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News and Views from the Indiana Native Plant and Wildflower Society • Winter 2011–12

Brown County Saga

The Burdensome Harvest of Good Intentions

Since introducing various "recommended" plants on his Brown County farm more than 25 years ago, and having gardened and farmed organically there for some 40 years, Dave Richards has had to develop a strategy to control, if not eradicate, the many exotics now invading his land. Here is how he arrived at this point—how many US landowners could tell a similar tale?—and how he is coping.

Many years ago when I managed several bee hives, a respected apiarist, Albert Thomas, who operated a honey and bee supply store in Indianapolis, recommended that I plant bush honeysuckle as an "excellent" source of nectar for honeybees.

About the same time, I had agreed to a farm and wildlife management plan with the office of the local Brown County Agricultural, Stabilization, and Conservation Service. ASCS recommended that I plant several varieties of lespedeza (Asian) for both wildlife and erosion control. They also informed me that the state DNR nursery at Vallonia had "wildlife packets" consisting of 25 autumn olive and 25 bush honeysuckles at a very reasonable price. The State Wildlife Biologist also recommended that I plant these Asian beauties, which I gladly did! I remember inquiring whether these plants might somehow spread by seed or bird dispersal. Both the ASCS and wildlife biologist denied that this was a possibility!!

When I had my first pond built, ASCS said that it was necessary to plant crown vetch to control erosion on both the dam and other disturbed areas.

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Illustration courtesy truthcontrol.com

Inside

INDIANA NATIVE PLANT
and Wildflower Society

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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.

Membership

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

News and Views

Information to be shared with INPAWS members may be directed to membership@inpaws.org.

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A Retrospective

By the time you receive this issue of *INPAWS Journal*, my term as INPAWS president will have come to an end. It has been an exciting two years during which my enthusiasm for INPAWS as an organization has grown.

As an all-volunteer enterprise, INPAWS is heavily dependent on its members. I have been constantly amazed by the willingness of INPAWS members to devote countless hours promoting native plants. This is true whether they are a Council member, giving time on a year-long basis, or are helping with one task that they have been recruited for.

The successes of INPAWS are due to the efforts of all these many volunteers. With this in mind, I want to look back on some of those successes during the last two years.

• **A new local chapter was formed in southwest Indiana,** and has quickly become one of our most active chapters. INPAWS membership in those nine counties grew from 11 in June 2010 to 64 by November 2011. My thanks to the officers and members in that area who have made this possible.

• **The INPAWS website has been revamped and modernized**. Although we had some help from outside INPAWS in designing the site, a huge amount of volunteer time was put into moving that design in the right direction and populating the pages with information and photos. If you have not yet seen the new site, please check it out (www.inpaws.org).

• **We brought the message of Doug Tallamy back to Indiana**, this time including areas outside central Indiana that had not had an opportunity to hear him. We were the prime sponsor for his return engagement to Indianapolis, speaking on a new topic, the importance of biodiversity corridors. We also were the prime sponsor for engagements in Ft. Wayne and South Bend. While we were not the lead sponsor for his presentation in Evansville, we were a supporting sponsor.

• **Letha's Fund for connecting kids with nature has grown** to the point where last year they were able to fund 12 trips or projects that gave 1,400 children an opportunity for a close encounter with nature. This is an initiative that I have a special interest in and am thrilled to watch grow.

• **We have expanded partnerships** with several organizations critical to our mission of promoting native plants. One such organization is the Indiana Chapter of the American Society of Landscape Architects (INASLA). In addition to an annual award for a project including native plants that INPAWS has sponsored for many years, each organization is now a sponsor of the other's annual conference. INPAWS also offers continuing education credits for professional landscape architects attending our conference. In a new initiative for which the details are still being finalized, we hope to work with one of the state landscape architecture schools to incorporate native plant information in the curriculum.

• **We increased the funding available for our Small Grants program**. We now make available approximately $2,000 each year for many worthwhile projects around the state.

Tom Hohman at Prophetstown Fen, September 2010. Photo by Wendy Ford.

As I look back on my two years as president, I am happy to turn over the reins to my successor, Art Hopkins, with full confidence that he will have the same support from INPAWS members that I had. I'm also looking forward to helping in other ways, both on the state level and with my local chapter. Maybe now I will have more time to spend getting my hands dirty, digging plants for the annual plant sale, and getting rid of invasives in local natural areas.

—*Tom Hohman*

Did You Renew?

If you neglected to renew your INPAWS membership in the fall, do it now so you get a full year of membership benefits. Keep those event notices and *INPAWS Journal* coming to your mailbox and support our mission of education and conservation.

Look for membership renewal information at inpaws.org or e-mail membership@inpaws.org.

Burdensome

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Following their recommendation, I planted this legume that also turned out to be invasive. Multiflora rose was already on the property from previous landowners.

Today, I am reaping the "benefits" of my past actions to improve habitat for wildlife and stop erosion!

Vetch

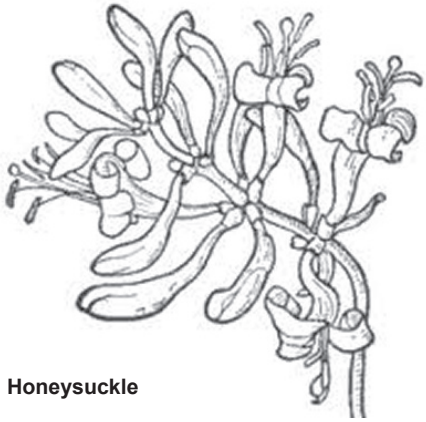
Here is my approach to solving the problem that I created many years ago:

First, I located all of the older bush honeysuckle and autumn olive shrubs, many of which were 10-15 inches in diameter, and used a chain saw to saw them off near the ground. The plants with a smaller diameter were pruned near the ground, the goal being to prevent these shrubs from forming any new seeds.

The second and third years, the same plants were pruned both spring and fall as they as they began to sprout.

Both honeysuckle and autumn olive stay green well into November and emerge very early, sometimes in March. This characteristic helps me to locate them during the colder months, as they are the only green plants in the woods and fields.

Bush honeysuckle can be pulled early in the spring if the ground is wet and the stem is less than 2 inches in diameter. Pull very slowly and steadily in order to get all of the roots as they spread some distance from the plant. Don't try this with autumn olive unless it is very small.



Honeysuckle

Gradually, these invasives will lose some of their vigor and will be replaced by native plants such as elderberry, wild jewelweed, pokeweed, spicebush and young tree saplings such as red maple, sumac, and sassafras.

Over the last few years I have been planting native shrubs such as pawpaw, persimmon, hazelnut, ninebark, and crabapple in infested areas. About 50% of the native shrubs have survived the recent droughts.

The crown vetch has spread into some of my pastureland but is not a major problem if mowed annually. This actually improves the soil and provides additional protein to the hay.

Locating and pruning back invasives provides good exercise and keeps me aware of what's going on in my forests and pastures.

Good luck in your invasive species control efforts!

Autumn olive

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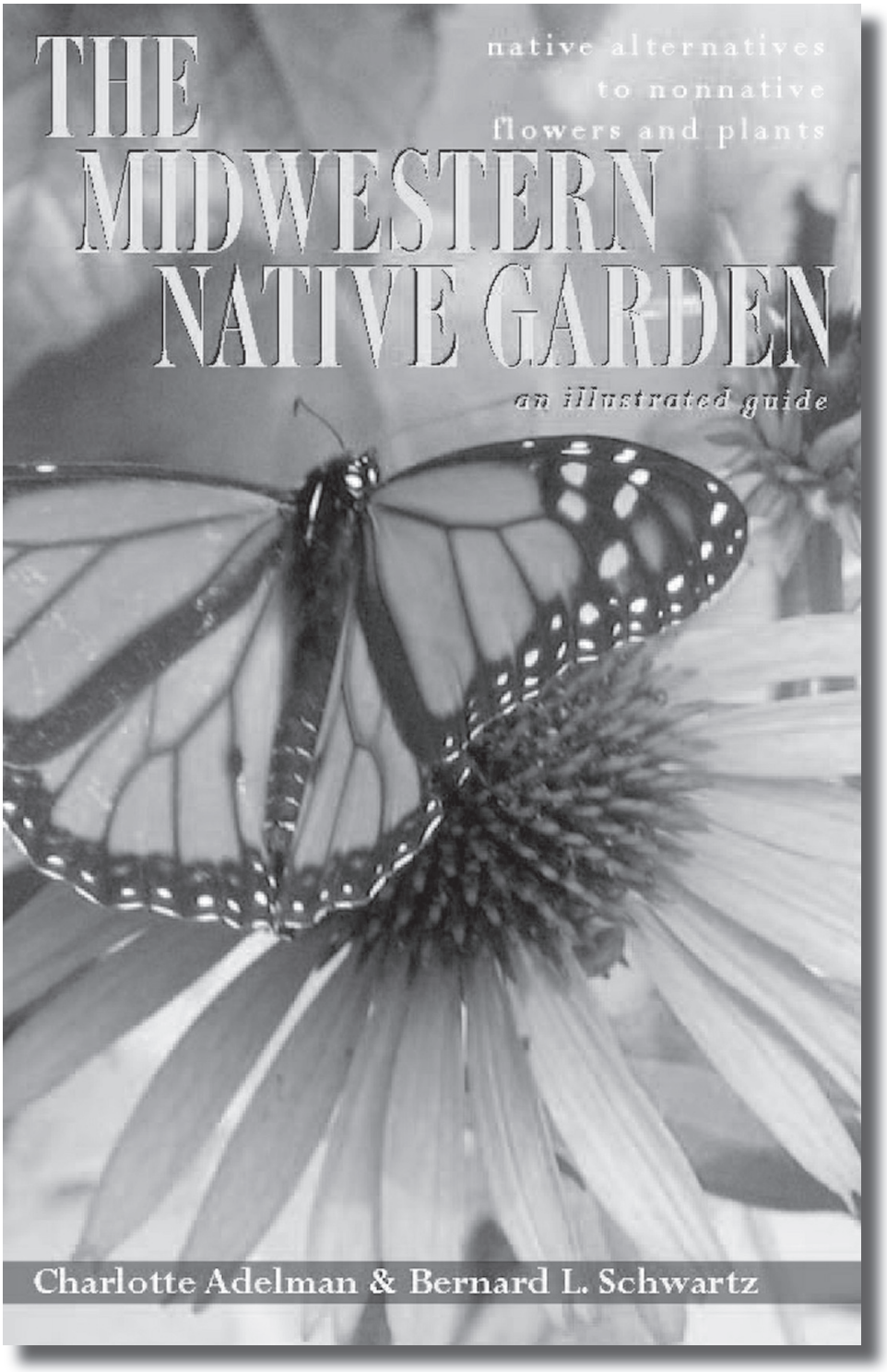
Dave Richards is a board member of the Brown County Native Woodlands Project, whose mission is to protect the forests of the Brown County Hills from the devastating effects of invasive plant species through education, training, and eradication of nonnative invasive plants. This article is adapted from the Project's newsletter, October 2011.

BOOK REVIEW

A Visual Treat Packed with Information

A review of The Midwestern Native Garden: Native Alternatives to Nonnative Flowers and Plants, *by Charlotte Adelman & Bernard L. Schwartz. Athens, Ohio: Ohio University Press, 2011.*

Nancy Hill, Avid Gardener



Our INPAWS book sales offer scores of books on native plants. I have many of them on my own bookshelves, since the only thing I like to buy as much as plants is books. So when I saw this title, it was hard for me to imagine what ground had not already been covered. Adelman and Schwartz have found a niche, however, and give us a treasure of information that is a treat as both science and art.

Categorized under spring, summer, and fall, the authors list nonnative garden plants. A typical entry has origin, height, cultivation, ornamental attributes, and often a reason not to plant it. For example, the nonnative butterfly bush is acknowledged as a nectar plant, but "Not one species of butterfly in North America can use buddleias as larval host plants."

For each nonnative, they list native alternatives, based on height, appearance, and growth conditions. The native Joe Pye weed, they say, is an excellent nectar source and in addition hosts "over three dozen species of Lepidoptera." They also suggest planting dogbane, Indian hemp, meadowsweet, buttonbush, false indigo, New Jersey tea, elderberry, or leadplant and tell us what butterflies, moths, bees, wasps, beetles, and birds use them for reproduction, food, or cover.

The visual presentation of this book is superb. For example, the authors tell us that fragrant sumac (*Rhus aromatica*) is a good ground cover alternative to the invasive, nonnative English ivy. There is a nice picture of both. *R. aromatica* is a host plant for the red-banded hairstreak (pretty photo of the hairstreak). Further, the sumac's fruits "provide eastern bluebirds and other bird species with emergency food during the winter," and there is a gorgeous early 1900's illustration of the eastern bluebird by Louis Agassiz Fuertes, a noted Cornell ornithologist and illustrator.

More than a dozen of Fuertes' richly colored illustrations enrich the book, along with eighty-two photographs of butterflies and moths, caterpillars, and hundreds of photos of plants, including many beautiful old illustrations. Kudos to the authors for mixing useful, accurate photos with lush vintage illustrations.

Every plant is listed with its scientific name. This is often critical. The authors present the nonnative "sweet autumn virgin's bower" and say its native alternative is "virgin's bower clematis." Avoid the former: *Clematis terniflora* and plant the latter: *Clematis virginiana*. Great information when reading plant tags.

I am a Doug Tallamy convert. I love knowing that the New Jersey tea I bought at the INPAWS plant sale last spring will be host to spring and summer azures, can attract at least thirteen butterfly species, will feed birds with their seeds and gather in small insects that hummingbirds feed to their young. Thus I

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IN MEMORIAM

Mark Outcalt 1935–2011

I always thought I'd see Mark Outcalt again. Everywhere I went connected with INPAWS—every hike, plant sale, Central Chapter event, Council meeting, annual conference—there he was, often accompanied by lovely Helen Harlan, his long-time companion. Then suddenly he was absent, struck down by a series of strokes, languishing in a hospital, not well enough to see visitors.

When I learned Mark had passed away several months later, I was sad for Helen, sad for myself, and sad for INPAWS, for in countless ways Mark was the go-to guy to get things done for the organization.

Officially, Mark was our long-time Membership Chair, and Secretary/Treasurer of INPAWS Central Chapter. But he did so much more. When I came on the Council as Journal Editor, Mark was there with business cards and a name tag for me to wear in Council meetings. When the Journal went to press, it was Mark who furnished an updated mailing list to the printer, who sent me a list of the new members to welcome, and who furnished extra copies of the Journal to the authors upon request.

I soon learned it was also Mark who got those pastel postcards printed, labeled and sent to tell us of upcoming INPAWS events. It was Mark who took Annual Conference registrations, organized the registration volunteers, and stuffed folders for the participants. And who was it that made regular trips to the INPAWS PO Box to collect membership checks, log them in, and send them to the Treasurer? Who else but Mark?

With all he did for INPAWS, it's hard to imagine Mark had time for anything else. But when I chanced to drop off some Annual Conference handouts once, I learned of another consuming interest he shared with Helen—the welfare of feral cats. A whole clan of homeless felines were cared for at the couple's Rocky Ripple abode.

There was so much else to know about Mark that came as a surprise when I read his obituary in the *Indianapolis Star:* A graduate of the University of Michigan, he received his doctorate from Purdue University, was Assistant Professor of Chemistry at the Indianapolis Campus and then pursued a career as a research chemist. We had mutual friends in his many circles, including the Marion County Master Gardner Association and the IMA Horticulture Society.

We have lost a great friend of INPAWS, a dedicated volunteer and active participant, a do-er who worked harder behind the scenes than any of us will ever know. We miss you, Mark. *—Wendy Ford*

Contributions in memory of Mark Outcalt can be made to Indy Feral, Inc., at www.indyferal.org. IndyFeral seeks to reduce the stray and feral cat overpopulation through the non-lethal method of Trap-Neuter-Return (TNR).

Visual Treat

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totally agree with the premise of this book—that to promote biodiversity we need to plant more natives in our home gardens.

So how far do we take this premise? I have hundreds of native plants, but I am NEVER giving up my variegated Solomon's seal or my 'Tiger Eyes' sumac or 'Matrona' sedum. Therefore, I was a bit bothered by the absolutism of the book. The overall tone of the book is Good Plant/Bad Plant, with an assumption that every gardener's goal should be 100% native plants.

Europe and Asia are nearly dirty words, and most nonnative plants are described as "naturalized or invasive in the Midwest," leading me to feel that Jacob's ladder, wormwood (*Artemisia vulgaris*) and wisteria are going to take over the world. Okay, maybe the *Artemisia* would. But the authors, in so aggressively prosecuting all nonnatives, sacrifice the opportunity to educate us on what is truly invasive (to be avoided at all costs) and what is just nonnative.

Further, what is native? A plant native to one area of this book's large geographic area (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin, and Ontario, Canada) is not necessarily native to another. The authors helpfully suggest accessing the USDA PLANTS data base for a specific plant's distribution.

Another quibble: I'm not sold on the organization of the book. When I'm thinking about changes or additions to my gardens, I don't say "I think I'll rip out that hosta and replace it with seersucker sedge or bottlebrush grass or northern sea oats. I take a more direct line. If I need a plant for a dry, shady spot, I pull out a native plant book and look at all natives that grow in those conditions, then choose based on leaf color, texture, and other design considerations.

Many nonnatives listed are the old-fashioned garden favorites—foxglove, hollyhock, peony, tulip, daylily, hosta, lavender, pinks, poppies, salvia, phlox, and roses. Every now and then, however, the format seems forced, as if the authors want to present a wonderful native plant and have to scrounge around for some nonnative to be its evil twin. Who plants the nonnative bishop's goutweed? I've been trying to get it out of my garden for twenty years! Or crownvetch? Or star of Bethlehem, which is that detestable wild-onion-like weed that needs to be dug out eight inches deep? I don't need an alternative for that one, native or not.

I am glad to own this book, even though I won't use it as the authors presumably intend. I will take pleasure in perusing the wealth of information on native plants that I now grow or want to grow, and I'll enjoy the insects and birds with whom I can now get acquainted thanks to the book's lovely pictures.

Nancy Hill, past INPAWS president, gardens in urban Indianapolis as well as rural Owen County.

Barbara E. Plampin, Shirley Heinze Land Trust

The Mystifying Vanished Tamarack Bog

Male pine warbler (*Dendroica pinus*) in breeding plumage, perched on a tamarack branch. Photo by Greg Schneider.

Last year, when my geologist-cartographer colleague and I were researching post-settlement influences in Eastern Great Marsh, one of our tasks was to resume the search for the site of the lost Tamarack Bog, once known to have existed, with its attendant cranberries, somewhere west of Fish Lake in Porter County's Pine Township. We failed. Here's why.

How do you lose a bog? Why try to find its remains?

Though the Indiana Dunes National Lakeshore had named a unit of the park after the Bog, no clue-furnishing tamaracks remained. If they didn't succumb to the 1927 drainage undertaken to establish the town of Beverly Shores, they succumbed in a two- to-three-year peat fire in the early 1950s. (I found the single remaining tamarack in the unit a few years ago, but it grows not in a bog but in the floodplain of a drainage ditch.) In 1928, geologist George B. Cressey noted that this quaking bog lay "just north of Tamarack on the Chicago, Lake Shore & South Bend Railway...." That clue sounded helpful, but no map showed a town called Tamarack. However, there was a Tamarack Stop on what is now the Chicago, Shore & South Bend. What railroad records remain indicate the Stop's removal in the l960s. So where was the Stop? At least five candidates exist for its location.

Before US 12 was constructed in 1922, early botanists like Charles Deam, the Reverend Marcus W. Lyon, Jr., and Father J.A. Nieuwland made their tantalizing discoveries after getting off at the Stop. Finding even one of their mouth-watering discoveries today would be more than gratifying. Among them: bogbean or buckbean (*Menyanthes trifoliata minor*), watch list; gold thread (*Coptis trifolia*), watch list; wild calla or water arum (*Calla palustris*), state endangered; bog arrow grass (*Scheuchzeria americana*), state endangered; and, most important, the boreal, small enchanter's nightshade (*Circaea alpina*), state extirpated—and, of course, cranberry (*Vaccinium macrocarpon*).

In the early 1990s, another colleague and I, following various clues about the Stop's location, found a possible candidate for the bog with speckled alder (*Alnus rugosa*) and poison sumac (*Rhus vernix*) growing above carpets of golden ragwort (*Senecio aureus*), all accompanied by a dozen ragged fringed orchids (*Habenaria*, a.k.a. *Platanthera lacera*). Slogging through another possible candidate, we confirmed botanist Gerould Wilhelm's hypothesis that the golden saxifrage (*Chrysosplenium americanum*), state threatened, would show up there.

About three years ago, Noel Pavlovic, United States Geological Survey, found the accurate location of the Stop in section 9 of Pine Township.

Maps! Ah, maps! Our early botanists communicated orally, leaving no accounts of either acreage, extent, or location. Donald Culross Peattie's 1930 map placed Stop and Bog in the wrong county. Another map places a tamarack bog west of Fish Lake in Pine Township but is too imprecise to overlay on a more sophisticated map. As yet, we cannot get access to the earliest surveyor's maps, and the Lakeshore's library is undergoing transfer to a new location.

Excuses. Excuses. It's remarkable how slippery the records are. Ours is a "Phase I" or progress report. My colleague isn't sure just what Cressey's "just north" of Tamarack means. I myself incline to accept Cressey's statement and am willing to explore further here. Small enchanter's nightshade just might remain. My colleague thinks Peattie misplaced the county line rather than the Bog and Stop and that further examination of this map might accurately place the Bog. He also recommends using topographical maps to search the lowest spots north of the Stop. Soil samples might help.

We might even continue the search for free.

The Case of the Uncommon

Patricia Happel Cornwell, Master Naturalist

It was a cold, sunny day in late October. We had had a couple of good frosts, and it was time. I put on my old coat and the leather gloves with the hole in the tip of one forefinger and went looking for my shovel. Finally I was going to do one of those things I'm always "going to" do. I was going to sow a patch of milkweed from seeds harvested at my parents' farm.

My husband and I live in southern Harrison County, surrounded by cow pastures and rolling fields of corn and soybeans. Because we mow our property only once in spring and once in autumn, scores of wildflower species take refuge here, among them the lovely orange butterfly weed (*Asclepias tuberosa*). However, in 14 years not one common milkweed (*Asclepias syriaca*) has germinated on our 19 acres. Why?

The farmers around here are big on herbicides, pesticides—you name a "-cide," they'll use it. Consequently, there isn't a single specimen of common milkweed in our part of the county.

On that bright fall day, I set out to remedy this sin of omission. The most time-consuming part was separating the milkweed seeds from their silky "kite tails." I chose a slope at the edge of our woods, next to a heap of limestone boulders on which years of rain have revealed in bas relief a collection of antediluvian fossils. I turned the soil in a patch about four feet in diameter and scattered the flat, papery brown seeds on the open ground. For insurance against deer and mower traffic, I put a white wire flowerbed border around them and strewed a few leaves over them to camouflage them from the ever-hungry wild turkeys.

Common milkweed is a perennial that favors roadsides and old fields like ours. Its single downy stem can grow to six feet, bearing three- to four-inch drooping umbels of dusty lavender-pink blooms June through August. Its leaves are opposite, entire, and oblong. Like most of its sister species (but unlike butterfly weed), if cut or bruised it exudes milky white latex sap.

Seeds of *Asclepias syriaca* take to the wind. Common milkweed has become uncommon where pesticides are heavily used. Photo by Hilary Cox.

There are about 250 genera and 2,000 species of Asclepiads, most of them tropical and subtropical. Various field guides list altogether 14 species of milkweed found in Indiana. The Genus was named for Aesculapius, the Greek god of medicine, because native populations, including Native Americans and later European settlers, used parts of milkweed plants for everything from asthma, contraception, and pneumonia to ringworm, warts, and wounds. Butterfly weed's old-fashioned name is pleurisy root.

The repertoire of milkweed doesn't stop there. Its young shoots have been eaten in salads and cooked like asparagus; the silky tufts that give wing to its seeds once filled life preservers, pillows, and mattresses; and its latex sap was used as both chewing gum and a substitute for rubber. Goldfinches (*Carduelis tristis*) plunder silk from milkweed pods to line their nests.

Common Milkweed

Milkweed's best-known customer, however, is not *Homo sapiens* or *Carduelis tristis*, but *Danaus plexippus*—the monarch butterfly. The foliage is the sole food of monarch larvae, and adults nectar on the flowers. The cardiac glycosides in milkweed make monarch larvae and adults toxic to birds and other predators. The plants provide a nursery for the young, nourishment for larvae and adults alike, and protection from their natural enemies. No milkweed, no monarchs.

Even if farmers weren't out to kill every plant they didn't plant, it's a wonder milkweed species survive at all. Their oddly constructed flowers may be their own worst enemy. Each flower, one-quarter to one-half inch long, has five down-curved petals around an elevated crown; each umbel of tiny flowers measures two to four inches across. Sacs of pollen snag on insects' legs and are pulled from the stamens, but they must then be inserted just so into slits behind the crown. If the insect gets it "wrong" and the pollen sacs go in backwards, those grains will not germinate. Some botanists conjecture that this is why most milkweeds produce many flowers but few seed pods.

A milkweed seed pod is like a sow's ear that contains a silk purse. When ripe, its rough spindle-shaped exterior splits down one side, exposing a snugly packed bed of white silk attached to scores of tiny brown, paper-like seeds. The wind teases out the fluff and sends the seeds sailing. The white tufts bring the term "angel hair" to mind, but they are a thousand times finer and lighter than the stuff people put on Christmas trees. These fibers spread out like a bridal train behind the seed and respond to the slightest whim of the wind.

After sowing my handful of milkweed seeds in the soil bed I had dug, I took out another pod and threw a handful of winged seeds into the air. I laughed out loud as they lingered momentarily around my head, then took flight. "Good luck!" I said.

Soon it will snow and tuck my milkweed seeds in till spring. Nothing to do now but wait.

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The Great Pretender

While writing this article, I was unable to identify a milkweed species that has eluded me for years. Everything about the plants is milkweed-like: long ovate entire leaves, umbels of tiny, greenish recurved flowers, fluff-filled pods, even milky sap. They look a lot like green milkweed, but the seed pods are very slender and the stems are red. So I emailed IDNR's Mike Homoya and Kay Yatskievych of Missouri Botanical Gardens.

They arrived at the same conclusion: It's not another milkweed species but hemp dogbane (*Apocynum cannabinum*), a.k.a. Indian hemp. Field guides make no mention of the distinctive red stem exhibited by the specimens in my field, and for good reason: not all hemp dogbane plants have red stems. The slender pods are a more reliable clue than stem color.

The dogbane family (Apocynaceae) is, at least, related to milkweed (Asclepiaceae) and includes such disparate kin as periwinkle (*Vinca minor*), *Amsonia*, and oleander.

GROWING YOUR OWN

A Near-Perfect Native Plant

Gene Bush, Munchkin Nursery

Creeping wintergreen, or *Gaultheria procumbens*, is as close to the perfect native plant as one will find in gardens from Canada to the Carolinas.

Almost every human sense is fulfilled just paying this plant a visit while walking through the garden. All twelve months of the year, the eyes are most certainly rewarded by lustrous leaves decorated in turn by tiny white flowers and red berries. The nose is rewarded by berries and foliage that exude a clean, fresh scent when crushed. Although wintergreen does not make an audible sound, it does say "holidays" as few plants can with its red and green theme during winter months. All five senses are combined to become that elusive sixth sense rising to the experience of a Courier and Ives greeting card.

Creeping wintergreen glazed by a light frost. Photo by the author.

Creeping wintergreen is a dwarf shrub that draws itself up to its full height of four inches while moving outward, rooting as it goes. It is assertive in its growth, creating a great groundcover when given the right habitat. There are only two requirements for success in growing wintergreen. It must have somewhat acidic soil, and it does best when the stems have a loose mulch or duff for the roots as they extend their reach.

My soil was neutral to just slightly acidic, so I created a raised bed for my wintergreen along with other acid-loving plants. My garden is on the north side of a hill, and the bed I created was located under a white pine for shade. I used alternating layers of peat moss and pine bark chips to a depth of eight to twelve inches, let the bed get rained upon a couple of times, and then transplanted my wintergreen and companion woodland jewels.

Within weeks, the wintergreen settled in and began expanding, creating a carpet of deep, lustrous green leaves of heavy substance. Each leaf looked as though it had been polished during the night to shine in the light of a new day. In July, tiny white-aging-to-pink, urn-shaped flowers adorned the top of the leaves. As I walked by the bed I could watch the flowers drop and begin to turn into berries.

By October, each round berry had become a deep holiday-red. In November, the first frosts and light snows began to dust and adorn the red and green of the wintergreen, heralding the holidays to come.

Wintergreen responds well to containers if you would like to bring some up to your home's entrance over the holidays. Give it lots of light, water well, feed lightly and often, and it will quickly fill a container to match a red bow and some sprigs of pine or cedar.

My favorite companions are native azaleas of choice; further south, perhaps a camellia for the groundcover to ramble under. Coming up through the wintergreen, I think the native Iris verna, along with the pink ladyslipper and the painted trillium, flesh out blooms for spring.

Each time you walk by, pick a berry to chew on for the fresh clean taste of wintergreen that will linger along with memories of a bed filled with the near-perfect native plant.

Gene Bush owns Munchkin Nursery, a prime source of ornamental shade plants, including many natives, in southern Indiana. You can follow his blog and sign up for his newsletter, Green Clippin's, at www.munchkinnursery.com.

Welcome New INPAWS Members

CENTRAL
Barb Baker
D. Vaughn Bidwell
Katie Booth
Carole Boylan
Pam Burt
Cathlene Darragh
Michael E. Gill
Troy & Lauren Haffner
Jonathon Hensley
Judith Lawburg
Jody Nicholson
George M. Oliver
Jacqueline Rosales
Smita Skrivanek
Beth Young

NORTHEAST
Bill & Lynne Bogardus
Terry Chandler
M. Kate Ferguson
Ron Gamble
Heath Hurst & Maraiah Russell
Al McSweeney
Brent Smith

SOUTH CENTRAL
Ann Burke
Paula & Barry Thomas

SOUTHWEST
Valerie Cockrum
Bonnie Frost

WEST CENTRAL
Deborah Marr

Letha's Legacy Continues

Cheryl Shearer, Youth Outreach

As a child, Letha Queisser developed a love for plants and flowers while she worked alongside her grandmother in her garden. When Letha was raising her three children and inspiring neighborhood youngsters to explore the fields and woods (and rewarding them with jellybeans) her husband Dave amusedly cheered her on.

Letha Queisser died in January 2007, and, in planning for her death, Letha requested memorial contributions be made to INPAWS. Under Tom Hohman and Ruth Ann Ingraham's leadership, the INPAWS Board established Letha's Youth Outdoors Fund as a part of the INPAWS youth outreach effort.

The purpose of Letha's Fund is to promote Letha Queisser's passion for wildflowers, Indiana native plants, and introducing children to the wonders of their outdoor world.

An early donor to the fund was Letha's high school friend, Carolyn Liebel, who fondly recalled times she and Letha spent as young mothers with their children enjoying outdoor adventures. Letha's husband Dave, a considerate and thoughtful man, phoned everyone who made a gift to INPAWS (including Carolyn) to thank them for their contribution to Letha's Fund. A romance blossomed and they married in December 2007.

Dave continued his interest in Letha's Fund with Carolyn's full support. When Dave and Letha's son Kelly joined the INPAWS Youth Outreach committee, his presence gave Dave a ringside seat in the grant-making process. As Dave's health deteriorated, he made clear to Kelly that his support for Letha's Fund should continue after his passing.

When Dave died on September 14, 2011, Carolyn and the Queisser family again directed memorial gifts to Letha's Fund. The tributes to Dave through donations to the Fund have been significant and a great source of comfort for the family.

As Letha's sister Charlotte Price observes, "Letha and Dave were two people with a love and appreciation for the natural world and the joys it brings to us all."

The Queisser family legacy has continued with the donation of Letha's cherished botanic prints, native plant drawings that had been passed down through her family. Upon her death, Dave donated the remainder of the valuable drawings to INPAWS.

At this year's Annual Conference, outgoing president Tom Hohman became the first recipient of a framed print from Letha's collection—a drawing of a spring beauty—in appreciation for his dedicated leadership of INPAWS.

Through INPAWS and Letha's Fund, the Queisser family is carrying on a special legacy, with Indiana's children as beneficiaries.

You may donate to Letha's Youth Outdoors Fund by mailing a check to INPAWS Treasurer, P.O. Box 30317, Indianapolis, IN 46230-0317. Please write "Letha's Fund" in the memo line on the check.

At Letha's Fund's first-ever poster session at the Annual Conference, Jody Nicholson of Marian University EcoLab sharesinformation on this popular field trip destination.

A Letha's Fund award recipient displayed photos of a butterfly garden they planted with the children.

Young men from Bloomington New Tech High School wowed the audience with their research on water quality for the Sycamore Land Trust. Photos above by Wendy Ford.

Ruth Ann Ingraham presented a framed print of Virginia spring beauty from Letha's collection to outgoing INPAWS president Tom Hohman. Photo by Cheryl Shearer.

Hilary Cox, Native Plant Advocate

Pollinators Plus

A Plea on Behalf of Plants and Insects

I have been fretting over an issue or two for a while now, and thank the voice of reason that is Doug Tallamy for stopping the spinning in my brain and turning me in the right direction. He even handed me the title!

Once upon a time we were part of a beautifully functioning system we call "nature."

All life on Earth depends on the same things to survive and reproduce: food, water, and air. Without them there is no reproduction.

What we, the human race, have done is to interrupt that life cycle in so many ways for so many forms of life that we are endangering our own lives. We are running ourselves and the rest of life into the ground.

We are using up or eliminating "resources" that were meant to be the infrastructure that would support life on this planet. I don't think these resources evolved as such, but it's the construct we have applied to them, and we need to gain a better understanding of the situation very quickly! For the sake of life's future, let's not take "nature" for granted.

So let me restart my story this way…

You love plants. So do I. If we didn't love plants, I wouldn't be writing this article, and you wouldn't be reading it.

Plants benefit us in untold ways, difficult to enumerate.

There are the obvious benefits: Plants make up a large part of our diet. They keep us alive. Some, more than we'll ever know, are medically beneficial. They heal us. Their flowers, leaves, branches and trunks beautify our world in every season with their structure and grace. Their aromas make us want to take deep breaths and "stand and stare." ("Leisure"' by W. H. Davies, from *Songs of Joy and Others*)

Other benefits are less obvious: Better physical health through tending plants (called gardening!). Better mental health through interaction with our green infrastructure. The gain of personal and scientific knowledge through observation of natural systems. Oh, and did I mention clean air to breathe? I could go on….

An aside: My personal quibble with the above is that these are all acts of "taking" instead of the "partaking" ("person who takes a part" –*Oxford Dictionary*) that once existed. They give, we take.

In our love of plants, throughout history and often unwittingly, the human race has done major damage.

We have introduced plant (and other) species all over the world which have turned out to be thugs.

Against such incursions, evolution fails over the short term. Evolution needs time. I know it will win out eventually, but in the meantime these thugs quickly take over vast areas from species that originated there.

The latter, so-called "native" plants, evolved over millennia along with the other life forms in those areas, and each form of life supported the other. We call this system a "community" and call many of its members "mutualists." When the thugs take over, the delicate "web of life" balance is thrown off, and the deadly chain of vulnerability to the community sets in. It's a form of terrorism that should be recognizable to the human race.

We humans have introduced foreign species of just about anything (animals, viruses, molds, insects, plants, to name a few) just about everywhere in the world. In so doing, we have disrupted the systems that took so long to evolve in those areas. In the world of plants, the system with which I am most familiar, the introduction of nonnative and invasive plants has reduced the diversity of the original plant material in what was once a well-balanced plant community, sometimes to the point of extirpation. This has caused the depletion or extinction of the mutualist species that rely on those plants.

Among those foreign plant species we have introduced are the huge monocultures we grow for food. Orange groves in the desert, apple orchards worldwide, soy, and the most common crop on the planet, corn ("a human invention, a plant that does not exist naturally in the wild and can only survive if planted and protected by humans." –*History Detective*)—all of these, and more, take up land once inhabited by original plant communities. And many of these exotics require pollination by nonnative species of bees!

Through my love of plants, I am becoming more familiar with another component of our original communities—insects!

I spent last winter in Tucson working 12–16 hours a day at the computer assessing the tens of thousands of pictures Neil Diboll and I have taken for our forthcoming book, *The Gardener's Guide to Prairie Plants*, and doing the necessary research to prepare a comprehensive guide not only to the plants we work with but also to the insects that pollinate them or use them as host plants. Through this research I became acutely aware of the enormous debt of gratitude we owe these fellow creatures. And yet...

The instinctive human reaction to most insects is to find ever more efficient—and toxic—ways of ridding the planet of these "pests."

The average gardener or farmer panics at the sight of holes in the leaves of their treasured plants—and dear reader, I see you, in my overactive mind's eye, reaching for the spray can as well. I do feel a touch more empathy with the farmers doing the best they know how to feed a world population increasing exponentially (another issue needing to be addressed, but not here).

So now let me ask you: You love plants, don't you? Then you must love insects too, correct? Because without insects there

would be no plants, and without insects and plants there would be no us, right? And when you look at them closely, aren't many of them strangely beautiful?

Is that silence I hear? Hmm. Maybe the answer comes with qualifications such as: "Well, I like butterflies; they're pretty. And honeybees are useful (if nobody in our family is allergic). So I want to attract them to my garden. Along with the birds, of course. But the rest? Well, they're just pests aren't they?"

"Pests" indeed—without which the human race eventually dies!

Because the large majority of those insects are of mighty importance to life on this planet. Some few are just parasites, but that label applies equally to the human race.

Wasps or ants, beetles or bugs, moths or spiders have one of the matchless jobs in the world:

Insects are our pollinators—plus!

Without insects, many plants would simply not reproduce. (Notice I haven't even mentioned bees? That's for another article too.) These pollinators are our food production managers. In some cases, such as ants, they are even farmers. They help produce our food. They also provide food for other species, including many species we humans count as food.

Some insects are generalists and will work with many species of plants. Some are specialists and will work with only one genus or even one species of plant. Many insects are mutualists, depending on other species within their community. They are all vulnerable to human activities.

Through loss of habitat and reduction of plant diversity due to those human activities, not to mention pesticides and the use of the spray can, we have already lost untold numbers of insect species forever. In the long term, we end up losing too if we don't change our behavior. We shoot ourselves in the foot, or worse. Fewer plants, fewer insects, less food production equals fewer people—not such a bad thing for the planet, perhaps, but unacceptable to us humans.

So far evolution appears to have coped with the burden of habitat degredation and loss of biodiversity. But can evolution keep up with human activity?

Look closely and you'll see a multitude of (native) mosquitoes working their way in and out of these common mildweed flowers. Photo by the author.

Insects are one unbelievably important component of our vulnerable native communities. I leave it to you to extrapolate to other introduced and invasive species, of which I have mentioned only a very few. We can only guess at the disruption and damage they have caused. And please include honeybees and earthworms in your considerations.

So there's the bad news, the knowledge I live with daily:

We are destroying our life-support system.

The good news? We can do something to at least ameliorate our impact. First read Doug Tallamy's book, *Bringing Nature Home*, then join your local native plant society. Buy and plant some of those plants that would have existed in plant communities in your area. If you don't have a garden of your own, join a (human) community garden and create an original plant community. Other members of the original community still in existence, including the insects, will follow as if by magic.

If you live in a city, find open spaces and turn them into wildlife habitat—they're doing this on roundabouts in the UK! Or grow plants in pots on your porch. Grow some of the edible native plants and reduce your dependence on monocultures of corn and soy, if only by a little. We have wild asparagus and Jerusalem artichokes in Indiana, to name just two, and they can both be easily grown in large pots.

And when holes appear in some of the leaves of your native plants—go and observe! Take a magnifying glass, find out what is eating them, look at the culprits closely, see how beautiful they are, learn what their true function is—if nothing else, we have Wiki to help us here—and admire their proficiency! Would that we performed our parts in "nature" half as well….

Find useful information on pollinators, biodiversity, plants, mutualists, generalists, local foods and such online.

Find out what's really happening out there, then go do something positive about it. Support your local native plant society. Educate your neighbors, your children, your grandchildren.

And if you don't use a computer, go to the library. Read… then act.

We have a big job ahead of us!

INVASIVES

Oriental Bittersweet

Ruth Ann Ingraham, Chair, Brown County Native Woodlands Project, Inc.

Anyone who drives through our southern states is stunned by mature trees, buildings, and even abandoned vehicles enveloped in the green cloak of kudzu. Kudzu is the classic example of a deliberately introduced, exotic plant whose original function was to control erosion along roadsides. This decision went awry with a disastrous results—the plant is out of control. Many of us are surprised when we learn that kudzu grows in Brown County as well as in many other counties in Indiana, and even into Michigan. The situation in Indiana is being closely monitored, and control efforts are ongoing.

The experience with kudzu illustrates what may happen when an exotic plant settles into a new environment without the natural controls that keep it in check in its homeland—Japan, in the case of kudzu.

One of Brown County's favorite fall plants is bittersweet, *Celastrus scandens*, with its clusters of bright orange orbs that dangle tantalizingly from vines that may reach the tops of tall trees. For as long as settlers have inhabited our county, as well as counties in 37 other states, bittersweet fruit, within reach, has been cut and used for decoration.

In the 1860s, a confusing look-alike was introduced as an ornamental plant—Asian or oriental bittersweet, *Celastrus orbiculatus*, native in Korea, China, and Japan. It escaped cultivation and naturalized, outcompeting the species that has grown in North America historically.

Both vines are woody, perennial plants. Because they are similar in many ways, it is difficult for most of us to tell the native from the interloper, but there are distinct differences. The best way to determine whether you have the native or the nonnative species is to check where the blossoms bloom and the fruit forms on the vine. American bittersweet produces flowers (and fruits) in single, terminal clusters at the tips of the stems. Oriental bittersweet is a prolific fruiter with lots and lots of fruit clusters emerging at many points along the stem.

Unlike American bittersweet, oriental bittersweet grows vigorously and climbs over and smothers vegetation, which may die from excessive shading or breakage. It can weaken mature trees by girdling the trunk. Left unchecked, it forms an impenetrable thicket and becomes a pure stand in forests.

Clusters of fruits all along the branch are the giveaway that this is the invasive oriental bittersweet. Drawing courtesy Florida Center for Instructional Technology.

In Brown County, oriental bittersweet infests forest edges, woodlands, and fields, especially where land has been disturbed. While often found in more open, sunny sites, its tolerance for shade allows oriental bittersweet to invade forested areas. (Unfortunately, hybridization of the two occurs, making identification more difficult. Before using control methods, be cautious lest the native bittersweet become the target.)

Many of us buy wreaths and other fall decorations that include sprigs of bittersweet berries. If, at the end of the season, you plan to discard the berries, and if you question whether the fruit is from the invasive rather than the native variety, discard them with your trash in a plastic bag. Putting the seeds or branches of oriental bittersweet in a compost or brush pile could accidentally introduce an invasive species to your property.

To learn more about this and other exotic, invasive plants, visit www.inpaws.org or find excellent links to more information at the website of the Brown County Native Woodlands Project, http://bcnwp.org. Reprinted from the BCNWP Newsletter, October 2011.

Ruth Ann Ingraham, our INPAWS historian, wears many hats. On weekends in Brown County, she volunteers helping landowners locate and identify invasive plants growing on their properties.You also know her as the author of Swimming with Frogs *(Bloomington: Indiana University Press, 2004), a journal of experiences with nature at her Brown County cabin.*

THE NEXT GENERATION

INPAWS Invites School Participation

Many may not be aware that in 2007 INPAWS Council established a membership category for school nature/ecology clubs with an interest in native plants. Annual dues are $25.

INPAWS Journal and all other mailings will be sent to the teacher or leader of the group, who will disseminate the information to club members. It is our understanding that, if the club is school-sponsored, the school will reimburse the teacher for the dues.

Members of the school group will be able to attend INPAWS events such as plantings, invasives pulls, field trips, and volunteer activities. In cases where there is limited space (such as hikes with restricted number of participants), arrangements will need to be made in advance with the event leader.

Slide programs and other information will be made available to the groups, and they will receive special consideration regarding grants for native plantings on their school property.

If any of our members are now working with a school group, please advise them of this policy and contact youth@inpaws.org for further information.

F I E L D N O T E S

INPAWS Mourns Bill Brink

INPAWS lost founding member D. William Brink suddenly and unexpectedly on November 15.

Bill operated Great Outdoors TurfScapes, a highly respected, environmentally conscientious turf management company on the north side of Indianapolis.

An avid outdoorsman and naturalist, Bill was an accomplished, self-taught wildlife photographer whose work exhibited great sensitivity and attention to detail. He knew exactly when and where wild things could be found and possessed the patience and skill to get the perfect shot. He was a founder of and exhibitor in the annual Eagle Creek Park Images of Nature Exhibit.

Many in INPAWS knew Bill as a good friend. Ruth Ann Ingraham recalls him driving her to an early organizational meeting in his truck during a blinding Indianapolis snowstorm. Bill also contributed seed money to get INPAWS started and served as one of its first officers.

Bill was active in the Indiana Audubon Society and a volunteer for Holliday Park and Eagle Creek Park, where he led Sunday morning bird hikes for many years.

Adapted from the The Indianapolis Star obituary, published November 18, 2011. Memorial contributions may be made to Eagle Creek Park, Friends of Holliday Park, or Letha's Youth Outdoors Fund (c/o INPAWS, P.O. Box 30317, Indianapolis, 46230).

Hike with INPAWS This Year

Program chair Mike Homoya has a fine lineup of excusions planned for this hiking season.

Here's a peek at what's in store: spring wildflowers at Fort Harrison State Park (Marion County) led by Perry Scott; forest wildflowers of Kokiwanee Preserve (Wabash County) led by David Hicks; sandstone cliff plants at Hemlock Cliffs (Crawford County) led by Kirk Larson; dune plants of Indiana Dunes National Lakeshore (Porter County) led by Noel Pavlovic; fungi of Shades State Park (Montgomery County) led by Andy Methven; shrubs of West Central Indiana (natural area TBA) led by Sally Weeks.

Watch for dates and details in the blog at INPAWS.org.

Revamped Website Unveiled in November

INPAWS' website has been reorganized, the logo "refreshed," and bells and whistles added to bring us current with social networking technology.

The website team chaired by Ruth Ann Ingraham includes INPAWS members Amy Perry, Jeff Pitts, Wendy Ford, and Matt Newell. The team brainstormed a new organization, and Wendy Ford collected existing pieces, wrote additional content, and populated the new site with text and photos. A project manager, graphic designer, and programmer associated with Ratio Architects worked with the team (at a reduced fee) to bring their vision to fruition.

The new site features a blog, which is where you'll find the latest news on INPAWS events. Blog pages will bring you timely news, in contrast to the content pages which house more "permanent" information on native plants, where to visit Indiana natives, how to landscape with them, and how to inspire the next generation of stewards of the environment.

The site retains the valuable species pages prepared by Marcia Moore, which show pictures of and link to information about all the Indiana native plants featured in our brochure, *Landscaping with Plants Native to Indiana*.

Please explore the INPAWS website at www.inpaws.org and let us know how we can make it even more useful to you.

Coming Up

January 24
Conservation Day at the Statehouse, Indiana Statehouse North Atrium, Indianapolis, 10:00 a.m. to 1:30 p.m.

May 12
INPAWS Plant Sale & Auction, Park Tudor School, Indianapolis

Watch for announcements of INPAWS events and field trips in the mail, via email, and in the blog at INPAWS.org.

Members Promote Natives

INPAWS members Alicia Douglass and Paul Rothrock have been authoring a column entitled "Native Plants to Know and Grow" for *Indiana Gardener* magazine (www.indianagardener.com).

The free monthly to bi-monthly publication has a northern Indiana circulation. This year they highlighted alumroot, bluestem goldenrod, columbine, heuchera, partridge pea, witch hazel, and prairie restoration plants.

"The column has been an opportunity to link the readers to INPAWS and its website resources," Rothrock says.

Friesner Herbarium Launches Blog

An exciting new blog offers seasonal observations of wild plants in Central Indiana—what's in bloom and tips on identification. It's written by our own Becky Dolan, director of the Friesner Herbarium at Butler University for over 20 years.She has a PhD in Botany from the University of Georgia and is a past president of INPAWS.

Find Becky's blog at http://blogs.butler.edu/indianaplants/.

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CONSERVATION BEAT

INCA 2011 Legislative Scorecard

Jane & David Savage, Conservation Committee

Here's how last year's priorities of the Indiana Conservation Alliance fared in the Indiana legislature. (The "grades" assigned are not INCA's but our loose interpretation of the results.)

Watch for information on 2012 priorities on the INPAWS blog, and plan on participating in Conservation Day at the Statehouse, a unique opportunity to make your voice for conservation heard.

Conservation Day will be held January 24, 10:00 a.m. to 1:30 p.m. in the North Atrium of the Indiana Statehouse.

C **Indiana Heritage Trust (IHT) Funding** Legislators allocated $100,000 per year from the general fund for the IHT. The Alliance had requested $750,000 per year in general fund appropriations in the bill.

A+ **Clean Water Indiana (CWI) Funding** The budget allocates $500,000/year from the general fund for the CWI as well as all of the cigarette tax dedicated funding. This is exactly what the Alliance was advocating for. Success!

D **Restricting Phosphorous in Lawn Fertilizers** House Bill 1425 was not scheduled for a committee hearing. The language was not inserted into another bill.

A **Sustainable Natural Resources Task Force** Senate Bill 375 establishing a task force to assess programmatic and funding needs of natural resources passed! Success!

C– **Property-Assessed Clean Energy Bonds (PACE)** Senate Bill 260/House Bill 1457 would authorize municipalities to establish clean energy financing districts with private funding. In its first session in the legislature, PACE legislation drew Republican authors in both chambers, and was heard in committee in both chambers, but the Indiana General Assembly failed to adopt this PACE legislation. In response to opposition from the Indiana Bankers Association, and from legislators who were reluctant to give municipalities added bonding authority, the Senate amended SB 260 to enable local governments to adopt privately funded PACE programs, and eliminated the priority of a PACE lien. In the House, the same concerns resulted in HB 1457 program language being deleted and instead provided for a summer study committee review of PACE programs. Ultimately, neither bill was acted on by the second chamber, and the bills died. PACE advocates will request that the topic be studied by the Environmental Quality Service Council prior to the 2012 session.