've now added Kentucky coffee tree, dogwood, serviceberry, witch hazel, maple-leaved viburnum, yellowwood, and ostrich fern as well as spring and summer flora such as celandine poppy, bellwort, Virginia bluebell, and Indian pink.

To minimize critter damage and maximize scenic value, a deer exclusion fence installed by Designscape now encompasses the area most visible from the library windows. Stone benches tucked into outside alcoves facing the ravine invite visitors to rest and enjoy the woodland scene, where we often hear wood thrushes and other birds. This summer Pete Lennox, Brown County retiree and former Indianapolis architect, single-handedly built a gently inclined zigzag path, based on a concept suggested by Karen Hartlep, to provide safe access for volunteers who work in the lower area.



Large-flowered bellwort (*Uvularia grandiflora*). Photo ©1991 Arieh Tal, Connecticut Botanical Society.

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Summer
May 23 for July 1 mailing

Autumn
August 23 for October 1 mailing

Winter
November 23 for January 1 mailing

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 values, beauty, diversity, and environmental importance of indigenous vegetation.

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Karen Hartlep

INPAWS Never Sleeps

Greetings Native Plant Enthusiasts!

When I took on this job, I mistakenly thought most of the year's activities would take place during the "growing months" when we have our plant sale, hikes, plant rescues, invasives control, and restoration work days, with the grand finale being our fall conference. Now I realize that INPAWS activities continue in full force year-round. Some exciting opportunities have recently been offered to our organization, along with on-going efforts that our dedicated officers, committees, and members continue to support.

Our Outreach Task Force is initiating a mentor program where new members will be personally contacted to welcome them, answer questions, and encourage them to attend INPAWS events. We gained a record 29 members at our fabulous fall conference due to the great publicity generated by Gillian Harris, Ellen Jacquart, and their committee, so this will be our first round of outreach activities. (All you long-standing members, please remember to renew for 2007!)

INPAWS has just been invited to participate in planning for the site of the Indiana Wildlife Federation's office on Indianapolis' north side. They quite naturally intend to use native plants to provide food, cover, and nesting sites for wildlife, so the expertise of our members seems a perfect fit. We are pulling together a small committee—if interested, please give me a call.

The Indiana Conservation Alliance (INCA) is sponsoring its third annual Conservation Day at the Statehouse on January 23. As an INCA member, INPAWS will have a booth there, and we'd love to have a great turnout from our membership. If you're interested in participating in this important outreach effort, please contact me.

Finally, for those of you who did not attend our fall conference, I would like to introduce Wendy Ford as our new vice president. Wendy remains our newsletter editor and continues to think up new and creative ways to serve INPAWS. Outgoing vice president Ellen Jacquart keeps her role as invasives chair and just wrapped up a very successful fall conference as co-chair. Janice Gustaferra is back as co-chair of the spring plant sale/auction, replacing Melissa Moran who will spend a couple of years providing clean water to communities in Guatemala. Finally, Mike Homoya is taking over programs/field trips from Lynn Dennis.

Thank you to all the outgoing committee chairs and officers for your great service, and welcome and thank you to our new leaders.

—Karen

Indiana Wildlife Federation

Promoting the conservation, sound management, and sustainable use of Indiana's wildlife and wildlife habitat through education and advocacy.

The Indiana Wildlife Federation (IWF) has played a part in conserving Indiana's natural resources for over half a century. As the nonprofit, grass-roots affiliate of the National Wildlife Federation, IWF works to promote the wise use of Indiana's renewable resources through educational programs like National Wildlife Week and the Backyard Wildlife Habitat program.

The Federation works with state agencies and other similar organizations to monitor what is happening to Indiana wildlife and their habitat, including lakes and rivers, air, and soil. They pay particular attention to legislation that affects Indiana's sportsmen and women, wildlife watchers, and conservationists, and of course our state's wildlife and wildlife habitat. IWF is also involved in national programs such as "Clean the Rain," which seeks to reduce mercury contamination in our air and subsequently our water resources. As fish consumption advisories increase across the U.S., this is an important tool to raise awareness of mercury contamination in Indiana's lakes and rivers.

Every year in the Indiana General Assembly, decisions are made and laws are passed that can have a profound effect on our natural resources, wildlife, and outdoor recreation activities. In its role as advocate for Indiana wildlife and conservation of habitat, IWF makes Indiana legislators aware of the positive and negative effects of existing laws and the effects of specific proposed legislation. IWF participates in study committees and testifies before the House and Senate subcommittees on bills that impact wildlife and wildlife habitat in Indiana. For information visit www.indianawildlife.org.

Brown County Ravine Project, continued from page 1

Education is a key component of our project. We want Brown County's landowners to comprehend the potential impact of invasive plants on our beloved landscape and to value our natives. Some free publicity has helped. The *Brown County Democrat* has published articles and photographs with headlines such as "Preserving Native Wildflowers: Group hopes to eradicate plants that squeeze out Brown County's selection of wildflowers that are native to this area."

On behalf of the Ravine Project, INPAWS' South Central Chapter brought Ellen Jacquart of The Nature Conservancy on two occasions to speak about exotic invasives. They also invited Gene Bush, committee member and owner of Munchkin Nursery, who showed slides and talked about "Color in the Shade Garden: Nine Months of Native Bloom," and another time spoke about shade plants generally. At all of these events we drew large, appreciative audiences from surrounding counties as well as our own.

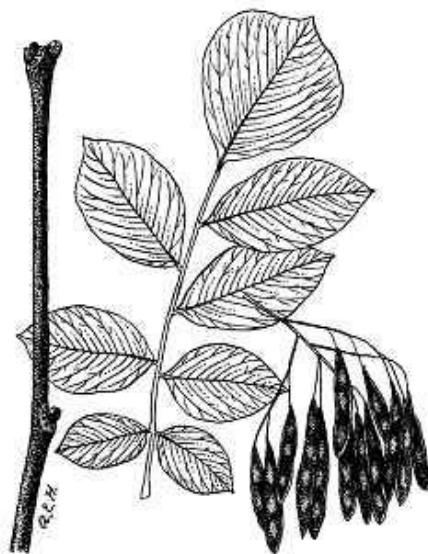
Our educational outreach extends to the Brown County 4-H Fair, where community volunteers talk with passersby about invasive and native plants and hand out literature, including our flyer about the Ravine Project and its goals. Our "Spring is Here!" plant sale raises money for ongoing needs, as has the sale of morel mushrooms (another story!) and copies of *Swimming with Frogs: Life in the Brown County Hills*.

The Ravine Project committee offers a hands-on educational component as well—free invasive plant assessments for landowners. I lifted this valuable undertaking from the shoulders of fellow committee member Dan Shaver, director of The Nature Conservancy's Brown County Hills Project. With a clipboard and printout of invasive plants known to exist in Brown County, the landowners and I hunt for the nasty intruders. On our walks

we talk about desirable plants too. Assessments take one or two hours, after which I send a report confirming those invasives we've identified, prioritizing them (worst to least), and suggesting elimination methods. The program has been well received, and several landowners are already on the 2007 waiting list.

Awareness and concern about invasive species in Brown County are indeed growing, and a few of us recently formed a steering committee to target invasive plant species countywide. Serving are representatives from the County Extension office, Soil and Water Conservation District, TNC, Brown County State Park, private camps, and concerned citizens. Our focus is on four species—tree of heaven, bush honeysuckle, autumn olive, and Japanese knotweed. Within the next two years we want to reach every landowner or land steward in the county with mailers that call attention to these exotic invasives and offer control assistance and suggested native plant alternatives.

Thanks, INPAWS, for helping in a big way to improve the environment in Brown County.



Kentucky yellowwood (*Cladrastis kentukea* syn *lutea*), U.S.D.A. Drawing, courtesy Hunt Institute.

Welcome New Members 2006

CENTRAL

Betty J. Seufert, Brookville
Beth Graham, Westfield
Lisa Madrid, Sheridan
Wayne Naylor, Noblesville
Judy Laird, Greenfield
Marilyn E. Smith, McCordsville
Bev Russell, Clayton
Carrie, Chism & Chad Vanover, Avon
Kathy Arensman, Indianapolis
Susan Beauchamp, Indianapolis
Joseph Bowles, Indianapolis
Linda & John Burns, Indianapolis
David Camp, Indianapolis
Carolyn Holder, Indianapolis
Jan Hosier, Indianapolis
Marian Keith, Indianapolis
Kim Lohr, Indianapolis
Cynthia Martin, Indianapolis
Dottie Mullennax, Indianapolis
Fritz Nerding, Indianapolis
Ruth Penner, Indianapolis
Michael Ray Smith, Indianapolis
Judy Biscan, Shaker Heights, Ohio

EAST CENTRAL

Kelly D. Krinn, Fort Wayne
David & Lois Ellsworth, Yorktown
Paul Rothrock, Upland
Jennifer Anderson, Anderson

SOUTH CENTRAL

JoAnne Himebough, Nashville
Kevin Baxter, Washington
Patricia A. Cornwell, Corydon
Linda D. Haas, Georgetown
Lois Morris, Bloomington

WEST CENTRAL

Wendy Langer, Peru
Wes Crawford, West Lafayette
Debra Steinhauer, Lafayette

INCA Legislative Priorities

When the 2007 session of the Indiana General Assembly begins in January, legislators will be deciding on important issues and putting together the State's biennial budget. INPAWS has joined with other conservation-minded organizations in the Indiana Conservation Alliance (INCA) to raise the profile of conservation in the Statehouse, and great strides have been made in the past two years.

This year, INCA is working hard to ensure that conservation funding is one of the legislators' top priorities and is lobbying for the following:

- **\$6 million for the Indiana Heritage Trust**, the only State funding source for permanently protecting natural lands such as nature preserves, trails, parks, fish and wildlife areas and forests (your license plate dollars at work).
- **\$6 million for Clean Water Indiana**, which provides technical assistance to help farmers and other property owners reduce the amount of polluted storm water runoff from urban and rural areas.

- **\$1 million for a pilot Farmland Protection program** leveraging federal dollars to establish conservation easements and limit development and non-agricultural use.

Elected officials respond to the concerns of their constituents. They need to hear FROM YOU how important conservation programs are to you and your family!

An easy and fun way to act on your principles is to come to Conservation Day at the State House on January 23. Surrounded by the many like-minded individuals in INCA's member organizations, you'll gain ample moral support to engage with your state senators and representatives about the need to fund conservation. If you cannot come to meet with your legislator in person, please make your views known in a letter or an e-mail.

For more about Conservation Day, visit www.nature.org/indiana or contact Angela Hughes at ahughes@tnc.org or 317-951-8818.



Making the Most of Your Lobbying Time

If you've never tried to influence your legislator before, you may feel a bit timid about a face-to-face meeting. Here to smooth your way are some tips shared during a training session at last year's Conservation Day.

1. **Have a 5-minute action plan.** That's all the time you'll have to speak with a member of the General Assembly in the hall, or 15 minutes at most in their office. Know beforehand which issue you will raise first, second, and third. Be prepared to state your most important points before an interruption cuts your meeting short.
2. **Speak plainly.** Don't tax your listener with unfamiliar jargon and acronyms. Make it easy for them to understand you.
3. **Make a personal connection.** Before meeting, do a little research to find something you and the legislator have in common. Did you grow up in the same community? Attend the same college? Noting similarities breaks down the natural barriers that exist when meeting someone for the first time.
4. **Don't do all the talking.** Ask an occasional question to be sure your listener is "getting it" and is actively engaged in the conversation.
5. **State your request clearly.** A pleasant chat may leave you feeling good, but it's not effective if the listener is left wondering what the point was. If you want your legislator to support specific funding in the budget, state that early in the conversation.
6. **Don't be too democratic.** If you partner with others when talking to the legislator, decide beforehand who in the group will be the chief spokesperson. Not everyone has to speak!
7. **Follow up for success.** Mail a thank you letter immediately after your visit, including any additional information that was requested. You can continue to send useful information such as fact sheets and news clippings throughout the session, and even when the legislature is not in session. Your initial meeting is only the beginning. Develop a relationship for the future.

All-American Basswood

Tilia americana L.

Easily recognized in each of the four seasons, American basswood lends a charm and dignity to Indiana forests that few tree species can match.

Rarely, if ever, occurring in pure stands, American basswood (called linn by local farmers, linden in Europe and Asia, or lime tree in England) is present in mesic woods frequently enough to be an important subdominant canopy tree. Large individuals often reach 2 to 3 feet in diameter and 70 to 90 feet tall. These mature trees have straight boles with dark grey to grey-brown trunks with distinctive deep-furrowed ridges.

Vigorous trees routinely have one to several root sprouts that often encircle the parent tree in coppice fashion, a basswood trademark.

Your walk in the winter woods may result in the chance discovery of bright red plump buds, each with only two overlapping bud scales, near the tips of basswood twigs. The buds are especially beautiful following an icing storm, the ice coating magnifying the bud within, like carnelian encased in crystal.

During April's warmth, the buds expand, then open to reveal delicate, enfolded cordate leaves, toothed margins, long petioles, and 5 incised main veins. American basswood is the only Indiana tree species with leaves having this combination of characteristics. Not truly heart-shaped, linden leaves have oblique bases.

Summer is when the basswood tree becomes truly enchanting, for then

the flower buds open to expose pale yellow complete flowers, attached in clusters below a leafy bract an inch or more across and 1 ½ to 2 ½ inches long. The odor released as the flower opens is like no other in the Eastern Deciduous Forest. Especially on days with heavy, damp air and overcast skies when rain threatens momentarily, as the tree frogs call and the

yellow-billed cuckoo (or "rain crow") stutters its kuk-kuk-kuk-kuk-kalp-kalp-kalp-kalp call, the full-bodied aroma of basswoods in bloom can be detected from a quarter-mile away, especially just before dusk descends. This fragrance drives honeybees into a frenzy. The hum of thousands of bees working a large linden tree is audible from a hundred feet away. Basswood honey is nearly white, the choicest of all honeys, and a true delicacy. If you can find a specialty shop that happens to have it in stock, by all means buy it for a rare woodland treat.

About 1976, when Bill Barnes, then director of the Division of Nature Preserves, and I were working with Mr. Gilbert Lubbe toward the protection of Lubbe Woods in Dearborn County as a Dedicated State Nature Preserve, I admired the huge basswood tree located adjacent to the



Tilia americana flowers, leaves and fruits. Photos by Ohio Biological Survey (left) and Pennsylvania State University (right).

Lubbe farmhouse. Mr. Lubbe, then in his late 70s, said that his parents had planted the tree in their house yard shortly after the Civil War for its shade, the fragrance, and the honey that their stands of bees made.

In fall, as the huge heart-shaped leaves turn a lovely lemon yellow, then drop off, the bee-pollinated flowers have matured into clusters of hard nut-like spherical fruits, each about the size and shape of a plump pea. These fruits remain attached to the single leafy bract that aids seed dispersal. Later, the winds of autumn or early winter dislodge the entire structures and send them whirling through the woods, much as a wounded helicopter might tumble from the sky.

Basswood trees are equally noted for their wood properties and bark characteristics. Most likely the common name of the species derives from the long bast fibers that run lengthwise in the inner layers of the bark. These fibers were used by Native Americans to make twine and cordage for use in stitching together cattail mats for their lodges, hides or woven fabrics into clothing, or birch bark sections into canoes. They also twisted multiple strands of the fibers into rope that, in terms of strength, durability, and freedom from kinking, rivaled the twines used in rope manufacture by the pioneers. Often the fibers were retted from the bark by submerging sections of bark in water for days or weeks before separation and use.

Basswood lumber is diffuse-porous, hence smooth-grained, and nearly white to a very pale brown, hence called whitewood in Early America. Then as now, it is a prized wood for carving decoys, wood inlays, household utensils, and such. Ceremonial face masks used by the Iroquois and other tribes were carved from bass-



American basswood. Photo by Four Seasons Nursery, Montana.

wood. Weighing only 28 pounds per cubic foot but quite strong, it was favored for boxes, crates, Venetian blind slats, artificial limbs, and, interestingly, for honey frames and bee hives. Early on, it was widely sought for use in buggy and carriage manufacture, for its light weight, hence ease of towage. When I was in high school, my Dad bought a pick-up load of basswood lumber (linn) at an auction. It planed nicely in my high school shop class into stock for making light yet strong and springy farm gates.

Basswood is a handsome tree that should be used far more widely as a lawn, street, and park ornamental. Most typically, the smaller-leaved European linden is used for planting, largely because it is more generally available from nurseries. The native basswood, however, is a beautiful ornamental, moderately fast growing, and all-around the preferred species.

Indiana Native Plant and Wildflower Society

Small Grants Program Guidelines for 2007

NOTE: February 1, 2007, is the deadline for grant proposals to be submitted. This will be the *only* time for grant proposal submissions in 2007.

INPAWS' small grants program supports projects that are in line with the mission of the society. In 1998, the Board allocated \$10,000 from the general fund to an endowment account. The interest from this account is available for grants. **The Awards Committee anticipates funding two grants of up to \$500 each in 2007.** These grants can be used in conjunction with other sources of funding for projects that support the mission of INPAWS.

The mission of INPAWS is to promote the appreciation, preservation, conservation, utilization, and scientific study of the flora native to Indiana and to educate the public about the values, beauty, diversity, and environmental importance of indigenous vegetation.

Applications are requested from groups or individuals and must be e-mailed (preferred) or postmarked by **February 1, 2007.** They will be reviewed by the Small Grants & Awards Committee.

Successful awardees **must prepare a poster or other presentation** to share with the membership at the INPAWS Annual Conference after the project is completed.

At the discretion of the Board and membership, **larger awards may be made** from time to time from the assets of the operating budget. Requests for funds for special projects may be made at any time to the Executive Committee. All requests must be made in writing with a clear statement of how the award would further the mission of INPAWS and benefit our membership.

Application Procedures for INPAWS Small Grants Program

1. Cover sheet, including:

- ▶ Name of project
- ▶ Amount requested
- ▶ Location
- ▶ Applicant/contact person information—name, address, telephone, email
- ▶ New or existing project
- ▶ Category that best describes the project—research, training, education, conservation and habitat, demonstration garden, etc.
- ▶ Prior INPAWS funding
- ▶ Specific information on how INPAWS grant funds would be used, including a detailed species list of all plants and seeds to be used
- ▶ Who benefits from the project? How many? How do they benefit?
- ▶ Names of organizations involved, if any, with a brief description of each, including number of members
- ▶ Financial resources committed to the project from other sources, if any
- ▶ Anticipated starting and completion date of the project

2. Text of proposal, not to exceed 2 pages:

- a) Summary of the project, not to exceed 50 words
- b) Clear, concise description of the project, including:
 - ▶ How does the project further the INPAWS mission?
 - ▶ Why is the project needed?
 - ▶ Specific objectives to be achieved

3. Budget sheet, showing:

- a) Labor, material, and program costs
- b) Sources and amounts of funds already raised, if any
- c) Total cost of project

E-mail 1 copy (preferred) or **mail 4 copies** of the grant proposal postmarked by February 1, 2007 to Joan Mohr Samuels at mohrsamuels@insightbb.com or 5828 Prophets Rock Rd., West Lafayette, IN 47906.

Good Sports

Nancy Hill, Plant Afficionado

Those Cultivars Gardeners Can't Live Without



Annabelle hydrangea shines in the summer garden. Photo by Missouri Botanic Garden.

Tony Avent of Plant Delights Nursery in North Carolina says that a sure-fire way you can tell a NON-gardener is if she looks at a plant and says “Oh, that’s gorgeous, but where would I put it?”

We gardeners are passionate about plants, and especially about any new plant that catches our eye. Catalogs, books, and home and garden magazines conspire to make us lust after the breeders’ latest triumph—the freshest green foliage, the most brilliant blooms, the most intriguing variegation, the richest autumn hues. Only the strongest among us can resist a new cultivar.

As gardeners who love native plants, we rescue native plants, propagate them, share them with each other, and purchase them at the INPAWS plant sale each May—and we put them to work in our gardens. We set a few Virginia bluebells and trilliums among the hostas and hydrangeas. We turn

problem drainage areas into sweet wetlands with turtlehead, monkeyflower and gentian, and our backyards into wildlife habitats with butterflyweed, cranberrybush and serviceberry.

Every year we see more native plants at our local nurseries—even the big box retailers—and not just the species are available, but many cultivars of them as well. That puts the native plant purists among us in a quandary. Can we consider these cultivars natives? Does planting them in our gardens violate the principles that led us to favor natives over exotics?

A cultivar is a plant considered sufficiently different from its parent species to have its own identity. Plant breeders select among naturally occurring variations for their garden-worthy characteristics, or conduct breeding programs to develop specific traits. The name of the resulting cultivar is written in single quotation

marks following the plant’s genus and species names, for example, *Monarda didyma* ‘Marshall’s Delight’. And just to make things confusing, a plant can have a marketing name that is different from its cultivar name. For example ‘Bailtiger’ is the actual cultivar name of a staghorn sumac sport marketed by Bailey Nurseries as Tiger Eyes sumac. When a cultivar receives a plant patent, it is denoted by the number that follows “PP” on its label. “PPAF” with no number means the plant patent is applied for.

What do we get from cultivars? Often a brighter or different color, a better (perhaps more compact) growth habit, prettier fall color, better flower production, better disease resistance, a pretty leaf variegation, or a longer bloom period. *Hydrangea arborescens* is a somewhat rangy native woodland shrub. Its cultivar ‘Annabelle’, on the other hand, is a garden workhorse if ever there was one, producing profusions of lime green and then white snowball blossoms all summer long.

Joe-Pye weed is another good example of a successfully cultivated native. Spotted Joe-Pye weed (*Eupatorium maculatum*) can grow over 8 feet tall in the wild, a daunting prospect for a home garden. The cultivar ‘Gateway’ was developed to reach its zenith at around 5 feet and, when cut back in early summer as suggested by Tracy DiSabato-Aust in her popular *The Well-Tended Perennial Garden*, it becomes a lush, rounded, purple-headed plant of about 3 feet, a handsome specimen in a perennial border.

Many cultivars are produced in dedicated selection and hybridization programs—some academic, some commercial, some a hybrid of both. But the surprising truth is that most cultivars are simply discovered. By sheer dumb luck.

Good Sports, continued

Like anything that reproduces sexually, a plant is subject to mutation, a spontaneous rearrangement of DNA. Over half of the new, exciting plant introductions we can purchase today are these genetic anomalies, sometimes called sports. They had a characteristic different from the plants surrounding it, a characteristic that caught someone's eye.

One day Steve Jergenson, an employee of Bailey Nurseries in Minnesota, was in the field taking inventory in a stand of *Rhus typhina* 'Laciniata', a cutleaf cultivar of our native staghorn sumac. Laciniata's fernlike leaves made it a popular cultivar, but it still grew to over 20 feet and suckered vigorously. Steve saw a small plant he thought was sick, or chlorotic. Its leaves were not dark green, but light yellow. He brought it to the attention of the growers, who scratched their heads and said, "What the heck, let's see what it does."

They grew clones and evaluated them. The new leaves started out a vivid chartreuse, changed to a bright yellow in summer, then turned a stunning orange and scarlet in fall. The clones had fuzzy, purple-red stems that angled upward, while the lacy leaves drooped downward to give a lovely oriental habit. To their delight, the growers also found that the plant stayed only 6-8 feet tall and did not sucker as aggressively as its parent, making it a well-behaved plant for home gardens.

They had difficulty propagating it in quantity until they used root shoots, a time-consuming but successful method. Next, they tested it in gardens throughout the country to see what temperatures and soil conditions it would tolerate. In all, it took them nearly 15 years from discovery to having enough plants to offer for sale. They called it Tiger Eyes sumac.

An excellent sport of our American highbush cranberry (*Viburnum trilobum*), so highly praised by Carolyn Harstad in her popular book *Go Native!*, was discovered by Bailey employee Freddy Garcia, a field worker. One fall day he noticed a smaller-than-normal, compact plant with extra brilliant red-orange color. It was developed, propagated, and



Tiger Eyes sumac is a yellow-leaved sport of our native *Rhus typhina*. Photo by Lee Grimes, Fort Pond Native Plants.

is now offered for sale as the cultivar 'Alfredo'. It grows to a compact 5-6 feet tall, making it an ideal viburnum for planting close to the house where its dense foliage will soften a bare wall.

Bailey employees also discovered a sport of *Acer saccharum*, our native sugar maple, that has unsurpassed intense orange-red, long-lasting fall color. It became *Acer saccharum* 'Bailsta', marketed as 'Fall Fiesta'. Through the years, Bailey has introduced around 60 new sports to

the gardening public. All of them were found by employees.

A field discovery that has become a landscape staple is the Winter King hawthorn, *Crataegus viridis* 'Winterking', which just celebrated its fiftieth anniversary. It was discovered by Bob Simpson, owner of Simpson Orchard in Vincennes, Indiana. One day he spied a small hawthorn tree growing in a fence row that still had its berries when others were gone. The berries seemed bigger as well, and the tree had a silver-gray bark peeling off to reveal an attractive orange inner bark. Simpson propagated it, and now Winter King is the tree that can be seen in the dead of winter displaying cheery masses of bright red fruit, sometimes in gorgeous contrast with snow on its limbs—a treat for us and the birds.

Can we call a plant derived from the "species" a native? Should we plant cultivars in our "native gardens"? Who knows? But don't tell gardeners you are going to take away their Silver King artemisia, or Alma Potschke aster, or Hot Lips turtlehead, or Magnus and White Swan echinaceas, or Kobold liatris, or Marshall's Delight and Jacob Kline and Raspberry Wine monardas, or Husker's Red penstemon, or Bright Eyes and David and Eva Cullum phlox, or

Goldsturm black-eyed susans. Strict definitions aside, perhaps we can simply allow ourselves the joy of growing what we love where it loves to grow.

Cultivars offer us a veritable smorgasbord of choices. They satisfy our thirst for variety. They pique our curiosity. But let us not forget the assets of the original wild species—those tough, determined natives that, like 100-year old roses in an abandoned Texas cemetery, need no gardener's help to survive.

Bats in Your Backyard

Laura Hohman, Bat World Hoosier Hills

It's not unusual to encounter bats in your own backyard. You may have any number of opportunities to view them without ever leaving home.

1. In or on your own house...attics, walls, roofs, and windows

The species you are most likely to encounter in your home is the big brown bat (*Eptesicus fuscus*). The highly adaptable big brown has taken advantage of the availability of roosting sites in and on houses and manages to thrive in Indiana despite ongoing habitat destruction. Another common denizen of human habitations, but not seen as frequently, is the little brown bat (*Myotis lucifugus*).

Bats may be seen in the home during winter months on warmer days. Bats will wake up from hibernation, and attempt to leave their roost. Sometimes they get confused and find their way into the living area of your house. Trust me, the bat does not want to be there—it wants to find the quickest route out. Do NOT attempt to handle the bat bare-handed, as there is the risk of rabies to consider. Rabies is not common in bats, but it is a deadly disease to humans.



Do not attempt to catch the bat while it is in flight. Wait until the bat lands and either remove it while wearing thick leather gloves, or place a box over it and slide a piece of cardboard gently underneath. Once the bat is contained, call a wildlife rehabber who deals with bats. A listing of bat rehabbers can be found on the Bat World website: www.batworld.org. For those of you who encounter bats frequently in your home, information on humane exclusion techniques can be found at www.austinbathospital.com/gotbats.html.



2. Flying around your yard...especially around bright lights

Merely go outside on a warm evening, and you will likely see bats flying around, taking advantage of the swarms of insects that are attracted to the lights surrounding your house. Bats are especially attracted to bodies of water like ponds or lakes. Common species of bats you might see include big brown bats, little brown bats, and eastern pipistrelles (*Pipistrells subflavus*).

You can encourage the presence of bats in your yard by putting up a bat house. Bat houses should be properly researched before purchase and placement. Bats are somewhat picky residents, and type/size/color of a bat house and location will factor into their decision to take up residence.

3. Roosting in your trees

Some species of foliage-roosting bats are eastern red bats (*Lasiurus borealis*) and hoary bats (*Lasiurus cinereus*). They are often difficult to spot, as their coloration and the way they roost help them blend in well. They hang from one foot and curl their body in such a way as to look like a hanging leaf. Your first indication of the presence of one of these bats may be when it is in danger. Many reports have been made of blue jays attacking roosting red bats, often killing or seriously injuring them. Also be watchful on the ground in the spring/summer for pups that have fallen from their mothers. Any bats found on the ground should be taken immediately to a bat rehabber. Don't forget your gloves!

Blissful Botanizing pt.2



It started with a quest for cedar posts. Rich Peine needed some for a walkway project, and his friend Andy Roller suggested using the outdoor sawmill at his brother-in-law's farm in Hardin County, Kentucky.

On his first visit, Rich noticed some "wildflowers" in what had been a hayfield by the mill; and later suggested to his wife Dee Ann that she accompany him on his next trip, which

she did. At first she was underwhelmed, seeing only the prominent invasive aliens, such as Queen Anne's lace. However, upon looking closer she realized that there was more than met the eye and decided it was worth a return visit. It is my good fortune that Dee Ann likes to have company on these botanizing trips, so one late June day we set off on our next adventure, accompanied by a baby starling Dee Ann was raising. We stopped just north of Louisville to pick up Andy who would meet up with Rich to go look at some of the caves on the property.

On arrival my heart sank. My first impression of what we were looking at matched Dee Ann's—too many invasives, not a lot of natives. We walked a few feet into the grass and looked more closely. The realization that not all the white flowers were Queen Anne's lace was the beginning. In fact, by far the predominant white-flowering plant was wild quinine (*Parthenium integrifolium*), not to mention pale spiked lobelia (*Lobelia spicata*). Next thing I knew, Dee Ann was down on her knees cooing over a *Hypericum* that needed identifying. Several hours later we had moved barely ten feet from that spot. Rich and Andy returned from their cave foray and tried to entice us to see some other flowers, but we could be persuaded to move only when they promised they had found orchids! We moved fast enough then. And they had, indeed, found *Spiranthes vernalis*...quite a few of them.

Some other plants we saw that first day included hairy wild petunia (*Ruellia humilis*), wild potato vine (*Ipomoea pandurata*), several *Hypericum* other than that first one, a purple coneflower which we believed to be *Echinacea pallida*, bee blossom (*Gaura biennis*), butterfly weed (*Asclepias tuberosa*), hairy lespedeza (*Lespedeza hirta*), toothed whitetop aster (*Sericocarpus asteroides*), pasture rose (*Rosa carolina*) and, in woodies, New Jersey tea (*Ceanothus americanus*) and common snowberry (*Symphoricarpos albus*). At this stage we didn't even look at the grasses and sedges, which abounded throughout.

Well, naturally, after stumbling upon such an unforeseen diversity of plant life, we planned on returning as soon as both our schedules permitted—this time armed with a plethora of field guides, as we had been encountering something of a problem when it came to the nitty-gritty of identifying certain plants, such as the *Hypericum*. Or the *Echinacea*, which we had to assume was *E. simulata*—a spe-

cies neither of us had ever heard of—until we could ascertain it for a fact next year. Apparently the only difference between it and *E. pallida* is pollen color, that of the former being yellow whereas in the latter it is white—and we didn't know to look!! Not enough books...

So it came about that a day in late July found the two of us once again headed for Kentucky, this time accompanied by six kittens Dee Ann was raising by bottle. We were to meet Andy at the farm, as he was bringing his jeep so we could go “further in”—which we duly did, though only after spending several hours in almost exactly the same spot as previously. Once again the diversity astounded us. In just one short month the area was almost unrecognizable. Nearly everything we had seen flowering before had finished and was developing seeds. In their place was a completely new set of plants to be identified. Now we were seeing tall blazing star (*Liatris aspera*) strewn throughout the warm season grasses, which were starting into real growth, along with the annual rosepink (*Sabatia angularis*), and multiple white spikes of the pale spiked lobelia.

Then, in an area we have come to see as the source of our most unusual plants, we found a plant neither of us could even guess at. We took photos and later spent many hours on the USDA PLANTS database and other sites trying to identify it. Finally Dee Ann sent a photo to Mike Homoya, our friendly state botanist, who confirmed we had been on the right track in suggesting it looked aloe-like. In fact it is a member of the Agave family, called *Manfreda virginica* or commonly...false aloe! Later, on our jeep ride into other pastures, we chanced



Southern mountainmint (*Pycnanthemum pycnanthoides*). Photo by the author.

upon several “cool” members of the milkweed (*Asclepias*) family, including clasping milkweed (*A. amplexicaulis*). Although this had finished flowering, the impressive, wavy-edged leaves were ample reward for finding it. We also stopped at an *Allium* which confused us and the others we asked, but most likely was *A. cernuum*, then a swathe of American senna or *Senna* (formerly *Cassia*) *hebecarpa* in full bloom...one of the best plants for attracting pollinators of all kinds, but not a plant for the formal or space-challenged garden! Next was *Asclepias viridiflora* of which we found one—and to our horror we had run over it in the jeep, bending the stem but not completely breaking it off. We tried to resurrect it to the best of our abilities, took pictures, and vowed to find it next time

we came that way. Not too far from that poor beaten up specimen we found two or three *Viola pedata* flowering on the verge of the trail we were following; this flowering seemed a tad late to me, as I usually associate them with spring. In the same area we saw several *Eryngium yuccifolium*... and here I want to reiterate what a thrill it is to see a plant I have known and used in gardens for years growing in its own natural habitat with no help from humans, except that they leave it alone, unmowed!

After this, we headed for the first time into the woods. Suffice it to say that we can't wait to see them in spring! Just to name a few of the plants we saw here: In open copses, *Monarda fistulosa* and *Pycnanthemum pycnanthoides*. Under a canopy of sourwoods and oaks, *Rhododendron*(!), some other low-growing shrubs we have yet to spend time identifying, and...caves! Plus, of course, those enticing fungi...but no, we're not doing those yet.

This late in the day we were all tired, hot, hungry, and brain-fried. We were also reluctant to give up, but common sense won out and we headed homewards, with six contented kittens asleep in their box, unaware of anything but their full bellies and the lull of the car engine. Now whose life would you choose?

Watch for more Blissful Botanizing in the next issue of *INPAWS Journal*.



Green comet milkweed (*Asclepias viridiflora*). Opposite: Dee Ann documenting that not all the white flowers were Queen Ann's lace. Photos by the author.

Basking in the Afterglow

INPAWS' thirteenth annual conference at Bradford Woods was a success, and the largest conference to date with 229 participants!

The beautiful fall weather made the forested campus of Bradford Woods a perfect setting for a day packed with speakers, exhibits, and workshops. Scott Russell Sanders, the keynote speaker, started off the conference with an overview of the natural diversity of "Wild and Scenic Indiana." Several speakers through the day expanded on this theme, talking more about the botanical and geological diversity of southern Indiana, while others spoke on how best to incorporate native plants into landscaping. The final speaker, Allen Pursell, talked about the wonder of oak-hickory forests, linking everything from acorn weevils and car insurance rates to the need for conservation of these forests.

Book sales were brisk through the day, with the new Nature Conservancy preserve guide and *101 Trees of Indiana* by Marion Jackson being the top sellers. All in all, a very full and fascinating day for attendees.

Thanks to organizers Gillian Harris and Ellen Jacquart and all the volunteers, speakers, and sponsors who made this such an enjoyable day.

Don't forget to post your souvenir INPAWS decal where it might spark a teachable moment! –Ed.

New Early Detection Publication

The Midwest Invasive Plant Network has printed a new flyer, "Keep a Lookout for New Invasive Plants in the Midwest."

The 8-1/2 x 11" sheet has photos and range maps of 16 new plant invaders in the Midwest on one side, and specific information on how to identify the species on the other side.

Some of the species, like tree of heaven, are well known already to many of us in Indiana but are just moving into states to the north of us. Others, like mile-a-minute vine, haven't yet reached Indiana, though those living in the Ohio River counties should be watching closely for it.

Every state in the Midwest and southern Ontario collaborated on this project and has set up contact information for reporting sites. In Indiana, contact the Purdue Plant and Pest Diagnostic Lab at 765-494-7071 or ppdl@purdue.edu, or call 1-866-NOEXOTIC.

To download a copy of the flyer, go to www.mipn.org. Multiple copies for educational purposes are available by contacting Ellen Jacquart at ejacquart@tnc.org.

Seeking Great Websites

When, in the course of your cyberspace meanderings this winter, you discover a really good website that is sure to interest INPAWS members, we want to know about it.

Please e-mail the link to webmaster Marcia Moore at mmoore@butler.edu. We will check it out and post information on the INPAWS site and in *INPAWS Journal*.

Swamp Milkweed Call Heeded

Becky Dolan thanks all the folks who responded to her request for swamp milkweed sites to help her Butler University honors student who is looking at genetic variation in the species. An e-mail query to the INPAWS list brought responses from 24 people all over the state. Some had the types of populations the student was looking for and even mailed her leaves. Dolan praises INPAWS for its "great networking and a great set of naturalist eyes operating around the state."

E-Idea: Bloom Alerts

When you discover that first skunk cabbage in bloom this spring at your local nature preserve, why not let your fellow INPAWS members know via e-mail? Several members have been doing this informally and have enjoyed taking advantage of those all-too-fleeting opportunities to view spring ephemerals and rare specimens.

If this idea interests you, talk it up with your chapter leadership and get a local e-mail network started. In time, we may be able to formalizing such a bloom alert system through a regional or statewide listserv.



Native Speakers in Demand

Requests to the INPAWS Speakers Bureau are already pouring in for 2007, Julie Beihold says. Her committee is seeking volunteers to give presentations at different venues around the state (but close to the volunteer's home).

Audiences include garden and conservation clubs, garden show attendees, Indiana Wildlife Federation backyard habitat workshops, schools, Kiwanis clubs, mothers' groups, and the like.

Talks usually consist of a slide show, but these are being converted to PowerPoint, so a laptop and familiarity with PowerPoint would be helpful. "The slides are scripted, so anyone can do this," says Beihold. "The audiences are friendly and very interested in the topic. We also tell people about INPAWS and its mission and activities."

Interested people can contact Beihold at iepdb@iquest.net or 317-852-8640.

And the INPAWS Award Goes To...

At the October 27 conference of the Indiana chapter of the American Society of Landscape Architects (INASLA), Karen Hartlep presented the INPAWS Award to Williams Creek Consulting for their "Grandview Gardens Stormwater Best Management Practice."

INPAWS presents this award annually to a landscape architect firm whose project prominently features plants native to Indiana.

Opposite: Group of skunk cabbages (*Symplocarpus foetidus*) in March.
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COMING EVENTS

Tuesday, January 23

INCA Conservation Day at the Statehouse

Join fellow conservationists in influencing Indiana legislators to support a conservation ethic in the state. 8:30 a.m. to 2:30 p.m. Organized by the Indiana Conservation Alliance (INCA). To register, visit www.nature.org/indiana or contact Angela Hughes at 317-951-8818 or ahughes@tnc.org. Volunteers are needed to staff the INPAWS booth; those willing should contact Dan and Sophia Anderson at 317-849-3105 or danjand1@sbcglobal.net.

Friday, February 9

Save the Dunes Council Winter Hike

Spend a fun-filled morning exploring the winter wonderland of Northwest Indiana's open spaces. 9:00 a.m. to noon. Light refreshments will be served. For location and details, RSVP to Conni Clay at 219-879-3937 or visit www.savedunes.org.

Wednesday and Thursday, February 21-22 Ecology and Silviculture of Mixed Oak Forests

Sponsored by the Indiana Society of American Foresters and Hoosier Heartland Resource Conservation and Development, this continuing education opportunity will outline the basic ecology of oak species in general, discuss past disturbance regimes and current problems facing oak regeneration, and highlight research helping to guide the management of oak forests. Brown County State Park, Abe Martin Lodge. More information, visit www.hhrdc.org.

Watch for announcements of INPAWS events and field trips in the mail, via e-mail, and at www.inpaws.org.

The award committee looks for designs that situate native plants in an appropriate context, that use a diversity of plant material, that create plant communities, and that create an overall design effect. Among their comments on Williams Creek

Consulting's winning entry: "Their naturalistic design and use of native plants for the treatment of stormwater runoff, effective biofiltration, and enhanced wildlife habitat make this project an excellent model for development."

Dear Readers: Rebecca Dolan, PhD, having penned no less than 30 lessons of Botany 101, will be back next issue with the debut of a new series. —Ed.

T.A. in Trouble

With Erythroniums came a rusty-bristly trailing evergreen plant, a little coarse, shy, and not easily found. It bore exquisite flowers, small and fragile, rivaling lily of the valley in fragrance. We called it "trailing arbutus," but all our New England neighbors called it "Mayflower." It grew in sandy, rocky woods and in evergreen swamps, always under protecting leaves, its chief desire for environment being an acid soil. It was a splendid flower for bouquets, its small clusters of rose and whitish flowers lasting in a living room several days, distilling fragrance to the very end. The first April outings on Sunday afternoons were to gather trailing arbutus.

The writer is U.P. Hedrick, Michigan pioneer of the 1870s and 80s, describing "Nature's Gardens" in the Land of the Crooked Tree (L'Arbre Croche) near Little Traverse Bay.

Trailing arbutus (*Epigaea repens*), T.A. for short, extends from Newfoundland to Saskatchewan, to Florida, and to New England and the Midwest in between. In Indiana, find it mostly in our northern counties. With us, bloom time lies somewhere between early April and early May. Our plants flourish principally on acid, north-facing dune slopes where the temperature rises more slowly in spring than elsewhere. Plants grow in rather open spaces, often near moss, with black oak (*Quercus velutina*), blueberry (*Vaccinium* spp.), and wintergreen



(*Gaultheria procumbens*). Less frequently, T.A. grows in flat, damp sites near blueberry and royal fern (*Osmunda regalis*). Strangely, our plants have little scent. (Readers' comments are welcome.)

When Abraham Lincoln's funeral train stopped in Michigan City, the local lighthouse keeper paid her respects with a wreath of trailing arbutus

(Noel Pavlovic personal communication). Today such a tribute would extirpate the Indiana Dunes National Lakeshore's T.A. On the latest (2005) Division of Nature Preserves' "Indiana County Endangered, Threatened and Rare Species List" for Porter County, the little shrub appears as "watch list," a category meaning something may go or is going wrong. This listing doesn't surprise me.

In 1993 and 2003, the Indiana Dunes National Lakeshore hired Myrna Newgent and me to find and map rare plants in the eastern part of Porter County. In 2003, though we found approximately 98 plants, T.A. had decreased dramatically. One population, documented as "plentiful" in 1993, had dwindled to a single plant, found only after two conscientious searches. Deer hoof action was probably responsible, and deer hoof action definitely had carved up another formerly abundant population—we could see the numerous trails descending the dune. Whereas small mats of T.A. are possible, no remaining plant covered much more than a hand span.

Deer are not the only problem . . .
To be continued

Reference: Hedrick, U.P. *The Land of the Crooked Tree*. Oxford University Press, 1948.

Artwork by Tina Thieme Brown, Maryland Native Plant Society.



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