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Indiana Native Plant and Wildflower Society

Spider Lily A Late Summer Fascination By Gene Bush

Plant Profile

At the risk of getting up on my 'natives soapbox' once too often. I find myself stepping up again for our own spider lily (Hymenocallis occidentalis). I see the tender foreign species in Dutch bulb catalogs, but never see our native listed. Here in the U.S. I have yet to see H.



The striking blooms of our native spider lily appear in late summer atop 30 inch stalks. According to Gene Bush, Spider lily is no more difficult to grow than tender Dutch bulbs found in catalogs.

occidentalis listed in a wholesale catalog, and only rarely have I seen it listed in a garden catalog. I do not have a clue as to the why of it all. To the best of my knowledge occidentalis is no more difficult to propagate and grow on than the tender species.

In the wild, spider lily is usually found growing along creek and branch banks where it is flooded during the growing season, as well as swampy bog and marsh areas. Usually they are in full sun. Native range is from Georgia, Alabama, on over and up to Indiana and Illinois. In spite of this range, hardiness is usually rated at USDA Zone 7 in literature. In my garden here in southern Indiana they have been through -30 degrees on one occasion and -20 on more than one occasion. They will also take some shade and do quite well, as mine are transplanted

where they receive only late afternoon sun. They also do not demand a pond or stream edge to do well. I dug in lots of peat and leaf mold, keeping my plants well mulched with chopped leaves, and they ride out our late summer droughts just fine.

This member of the amaryllis family has long strap-like leaves that form a fountain radiating up and then arching out and down. Individual leaves are about two and one-half inches wide by over two feet in length with a center rib forming a crease down the middle. Normally the foliage has mostly gone dormant by bloom time, but some years both foliage and blooms are present at the same time.

The ghostly blooms are at the top of a nude stalk that reaches thirty inches or more. Each bloom has its own display stand at the top of the stalk and there will usually be five to six blooms per stalk. The common name of spider lily comes from how the blooms are constructed. Each bloom has six long, narrow, white petals widely spaced and in a shallow cup outline. At the center of the petals is a cup formed from "webbing" that goes from stamen to stamen.

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There are six stamens about three inches long and the web comes about two inches up each one, forming a rib for the web. The overall

Movie Horrors

Letters



Vinca minor (top) is on the INPAWS list of What NOT to Plant.

Ruth Ann Ingraham with American spikenard (Aralia racemosa) that thrives near a limestone wall at her Indianapolis home, although it did not self-seed as we erroneously reported in July.

A Native Plant Enthusiast Sees The Hunger Games

By Melissa Moran

This spring, my husband, our two teenaged daughters and some friends headed to the theatre for the blockbuster opening of The Hunger Games. In a future place and time, a boy and girl from each of twelve districts are selected to fight to the death on live television. The protagonist (Katniss) volunteers to take her younger sister's place for the latest match. Parts of the movie were filmed in North Carolina's DuPont State Forest and thousands of wilderness acres-including waterfalls, streams, and lakes-provide a beautiful backdrop to the tragic story. Halfway into the movie, Katniss is heartbroken; she has lost a friend and ally to the Hunger Games and sets

Clarifications

In the summer 2012 issue we ran a caption that identified bladder campion as an Indiana native. Kay Yatskievych clarifies, "Bladder campion (Silene vulgaris) is not native in Indiana. It is an exotic that is native to Europe. Asia, and Africa, and has been introduced nearly throughout the U.S."

Ruth Ann Ingraham wrote to clarify another photo caption: "The Aralia racemosa or American spikenard," she says, "which I'm standing behind in the photo did not self-seed in the normal sense from a natural habitat but rather from a cluster of plants introduced into my landscape in 1997. attempted to make the point that apparently a bird plucked a seed from my introduced plants and deposited it next to the limestone wall by my front sidewalk. The seed germinated, rooted and a plant grew. That plant thrives there and is far more robust than the plants from which it originated. I believe, rightly or wrongly, that the limestone leaches nutrients which this volunteer plant prefers. It would be misleading to think that Aralia racemosa would self-seed naturally into my northside Indianapolis garden."

about to collect flowers for an impromptu memorial tribute to her friend.

In the throes of this compelling and tearful scene, it happens. My eyes fix on the deep green forest floor on which our protagonist has placed the body of her friend. I recognize it. Vinca minor. Everywhere, Unmistakable green monotony, Wallto-wall un-natural carpet, as far as the eve can see.

My mind begins to wander in several directions: How does this happen to such beautiful places? Don't they have an invasive plant removal SWAT team? I'll bet the director selected this glade precisely for the deep green, complete covering of the forest floor. Did anyone in the cast or crew recognize this as an invasive plant? If they had each taken two fistfuls, they could have cleared it all. Don't they know periwinkle is on the Invasive Plant Species Assessment Working Group (IPSAWG) list and the INPAWS list of What NOT to Plant? Perhaps Ellen Jacquart could request publishing rights and use a scene from this movie in the next IPSAWG brochure...

"I recognize it. Vinca minor. Everywhere, Unmistakable green monotony. Wall-to-wall un-natural carpet, as far as the eve can see."

What can I say? Once you see an invasive plant and know it for what it is, you will always see it, no matter where you are or what you're doing. I leaned over to my native plant-loving daughter and told her what I saw. "I know, I saw it too, Mom. But let's watch the rest of the movie.'

Next invasives removal project: DuPont State Forest, North Carolina-anyone?

Melissa Moran lives with her family in the Nora area north of Indianapolis. Her first native plant garden was made entirely of plants from the INPAWS plant sale, and she has continued expanding her home's native gardens ever since.

Meet the Dodders

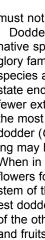
A family with unsavory behaviors

Bv Mike Homova

Fact may indeed be stranger than fiction, and in nature, dodder is a prime example. Although dodders are true plants, they look nothing like them. Think instead of strings of orange or yellow spaghetti. Fully fledged dodders have no roots, no apparent leaves, and just miniscule amounts of chlorophyll. And the flowers, when produced, are barely there. Given these characteristics, and some unsavory behaviors to be revealed later, it's clear that dodders are no ordinary plants.

Yet, life begins ordinarily enough for a dodder. Its tiny seedling looks somewhat normal – like a sprouting onion – but further in its growth, normal ends and bizarre begins. Dodders are vines, and as a tiny dodder seedling develops, it "sniffs" out nearby plants upon which to climb (yes, dodders can detect

"Fully fledged dodders have no roots, no apparent leaves, and miniscule amounts of chlorophvll."



odorous vapors). After contact with a plant, the dodder breaks its connection with the ground, giving it unfettered access to scramble about the branches of its reluctant host.

And now for the unseemly part. At various points of contact between the dodder and its host plant, the dodder produces rootlike haustoria that pierce the host's stem,

Michael Homova is a plant ecologist and botanist for the Indiana Division of Nature Preserves, a position he has held since 1982. Regarded as one of the finest field botanists of the Midwest. he is author of Wildflowers and Ferns of Indiana Forests: A Field Guide (Indiana University Press, 2012) and Orchids of Indiana (Indiana University Press, 1993).

Dodders (Cuscuta), of which Indiana has ten native species, are members of the morning glory family (Convolvulaceae). Not many of the species are common, and some are considered state endangered (state endangered means 5 or fewer extant occurrences statewide). Probably the most common dodder in the state is swamp dodder (Cuscuta aronovii). but the most interesting may be rope dodder (Cuscuta glomerata). When in bloom, its cluster of tightly compact flowers form a thick, coiled "rope" around the stem of the host plant, making it one of the easiest dodder species to identify. For identification of the others, close examination of the flowers and fruits is necessary Dodders are typically found in wetlands

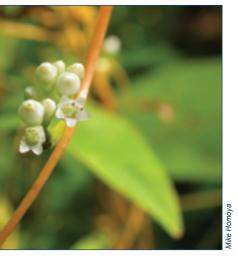
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slowly draining it of its life juices. Yes, it's true. Dodders are sap-sucking parasites, the leeches of the plant world.

Although dodders feast mostly on juicy herbaceous plants, shrubs such as buttonbush, hazelnut, and even poison ivy vines are also fair game. Dodders are not totally promiscuous, though. They have a strong dislike of grasses, sedges, lilies, and other monocot plants. Just

Plant

Profile



must not be tasty enough.

growing on a variety of host plants, particularly spotted touch-me-not (Impatiens capensis) and water willow (Justicia americana), the latter an

Dodders—continued on page 5

What's On Your Mind?

Native Plant Q&A

Three species

recommended to

restore the understory

for a woodland garden

are red chokeberry

buttonbush (right).

(top), spicebush and



Wild Ideas

by Patricia Happel Cornwell

Q I have been clearing honeysuckle, prairie rose and garlie $\overline{}$ my woods to create a woodland garden. The cleared area is mainly bare ground and poison ivy, 80% shady year-round and dry, dry, dry. I have planted two arrowwood viburnums and two spicebushes along the edge of the woods. What could I plant in the woods to help restore the understory? — Heidi Jasper, Bartholomew County

You already have one of the best under- Λ story species for a shady garden: native spicebush (Lindera benzoin). Spicebush grows 6 to 15 feet tall in sun or shade and all parts of the plant have a pleasant spicy scent. In spring it is covered with yellow blooms; in fall it sports red berries and bright yellow leaves. Color and fragrance – that's the good news. The bad news is that, like most native shrubs, it prefers moist soil, which you do not have.

Another attractive possibility for full sun or partial shade native to the northeast US is red chokeberry (Aronia arbutifolia), which reaches 10 feet tall, with clusters of red berries and showy red autumn color. It likes acidic soil and tolerates both wet and dry.

Buttonbush (*Cephalanthus occidentalis*) would be a stretch but it. too. tolerates a wide range of soil and moisture conditions once established. This species has sweet-smelling fuzzy white balls of flowers and glossy leaves. It grows six to 10 feet tall.

You say that in addition to multiflora rose, Japanese honeysuckle and other invasives, you have removed a lot of "prairie rose gone amok." Rosa suffulta, or prairie rose, is our only native climbing rose, producing two-inch pink blooms in June. It accepts ho-hum soil and, if you do indeed have this species, you know it already thrives in your dry woods. It is possible that you actually have Virginia rose (R. virginiana) or pasture rose (R. carolina), as these also tolerate dry, poor soil. If you have not exterminated all of your wild roses

a judiciously pruned clump would lend some early summer color to your woodland garden.

You noted the presence in your woods of flowering dogwood. Depending on the species, these can be understory or canopy trees. some growing to a height of 35 feet, like native pagoda dogwood (Cornus alternifolia). Natives of more modest size are red osier dogwood (C. sericea) and gray dogwood (C. racemosa), which grow only four to eight feet tall.

All of these species can be pruned to fit your space. If you are willing to water them generously at least during their first year, you may be well rewarded. Native shrubs are not always stocked by garden centers, but check out the Landscaping section at inpaws.org for native plant retail sources. Carolyn Harstad also lists native plant sources at the back of her book Go Native: Gardening with Native Plants and Wildflowers in the Lower Midwest, IU Press, 1999.



I am having trouble identifying a spe-O cies I saw last May at Stoutsburg Savanna in Jasper County. There were three plants 1-2 feet high, with creamcolored, oddly shaped flowers on branches that paralleled the ground. The flower is hard to describe: the two top petals were flat, the next two beneath were at a 45-degree angle and the bottom two formed a pod at a 90-degree angle. The leaf

Wild Ideas—continued on page 5

Dodders from page 3

herb that grows about 1 to 2 feet tall in shallow streambeds and lakeshores. But there are many different hosts, including the mallow seen here in the photo. Even though mostly found in wetlands, dodders can turn up in some surprising places. During this past summer season a population of dodders was observed terrorizing some nice garden annuals (especially Coleus)



Dodder vines find many different hosts, including this mallow (Hibiscus) observed at the Muscatatuck Bottoms Recreation Area

growing along the Indianapolis Canal Walk. In Indiana, dodder rarely infects agricultural crops, although elsewhere in the U.S. some may be troublesome pests. But unless the dodder infestation is severe, the negative impacts seem to be tolerated. Most host plants continue to grow and even flower and fruit. albeit somewhat less vigorously than normal. Thus, there's usually little need to be concerned that dodders will kill your favorite plants. And anyway, dodders are pretty

cool plants that need some love too. A note of warning. While research has shown that dodders are parasites of plants only, it would still be wise not to stand too close to them. Who knows, the desired object of a particularly hungry one of these botanical "wiretappers" just might be

3046.

you! 👷

is a five-leaflet compound. On the sample I took, three leaflets are 1¹/₂ to 2 inches long, the bottom two smaller. I think this plant is in the pea family, perhaps a kind of indigo. - Ed Zschiedrich. Battle Ground. Indiana

You are on the right track; this plant is A certainly in the pea family. The Audubon Society Field Guide to North American Wildflowers (Eastern Region) describes the typical pea flower as having "a broad upper petal (banner or standard), two lateral petals (wings), and two bottom petals (keel) joined and shaped like the prow of a boat." I believe you have seen large-bracted wild indigo (Baptisia leucophaea). This indigo has white or cream flowers and "two large stipules at the base of three-part leaves, giving the effect of five leaflets rather than three" (Audubon). This species can be differentiated from white wild indigo (B. leucantha) by the leaves; B. leucantha has three-part leaves with no noticeable

stipules. 🎃

Editor's note: INPAWS had many plants of both B. leucophaea (cream false indigo) and B. leucantha (white wild indigo) for sale at its native plant sale in May, 2012.

If you have a question for the "Wild Ideas" column, e-mail the details with your name, city or county, and phone number to Pat at flowerfeet@hughes.net. Be sure to type "INPAWS Wild Ideas" in the subject line.

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Wild Ideas from page 4



The large-bracted wild indigo blooms in May or June and then goes dormant. The stem detaches from the base and the plant tumbles in the wind, dispersing its seeds.

Finally, a use for poison ivy

Dunes Walk

By Katharine Hadow Ploense

Hikes

Complain about poison ivy if you like, but at the Indiana Dunes National Lakeshore it protects the pitcher's thistle.

When my family arrived at the INPAWS' "Walk Through Time" hike at the Indiana Dunes on July 21, we expected well-groomed trails. Instead, our guide and lecturer, ecologist Noel Pavlovic of the U.S. Geological Survey, Biological Resources Division, led us off the official trails onto footpaths menacing with thick poison ivy.

Noel Pavlovic of the U.S. Geological Survey, Biological Resources Division, led us off the official trails onto footpaths menacing with thick poison ivy.



When we came to a rickety log bridge, we were technically crossing the Grand Calumet, but at that point the river was an unimpressive six feet wide and two feet deep. The dicey crossing still made the hikers nervous—not for fear of slipping into churning waters, but of dropping their cell phones and cameras into the trickle.

Between the bridge and the poison ivy, this uninviting trail discouraged hikers from following it to the top of the dune. If they got there, they might trample the pitcher's thistle (*Cirsium pitcheri*), a federally threatened plant. Pitcher's thistle is now found on beaches and grassland dunes of Indiana, Illinois, Michigan, Wisconsin, and Ontario, Canada. It requires five to eight years to mature, and then flowers only once. The flowering period typically lasts from June to early July, but because of 2012's hot, dry summer, the one mature flower we saw had already gone to seed and was dying.

Noel stopped often along the trail to point out both native plants and invasive non-natives. He spoke especially fondly of the wild lupine (*Lupinus perennis*). At its northern range, the lupine supports the Karner blue butterfly, an endangered species found chiefly around the Great Lakes. The wild lupine requires sandy soil and only partial shade. We did not see the lovely blue flowers because it blooms in May and early June. The lakeshore's oak savanna does offer a suitable climate, but we didn't see many plants, again because of the drought.

Noel also talked about the Dunes' oak savanna. In the Midwest, oak savannas and tallgrass prairies are the most threatened ecosystems. He told us that ecologists debate the exact definitions of ecoregions, but in all cases, definitions depend on how much tree cover the land receives. In the Midwest, they use this scheme:

- Prairie <20% canopy cover
- Savanna 20–50% cover
- Woodland 50–90% cover
- Forest >90% cover

What we learned on "Walk Through Time" at the Indiana Dunes: Stay on the trails. Otherwise you may develop a rash, or, worse, harm a threatened species. Protect wild lupine if you want to help support the Karner blue butterfly. In defending the pitcher's thistle from humans, finally, poison ivy is good for some-

thing. 📌

Katharine Hadow Ploense is the former director of public information at Reeves-Reed Arboretum in Summit, NJ. She volunteers at the Natural Resources Conservation Service of the USDA. Her herbicidal neighbors would be dumbstruck to learn that she lectures on non-native invasives. She deadheads daylilies at Thistlethorpe in Crown Point, IN.

INPAWS Events

Conference 2012

Saturday, November 3 7:45 am to 5:00 pm UIndy Hall at University of Indianapolis, Schwitzer Student Center

INPAWS' biggest annual event

Keynote Speakers:

Rob Naczi, Curator of North American Botany at the New York Botanical Garden and one of the world's leading botaniststaxonomists

James Locklear, director of conservation at Omaha's Lauritzen Gardens Also: Dr. Paul Rothrock, Sally Weeks, Kay

Yatskievych, Mike Homoya, and a special visit from Charles Deam (Sam Carman)

Find registration information at inpaws.org

Hike Saturday, October 6 9:30 to 3:00 EDT Fern Cliff Preserve Putnam County, Indiana

Leader: Bill McKnight, former biology instructor and museum curator. Author of *Bryophytes of Illinois and Indiana* (in prep).

What To See: West central Indiana has a good *bryoflora* (mosses, liverworts and hornworts), with Putnam County having almost half of the 450 species reported from Indiana. If time permits we may do an additional site, possibly Sword Moss Gorge

Go to inpaws.org or the INPAWS blog for more information.

The most exciting find to him as an expert were several species of *Lactarius*, the milky cap mushrooms. "Two of the species may be new to Indiana," he said, "and there were two other species which are not common but represent distributional range extensions." When asked, what one thing he wished more people understood about fungi. Dr. Methven said. "How important they are ecologically and economically. We (humans) could not exist without fungi. They are important decomposers and nutrient recyclers in the forest. Without them we would have been buried in organic debris long ago." The fungi are also important economically. They give us "penicillin, bread, alcohol, ethanol, lots of pharmaceutical compounds and organic compounds we use in daily life...every day."

Hunting Mushrooms

On Saturday, September 8, about 30 people ranging in age from 6 to 60-something joined Dr. Andrew Methven of Eastern Illinois University for an INPAWS hike at Shades State Park. They went in search of mushrooms. Dr. Methven estimates that they found between 75 and 100 species of fungi. "We saw some fungi I would generally consider to be early summer and summer fungi. I think that was a direct effect of having so little rainfall in the summer. The recent rains brought up fungi we didn't see earlier in the year."



INPAWS members found scores of mushrooms during a recent hike at Shades State Park. Two of the species may be new to Indiana according to mycologist Dr. Andrew Methven.

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$\bigcirc 2012$

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All are invited to submit articles, news, and event postings. Acceptance for publication is at the discretion of the editor. INPAWS welcomes differing points of view.

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Mission

To promote the appreciation, preservation, conservation, c vation, 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 at inpaws.org.

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Please direct Information of interest to webmaster@inpaws.org.

Going for the Gold

Competitive Botanizing By Barbara Plampin

No botanical Olympics? Botanists do compete anyway, sometimes rather fiercely, because we can get our names in regional, state, or local records. or even books. Hikes and explorations furnish opportunities to "medal." The unspoken rule: The first person, even if idly bored and ignorant, to ask "What's this?" gets the gold. The actual identifier may preen herself, but her medal



will be silver. The knowledgable do well to call out the plant name or its equivalent very quickly. Example: The Division of Nature Preserves' Tom Post and I agreed we were looking for state rare ground cedar (Lycopodium tristachyum). One day, spotting candidates. I was fumbling in my book for an ID when Tom exclaimed. "Barbara, vou're standing in it!" Gold to Tom.

Bronze goes to those lumped under et al. Sometimes the records list actual names, but being an et al. may spare one embarrassment if the gold medalist's ID of, say, a rare fern, later turns out to be erroneous.

Exploring new territory, the would-be medalist dashes ahead, capitalizing on the pack's tendency to stop to ID every single plant. She keeps speculations about possible rare finds to herself. Silence and swift feet enabled me to find two state threatened bladderworts: the dirty yellow flowered small or lesser bladderwort (*Utricularia minor*) and one-half inch plus hair or zig-zag bladderwort (U. subulata) in unexplored pannes. (Pannes are intradunal ponds created when wind excavation

If properly licensed, a loser may console herself by collecting the rarity and depositing it in an herbarium, thus ensuring her name in the records. Not recommended: imitating a certain British botanist who, greedy for fame, salted a far-flung Scottish island with disjuncts (plants far out of their range) and then "discovered" them over the years to botanists' applause. Fraud detected, his medals were stripped.

Barbara Plampin is a Life Director of the Shirley Heinze Land Trust and a field botanist. She does rare plant monitoring, often for the Indiana Dunes National Lakeshore. She holds a Ph.D. in English and lives in the Indiana Dunes.

Spider from page 1

waving in the wind. Blooms come on at a time when gardens could use a bit of color. In my garden spider lily begins blooming in mid-August and lasts well into September. Some native companion plants that bloom at the same period could be cardinal flower (Lobelia cardinalis), the great blue lobelia (L. siphilitica) and turtle head in pink (Chelone *lyonii*). You may also want to try some of the native asters.

© Gene Bush. Bush is a nationally known garden writer and speaker who owns Munchkin Nursery & Gardens in southern Indiana. Contact Gene at munchkinnursery.com or join him on Facebook or Pinterest.

exposes the water table.)

Unlike an Olympic race, the person in front may not medal. On a spring bog hike, I heard my co-leader crv out triumphantly those most humiliating words, "You walked right by it!": *it* being the emerging missle nosecone of tightly wrapped leaves of the state watch list white lady's slipper (Cypripedium candidum). I was too busy seeking grass-of-parnassus (Parnassia glauca) leaves. Last place may luck out. On a hike through savanna and sand dune I had two before-lunch sightings of state threatened fame flower after all the other botanists had "walked right by it." The rosy petals of this portulaca family member do not open until three and close at six.

appearance is of a delicate white lace doily





While botanizing. Barbara Plampin was intent on finding grassof-parnassus (left) when she walked right by Lady's slipper (top).

Another find, the dirty vellow flowered small or lesser bladderwort is threatened in Indiana.

A Conservation Story

Hats Off



A Michigan garden center took dame's rocket (Hesperis matronalis) off sale after alert INPAWS volunteers called attention to the invasive plant's aggressive habits.

Dateline May 23, 2012

by Steve Sass

Last Friday, a day that was literally sandwiched in between Thursday's garlic mustard & dame's rocket pull at the South Bend/ Elkhart Audubon Sanctuary and Saturday's garlic mustard & dame's rocket pull at Save the Dunes' Trail Creek Fen property, I had time to shop for some tomato and pepper plants at Vite's Greenhouse in Buchanan, MI. While perusing the vegetables, I spied a table full of none other than dame's rocket (Hesperis matronalis). In case you don't know this plant, it's the pink to white plant that flowers in abundance along roadsides in May.

Stunned by the irony of seeing for sale in a local nursery an aggressive, exotic invasive plant that I had just spent six hours pulling, I snapped a picture of the dame's rocket display and posted it on the INPAWS Facebook page. My post was guickly noticed by INPAWS State Invasive Plant Education Chair, Ellen Jacquart, who immediately contacted Vite's Greenhouse and politely asked them to stop selling this invasive plant. Shortly thereafter, Vite's replied: "Thank you for alerting us to this. After additional research, we are going to discontinue selling dame's rocket and remove them from the bench. We purchase this plant from a wholesaler in a part of the country where it is apparently not such a problem. The consolation is that we have only sold just a handful

I think that it was a very upstanding move on Vite's part to admit and subsequently correct their mistake, and I would like to encourage INPAWS members and supporters to frequent their business for vegetable and herb transplants. The native plants are scarce, but I did manage to find a table of Asclepias tuberosa (butterfly milkweed) for \$1.99 each, and there were other things here and there. Plus, I also picked up a couple of lovely hanging baskets of annuals for my mother.

and don't have an abundant supply."

The moral of the story is "yes, we can make

a change." As insignificant as one table of plants may seem, dame's rocket produces a copious amount of seed. The fifty or so plants that were removed from Vite's Greenhouse in 2012 may have stopped 500,000 plants from invading the wild in 2015 or 2016 🔶

Steve Sass is president of INPAWS' new North Chapter.

Invitation

The next board and council meeting of INPAWS will be November 13 at 3:00 in the offices of the Nature Conservancy in at the Efroymson Conservation Center, 620 East Ohio Street, Indianapolis, IN 46202.

Any INPAWS member is welcome to attend.

New INPAWS Members

North Mary Haynes

Southwest Steven A. Mussett

West Central Darla Aldred

Central

Rosemary Jeffrey Sue Loudermilk & Dr. Sameer Bhatia Phil Waite & Lisa DeHayes

South Central

Mark & Kathy Sheehan Stori Snyder Dorothy D. Wilson 🥧

The Waterer

By Nancy Hill

My husband's a pretty smart guy. But I hate it when he's right in an area where I'm the expert.

I'm the gardener in the family. For over thirty vears. I've designed the beds, bought the plants. planted the plants, and taken care of the plants. I love it. It's my passion. John has no interest in it. He likes cars. I would no more ask "Want to help me to pick out a witchhazel?" than he would ask "Wanna help me take the gas tank out of the '58?"

In the brief and scattered moments I've wished for his participation, I remind myself of gardener friends who have a spouse with an opinionabout where to place the serviceberry or sumac. when to cut back the Joe Pye weed, or how many Hot Papaya Echinaceas to group together. My garden is a one-cook kitchen and I like it that way. But as the workload has grown (I have home gardens, cabin gardens and I landscape around commercial buildings in Broad Ripple), I've increasingly needed help. I now hire people to spread mulch, weed, transplant and edge. What I can't do is hire someone to water.

No one waters my plants the way I do. For one. I water deeply. Only a person who loves a plant will really give it all the water it wants. Others can perform the task, but it's not the same, like taking your dog for a long, lovely walk versus hiring a dog walker. It's personal. Standing over a swamp mallow with a hose is a time when I look it over, see the shoots that emerged after I cut it back in May, compare its height to last year, assess when it might take over the sidewalk, delight in how many buds it has, and visualize how stunning it will be in a week or two with hundreds of deep red blossoms. If I don't actually talk to it, which I sometimes do, I'm still communing with it.

The few times I've hired someone to water, I watch a woman fan a spray of water over a large bed, which neither deeply waters nor communes. I instruct, I explain, but to her it is a patch of green, not a gathering of the individuals I chose and know personally. The welfare of the 'Henry Eilers' rudbeckia is not in her heart. She doesn't

Nancy Hill is a past-president, current Journal editor and long-time member of INPAWS. She uses native plants in her home and commercial gardens.

The problem with watering is how much it was needed these past two summers of drought when nature's spigot closed tight for months at a time. Plants needed not hours but days of watering each week and there is a limit to the time I can stand in 99-degree heat, holding a hose. So last year, out of desperation, I asked my

husband for help.

"Just watering?" He asked, "That's it?" I smiled inside. He thought watering was easy. In a bad drought, when mulch hardens like a This summer John again helped with the water-"I took the watering wand off." he said. I looked at him. Was he nuts?

pie crust over every bed, water runs off like crazy. To prevent this, I explained, you use the watering wand. I carefully showed him how to stand over each plant, let the water build up, then absorb into the ground, over and over and over, until you know the water has gone through the mulch and into the dirt. The wand provides just the right amount of water, I said—a gentle 18" ring of droplets, soft enough to not run off but strong enough to eventually soak through to the plant roots. ing. And he was more than good-natured. He was (dare I say it) committed. Some mornings he left to water at the commercial buildings when I was still enjoying my second cup of tea. One day when I joined him, he dropped the bomb. "But..." I choked out.

I watched. A one-inch stream of water came

hard out of the end of the hose. He aimed it next to a red salvia. The force of the water immediately dug a hole in the mulch. He moved the stream around the salvia. It dug a circle around it. A beautiful circle that held water like a bowl. I watched as that large bowl of water filled up, then disappeared into the mulch, into the dirt and down to the roots. The hose's hard stream did two things at once. It delivered lots of water and it loosened the mulch.

know that the 3-inch nubbin of green is one day going to be a spectacular 4-foot mass of vellow brown-eved blooms and she is not motivated, therefore, to give him a long, deep, soaking drink that goes to his baby roots. There is no love going out to Henry.

"Watch." he said.

Waterer—continued on page 12



Hibiscus moscheutos (rose mallow or swamp mallow) is a tall wetland perennial found in many counties of the state. It blooms from July to October. in shades of white or pink, with a dark burgundy center. There are several cultivars: many are more deeply cololored, like this one in bright red.

A Botanical Cliffhanger

Plant **Profile**



Sedum telephioides (Allegheny Stonecrop) has evolved desertlike succulent leaves that retain what little moisture comes its way. Mike Homoya, Indiana State Botanist, writes in Wildflowers and Ferns of Indiana Forests that Sedum ternatum (mountain stonecrop) and S. telephioides (Allegheny stonecrop) "are the only 2 native species of Sedum in Indiana, although there are several introduced naturalized ones."



Sedum telephioides is

classified as an Indiana

it only grows in some

of the most hostile and

uninhabitable conditions

almost only found on the

River. Kay Yatskievych

S. telephioides as occur-

ring in Clark, Crawford,

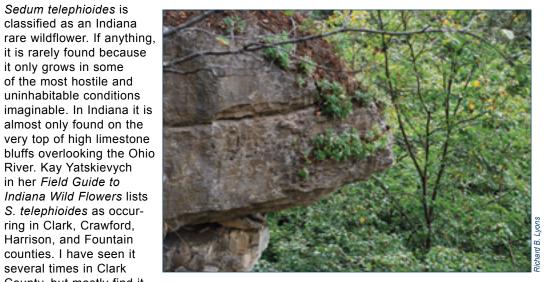
Harrison, and Fountain

counties. I have seen it

County, but mostly find it

several times in Clark

in her Field Guide to



at O'Bannon Woods State Park in Harrison Co. There it grows out of the fissures and cracks of the cliff faces that border the Ohio River. It ekes subsistence out of the few remnants of forest soil trapped in these fissures on a gravity-fed journey over the cliff's edge and to the talus slopes below. A beautiful plant whether in flower or not, S. telephioides has adapted to these conditions by evolving desert-like succulent leaves that retain what little moisture manages to come its way. Because of its rarity it should be left alone in its singular and outof-the-way habitat and never be disturbed 幓

Richard Lyons is a Master Naturalist and has been volunteering as naturalist at state parks since he retired from his job as a fireman twelve years ago. His passion is leading wildflower hikes in Southern Indiana.

The Waterer—from page 11

"I do a count of 60 on each plant." he said. "Of course that's not all at once. You have to move back and forth."

It took several seconds for a bowl of water to fill around each plant and while that soaked in, he moved over to the next one. Each plant got several bowls of water until it soaked in so slowly that you knew the ground was saturated. With a shrub, he held the hose above the main set of stems close to the ground and it usually kept absorbing for a full 60 seconds.

I watched silently, enjoying both the sight of quarts of water sinking into the dirt and the sound the thick stream of water made when it hit each bowl of water, a baritone of a sound, not the plinking of drops.

I have about six watering wands in my garage right now, hanging neatly on the wall. Some have never been used. And probably never will be. I'm still the gardener in the family. But every now and then I let my husband have an opinion 🥧

In the words of "Plain ol' Charlie Deam"

By Kit Newkirk

Mike Homoya writes that Charles Deam was, well, eccentric. Homoya also writes that the best biography of Deam is Plain Ol' Charlie Deam by Ralph Kriebel. Curious, I began poking around the web and found a post by Keith Board of northern Indiana at getyourbotanyon.blogspot.com listing choice quotations from Charles Deam. Here are some of Board's favorites as well as others culled from Kriebel's biography.

"I understand they are strongly recommending now that all the old cemeteries be planted with multiflora rose. When Gabriel sounds his horn, I am afraid some will be stranded and not be able to get thru the roses. Please do not recommend the multiflora rose except for the bonfire."

"It makes my mouth sore to talk about multiflora rose."

"...I have spent all my time on something I consider worthwhile. In so doing you meet a lot of opposition."

"You know I am very hard of hearing when I can gather plants."

"I shall never forget my toughest day. I started down a newly graded road (all roads unknown to me at that early date) of 4 miles. In the 4 miles I had to change tires three times. Inner tubes in those days were very poor quality. It was in the fall of the year with a strong wind and drizzling rain. I was from about 9:00 A.M. until dark making the 4 miles and I doubt if a single vehicle passed me that day.... I wanted to get off this road and when I did I drove into a woods and the car scarcely got over the side ditch when I was "in" to the hubs. So I just camped there that night but I did get out my stove and make some coffee to help me get down my bread and peanut butter."

"I got well in spite of the M.D's." "Old General Debility will give the alls '

tion information 🍁

commands, and believe me, you will obey." "A nosy automobile repairman asked Deam and Van Camp whether they were local men. 'Nope,' Charlie retorted, 'we're just passing through, like Pluto Water'." (Pluto Water was bottled at French Lick, Indiana).

"Huffing and puffing to keep up with DenUyl one day in the late 1940s, Charlie said, 'If I drop dead, just throw me on the nearest brush pile and keep going'."

"Friesner, you collect grasses like a cow." "Doubtless sometimes you wish to call someone a mean name. Well I have found it. Just call him a sunflower. That combines all that is needed. The brutes have no principles, guided by no laws, and seem to be free-for-

"I did my darnedest, and in it you have my measure.

"I am just plain ol' Charlie Deam and I never want anyone to think anything else."



The best biographical book on Deam. according to Mike Homova, is Plain Ol' Charlie Deam by Ralph Kriebel.

Doug Tallamy To Speak October 13. 8:30 - 3:00 Hendricks Co. Fairgrounds Auditorium, Danville, IN

In a one-day seminar produced by the Hendricks County Master Gardeners, Dr. Doug Tallamy, University of Delaware Professor of Entomology and Wildlife Ecology, considered THE GURU of habitat gardening, will talk about how to use native plants in the garden and their impact on wildlife and the environment. Never miss a chance to hear Dr. Tallamy! Also – Ellen Jacquart of the Nature Conservancy will identify invasive species and how to get rid of them. Fall is the best time to fight back invasives. AND...We'll discuss the Hendricks County Pollinator Project. Go to hendricksgardeners.com for registra-

Let INPAWS Help

Awards up to \$1,000

Grants & Awards Our Small Grants Program makes awards of up to \$1,000 to projects that further 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.

These awards can be used in conjunction with other sources of funding. Successful awardees must prepare a report to share with the INPAWS membership after the project is completed. From time to time, larger awards may be made for special projects by presentation 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 the interests of our membership.

Small Grant Guidelines

Deadline February 1, 2013 Application Procedure

1. Cover sheet, including: name of project; amount requested; location; applicant/ contact person information (name, address, telephone, email); specific name of person/ organization to whom award checks would be payable; whether a new or existing project; category that best describes the project: research, training, education, conservation and habitat, demonstration garden, etc.; any prior INPAWS funding.

2. Text of proposal, not to exceed two pages: (a) summary of the project, not to exceed 60 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. 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 and how? How many 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.

3. Budget sheet, showing: (a) labor, material, and program costs; (b) sources and amounts of funds already raised, if any; and (c) total cost of the project. Please note that grant money will not be awarded toward transportation, lodging, or refreshment costs.

4. If applicable, a plants list may be included with the proposal either as an additional sheet or part of the text.

Submissions

1. E-mail (preferred): Send one copy to smallgrants@inpaws.org, noting the name of your project in the subject line.

2. Land mail: Send one copy, postmarked by February 1, 2013, to INPAWS Small Grants Program, P.O. Box 501528, Indianapolis, IN 46250.

Inspiring youth about nature

Applications to Letha's Fund continue to roll in, from Elkhart to Randolph Counties, and points in between. Find out more about Letha's Fund at inpaws.org.

Here is what kids have said about their excursions into nature:

From second graders:

"...a lot of plants make food"

"I learned what poison ivy looks like" "...the best part was when I got to hold a worm"

"Thank you Letha's Fund for not making my mom pay \$6."

From sixth graders:

"We put on skits for invasive plants just for you"

"...we found out that the park has lots of invasive plants especially Bush honeysuckle"

"Thank you for warning us about invasive plants and animals.....you guys are good people."

Deam's Flora *continued* from back cover

In our efforts to protect Indiana's natural landscape we often find ourselves retracing Deam's footsteps. In one example, information found in the *Flora*'s account of bog bluegrass (*Poa paludigina*) revealed the existence of an unusual habitat for southern Indiana, resulting in the discovery not only of the rare bluegrass, but a site that would become a state-dedicated nature preserve.

Information in *Flora* has also been very useful in the restoration of landscapes. Because Deam collected plants in every township of the state, we have an excellent record of what occurred in an area historically. This has been especially helpful when attempting to restore areas that no longer possess their native veg-

> *"Information in* Flora has also been very useful in the restoration of landscapes... Deam collected plants in every township of the state..."

etation. A prime example involves an area in Daviess County, Indiana, where a major restoration project conducted by the Division of Nature Preserves has relied heavily on the *Flora* and Deam's plant collection for guidance. Landscape restorationists throughout the state would do well by utilizing the *Flora* in similar fashion.

The *Flora* is clearly more than a list of plants. Many treasures are found within its pages, ranging from topics on early 20th century agrarian culture to herbal cures. There are frequent references to discussions with "old timers," including some of whom were the first European settlers in the state. Also mentioned are accounts of Deam's own early activities on the family farm, such as when he used scissors to cut cockle and rye in a wheat field, or pulled common purslane by the bushel and fed

it to the hogs. One of the most exciting bits of information, at least for me, was Deam's statement that he had in his possession two books owned by Dr. Asa Clapp, a pioneer botanist who lived in New Albany in the early 1800's. Dr. Clapp was Indiana's first resident botanist, and his records of the state's early flora are extremely important. Deam commonly referenced Dr. Clapp's records in the *Flora*, but their source was never clear to me. Then, during a cozy armchair reading of the Flora (yes, I enjoy reading the Flora like some read novels), I learned that Deam had owned Dr. Clapp's books, and that Clapp's records were written in them! That revelation, found specifically in Deam's accounting of Trautvetteria, ultimately led to the current location of Clapp's books.

I never had the pleasure of meeting Charlie Deam — I was born the year that he died but I often sense his presence whenever I see one of his plant specimens, retrace his footsteps into a natural area, or better yet, open a copy of the *Flora*. It should come as no surprise that I have a special reverence for the man and his work. Thus it brings me great pleasure that the *Flora* is available again. allowing others to share in the pursuit of understanding, and ultimately the appreciation and protection of our native plants and natural areas. So whether you're a professional botanist, ecologist, teacher, wildflower enthusiast, naturalist, forester, wildlife biologist, soil scientist, landscape architect, horticulturist, or just someone wanting to know what that plant is in your backyard, this book is for you. From the preface to the reprinting of Flora of Indiana, Item# 1-930665-598, \$124.95, Hardcover, 1.236 pp.

Michael Homoya is a plant ecologist and botanist for the Indiana Division of Nature Preserves, a position he has held since 1982. Regarded as one of the finest field botanists of the Midwest, he is author of Wildflowers and Ferns of Indiana Forests: A Field Guide (Indiana University Press, 2012) and Orchids of Indiana (Indiana University Press, 1993).

Books



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Charles Deam is pictured with one of the 84,000 specimens he examined in preparing his magnum opus, Flora of Indiana, which was recently reprinted by The Blackburn Press.

Flora of Indiana By Charles C. Deam, M.A., D.Sc., LL.D. Preface by Mike Homoya

"I'll leave my obituary in the books I create." —Charles C. Deam (1865–1953)

Prophetic to his word, the books of Charles Clemon Deam — or simply "Charlie" as he was known to his friends — do indeed reveal much about the man. A druggist, forester, and botanist from Bluffton, Indiana, Charlie Deam was meticulous, opinionated, studious, disciplined, driven, and even, shall we say, eccentric. Simply put, he was a character. But that character produced a collection of some of the most thorough botanical works ever published. His standards were high, as perhaps is best revealed in his magnum opus, *Flora of Indiana* (hereafter, the *Flora*). Published in 1940, with reprintings in 1970 and 1984, the *Flora* has served as the standard

by which other state *floras* must be compared. Now over 60 years old, it has clearly withstood the test of time, and continues to be a primary source of information for any serious student of field botany.

Deam insisted upon the highest standards for his work, and strove to make the *Flora* as

"Deam was meticulous, opinionated, studious, disciplined, driven, and even, shall we say, eccentric."

accurate as possible. That was clearly the policy when considering a species for inclusion in the book; it was his rule that every species included must be vouched for by at least one collected specimen. He examined over 84,000 specimens in preparation for the book, and from these he prepared keys, species accounts, and range maps showing species' occurrence by county.

Although these maps reflect the knowledge only as it existed in 1940, they continue to be useful today in determining a species' general range in the state. This is especially helpful for the beginner, or one not familiar with Indiana's *flora*, as it can reduce the field of options when trying to determine an unknown plant's identity.

"Where's Deam?" is not an uncommon cry heard around the office in the Indiana DNR Division of Nature Preserves. It's not a person being sought, but rather a misplaced copy of a book that we simply can't do without. Early on we declared that the *Flora* would be our starting point in creating the first state list of rare, threatened, and endangered plant species. The *Flora* continues to be one of the first choices to consult when gathering information on wild plants. However, the utility of the *Flora* extends beyond species identification, range, and habitat.