

INDIANA

Native Plant and Wildflower Society

NEWS

Volume V Number 1

Spring 1998

Buckthorns in Indiana *the Good, the Bad, and the Ugly*

by Kevin Tungesvick

The buckthorn family contains some of our finest native shrubs, as well as some of our worst invasive exotics. In Indiana, this family is represented by two genera, *Rhamnus* and *Ceanothus*. *Rhamnus* contains three species native to the state and two of our worst invasive shrubs. *Ceanothus* is represented by two native species, one of which is now extirpated in Indiana.

Unfortunately, the most common buckthorn species in the state are exotics. Glossy Buckthorn (*Rhamnus frangula*) is a horrible weed of fens, bogs and other wetlands. It is a thornless shrub with glossy elliptic leaves and gray-brown twigs with elongate lenticels. It can be distinguished from all other buckthorn species in Indiana by its entire, or untoothed leaf margins. The yellowish-green five-parted flowers develop into glossy black berries, which are consumed and disseminated by birds. This shrub may reach the size of a small tree, occasionally growing 20 feet high with up to a four-inch trunk diameter.



Glossy Buckthorn
(*Rhamnus frangula*)

At Springfield Fen in Laporte County, acres of wetlands have been usurped by this species. According to Tom Post, Regional Ecologist with the Division of Nature Preserves, approximately 35 to 40 percent of this preserve is infested

with Glossy Buckthorn, including nearly all of the available sedge meadow habitat. This condition

remains in spite of the fact that thousands of volunteer hours have been spent removing buckthorn over the past 10 years.

Central Indiana wetlands are also prone to invasion by Glossy Buckthorn. I have witnessed specimens of this species over 15 feet in height with a three-inch trunk diameter in a degraded fen along White River east of

Anderson. Although this fen is currently choked with Buckthorn, Multiflora Rose, and native Ninebark (*Physocarpus opulifolius*), the presence of prairie species such as Big Bluestem, Indian Grass, and Dense Blazing Star along a roadside that cuts through it tes-

tify to its formerly open nature. A few weak specimens of the state-endangered Great St. John's-wort (*Hypericum pyramidatum*) also continue to survive in the ever increasing shade of several large buckthorns, once again demonstrating the deleterious effects of exotic species on native biodiversity.

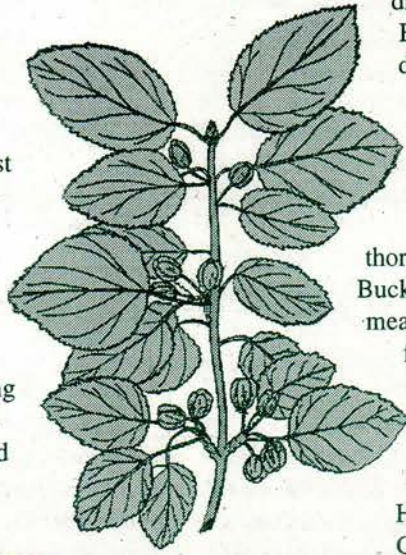
In Marion County I have seen Glossy Buckthorn thriving in groundwater seeps along Fishback Creek northwest of Eagle Creek Reservoir. Unfortunately, Glossy Buckthorn remains widely available in the nursery trade. The upright variety *columnaris*

Buckthorns . . . continued on page 2

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and its named cultivar 'Tallhedge' are promoted by the industry as screening plants for their glossy dark green foliage and narrow upright habit. The dissimilar-appearing Cutleaf Buckthorn (*Rhamnus frangula* 'Asplenifolia') has almost linear foliage and abundant fruit. During the 1996 INPAWS Indiana Dunes trip, I pointed out a hedge of Glossy Buckthorn planted along the parking lot of a fast-food establishment. In the mulched bed surrounding the hedge, hundreds of seedlings testified to the fecundity of the species. I urge anyone who is concerned about the plight of our native flora to avoid purchasing this shrub and to educate others about its invasive nature.



Common Buckthorn (*Rhamnus cathartica*)

Common Buckthorn (*Rhamnus cathartica*) is an equally invasive exotic shrub of woodland habitats. It differs from Glossy Buckthorn by having dull green leaves that are more ovate with fine teeth along the margins. Its gray-black branches may also contain small thorns. Unlike Glossy Buckthorn, it is dioecious, meaning the male and female flowers occur on separate plants. Like Multiflora Rose, Autumn Olive, and Amur Honeysuckle, Common Buckthorn was frequently planted to provide food and shelter for wildlife.

To truly realize the invasive nature of Common Buckthorn, one should travel to the Chicago Region. There, many of

the remnant woodlots and oak savannas have an understory composed entirely of large round specimens of this shrub. Like many exotics the leaves of Common Buckthorn remain green well after the native woody species are bare, making them particularly easy to identify in late fall. Many thousands of volunteer hours have been spent removing this species from the Forest Preserve Districts of the Chicago Region.

Unfortunately Common Buckthorn is likely to increase in Indiana in future decades. It has been seen in several areas of Eagle Creek Park, including young second-growth forest just south of the Nature Center. It is an abundant shrub at Christy Woods on the campus of Ball State University in Muncie. In the not too distant future, Common Buckthorn will likely battle Amur Honeysuckle for possession of the understory of our degraded urban woodlots.

Buckthorns . . . continued on page 4

Indiana Native Plant and Wildflower Society Newsletter
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Published quarterly by the Indiana Native Plant and Wildflower Society for members.

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

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Information for the newsletter is supplied by Society members and others interested in sharing information about Indiana native plants. Articles or drawings should be sent to the Editor, Dan Anderson, 7412 Graham Road, Indianapolis, IN 46250, or e-mail wilson@hsonline.net.

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President's Message

by Ruth Ann Ingraham

Long before the term "native plants" became a part of my awareness I unwittingly learned about the essence of native plants.

In 1969 I purchased a new-model Toyota station wagon which, to my surprise, turned out to be lemon—not a car. In 1972 I sold that Toyota to a man who was convinced that anything made in Japan was great—in spite of my documentation to the contrary. Fortunately my mother was ready to retire her big old yellow Buick and she passed it to me for an extremely modest price. With the profit from those two transactions I chose to landscape the yard around my Broad Ripple home here in Indianapolis.

Happily, at the southeast corner of the house a small, sunny garden space was created where a concrete walk had been. Aging yews provided the traditional backdrop.

I decided to apply my latent creativity to the design of this mini-garden and

drew a plan. (That hand-drawn, multi-colored design is still tucked inside the front cover of the 1972 edition of Time-Life's *Perennials*.) I sent my plant order off to Wayside Gardens and while I waited for my order to arrive I envisioned the splendor that would soon appear outside my dining room window spring through fall.

The plants arrived and I lovingly put them into place.

Gradually, over the span of a few years, all of those plants died. But to my surprise and delight, something unplanned appeared. Black-eyed Susans. They self-sowed and spread, and summer after summer they formed a glowing mass of color through Indiana's torrid summer months with scant attention, one might say negligence, on my part. And in the winter the seed heads provided a natural food source for goldfinches.

Eight years ago Joe and I purchased a little cabin with some land in Brown

County. The land, which slopes from the gravel access road down to the cabin, had been mowed. We decided to see what would happen if we stopped mowing that area. Could we have something worthy of the name meadow, we wondered. That was a relatively novel concept to us then. An annual early-spring mowing was all that was required to reap unanticipated rewards. Now there is a warm-season panoply of native grasses and flowers, including Little Bluestem, Purple Top, Goldenrod, Asters, Rosepink, Yarrow, Butterflyweed and, last fall, the native orchid Ladies Tresses and an accompanying array of insects. In the winter, juncos, finches and sparrows feed on the seed heads.

Many of us in INPAWS are novices and stumble along until we accidentally find ourselves surrounded by nature's glorious floral gifts. It pays to welcome native plants that choose to grace our environments.

INPAWS Spring Native Plant Auction

will take place

Saturday, May 16

at the Community Center on the campus of Augusta Christian Church 3445 W 71st Street, Indianapolis.

10 AM . . . donations will be received;

noon . . . the \$2, \$4 and \$6 sale tables will open;

1 PM . . . the auction will begin.

Light snacks and beverages will be available.

Message from Rolland Kontak, Auctioneer

It's not too early to start thinking about your auction donations.

In just a few years we have realized thousands of dollars from your donated native plants, garden hardware, books and art items, and other related material. (Bird houses, ornamental faucets, etc., etc.)

Here are a few hints to insure your donation brings the highest return it deserves:

On your plants, make sure they are well grown, potted early enough to acclimate and not wilt (at least two weeks before the sale).

Present them in an appealing container, clean and fresh, appropriately sized for the content. Label them accurately. Botanical names are desirable. Donor name is optional.

If you need containers I have many hundreds of flats and pots, from two-inch clay pots to three-foot tubs for trees. They are yours to pick up provided they return filled for the auction. Call me (317-356-0953).

Hardware, art objects, wearables and books should be desirable, not cast-offs.

Please deliver your donations AT LEAST one hour, preferably two, before sale time. You can only imagine the frenzy of that last hour before sale time when the pricers and sorters are making those last minute preparations.

All donations are tax deductible if you choose. We have a system to track your donations and furnish appropriate documents for tax purposes.

Join the fun. I'll see you on May 16.

For more information call Dianna Zamani (317) 233-8084.

Interestingly, Charles Deam, while noting several records for Common Buckthorn, excluded it from his *Flora of Indiana*. However, he remarked that when planted in his arboretum, hundreds of seedlings were produced, prompting him to destroy the seedlings and parent plants.

In *Plants of the Chicago Region*, Floyd Swink and Gerould Wilhelm report several other alien *Rhamnus* species that have escaped around the Morton Arboretum, including Dahurian Buckthorn (*Rhamnus davurica*), Japanese Buckthorn (*Rhamnus japonica*), and Chinese Buckthorn (*Rhamnus utilis*). Therefore, any non-native buckthorn should be considered potentially highly invasive. Fortunately these species are not currently widespread in the nursery industry.

In contrast to the alien species, native members of the *Rhamnus* genus are fine conservative species of our woodlands and wetlands. Lanceleaf Buckthorn (*Rhamnus lanceolata*) is an uncommon plant of fens and rocky slopes. In Indiana it occurs locally from the Wabash Valley in the north central portion of the state south to the Ohio River. I have found it as an occasional plant in an area of remnant fens in Henry County in the east central part of the state. There, it appears to prefer shrubby wetland borders. This species also occasionally occurs in old field habitats in southeastern Indiana. It is a rounded shrub with four-parted flowers and dark green lanceolate to elliptic foliage with fine teeth along the mar-

gins. Its attractive foliage and adaptability to upland sites might make it a useful ornamental shrub if it were available in the nursery trade.

Alder Buckthorn (*Rhamnus alnifolia*) is a low shrub, usually less than a meter tall, that occurs in bogs and fens. In Indiana, it is largely restricted to the northern two tiers of counties. It differs from Lanceleaf Buckthorn by having five-parted flowers.

At the other end of the state, Carolina Buckthorn (*Rhamnus caroliniana*) is restricted to a few counties bordering the Ohio River in south central Indiana, occurring on rocky wooded slopes. It is a common plant in dry oak woods surrounding limestone

glades in southern Harrison County. Like Alder Buckthorn, Carolina Buckthorn has five-parted flowers.

The other genus in the buckthorn family in Indiana, *Ceanothus*, contains one of our most attractive and interesting native shrubs. New Jersey Tea (*Ceanothus americanus*) often remains under two feet in height, producing attractive white flowers in July over dark green, ovate foliage. It occurs in prairies, savannas, and open oak woods.

The seeds of this species require a heat treatment before they will germinate,

making it one of the most fire-dependent members of our flora. The leaves have been used to make a tea substitute, hence the common name. New Jersey Tea is found throughout the state, but is most common in the prairies and savannas of northwestern Indiana.

According to Deam, Redroot or Inland New Jersey Tea (*Ceanothus herbaceus*) formerly occurred on low dunes in Lake County between Pine and Miller. It is believed to be extirpated, as much of its habitat has been destroyed by industrial development. It differed from New Jersey Tea by having narrower lanceolate leaves. Both *Ceanothus* species bloom on new wood, another adaptation to a fire-maintained habitat.

Since exotic buckthorn species will continue to increase in Indiana, concerned individuals should learn to identify the various members of this family, so that we may conserve the native species and remove the invasive ones. Effective removal can usually be accomplished by cutting the shrub as close to the ground as possible

followed by the application of a solution of 50% Glyphosate herbicide (Roundup) to the cut stump. Such actions will help ensure that future generations will not be deprived of the opportunity to enjoy our diverse botanical heritage.

Kevin Tungesvick is INPAWS Vice President, Program Chairman, and loves to clean seeds, which he does, among other things, at Spence Nursery in Muncie.



Lanceleaf Buckthorn (*Rhamnus lanceolata*)



New Jersey Tea (*Ceanothus americanus*)

Committee Reports

CONSERVATION COMMITTEE

INPAWS Joins the Native Plant Conservation Initiative

In November 1997, INPAWS became a cooperator with the Native Plant Conservation Initiative (NPCI). The NPCI is a consortium of ten federal agencies and one hundred state and local cooperators who are collectively engaged in solving the problems of native plant extinctions and native habitat restoration. Among the federal agencies are the National Park Service, Bureau of Land Management, U.S. Geological Survey, and the Fish and Wildlife Service. The list of cooperators reads like a Who's Who of groups that share INPAWS' interests, for example, Natural Areas Association, and Native Plant Societies from Maryland, Missouri and Montana.

The NPCI is involved in exchanging information, ideas and expertise. Each year it awards thousands of dollars for on-the-ground conservation and restoration projects. Since its inception in 1994, grants have been awarded for 71 projects, totalling \$1,500,000 in federal funds and matching non-federal contributions.

For more information, visit the NPCI's home page at

<http://www.aqd.nps.gov/npci/>

Ted Harris, Conservation Committee Chairman

A NEW INPAWS PERK!!!

INPAWS members now have an opportunity to visit native plant gardens of fellow members listed below. Please call to arrange a time for your visit, or, if a date is specified, please call your host or hostess to let him or her know you are coming.

Bartholomew, April 4, 2-7 PM
Art Hopkins • 812-372-2862

Brown
Colin Reeves • 812-988-9438

Hendricks
Colletta Kosiba • 317-852-5973

Marion
Carolyn Harstad • 317-257-9452
Virginia Finch • 317-291-0523

We would like to continue these open houses. Many INPAWS members have indicated an interest in touring prairies and meadows established by other members. We would like to see what you have growing and learn of the failures (if any) and successes you have had. I need you to volunteer your site, so we can offer the tours in the June newsletter. Please share your experiences. You may either choose a date for an "open house" or arrange visits on an individual basis. Please let me know if you are interested. Call or write. No location is too small.

Colletta Kosiba, Chairperson,
Speakers Bureau • 317-852-5973.

SPEAKERS BUREAU

The following INPAWS members will give programs on native plants at events open to the public. Come see their presentations!

Folklore of Native Plants
Sue Nord, Indianapolis Museum of Art, March 5, 7 PM

Return to Natives
Colletta Kosiba, Flower&Patio, March 17, 4 PM

Creating Backyard Wildlife Habitat
Greg Oskay, Danville Fairgrounds, March 27, 6 PM

Medicinal Herbs
Diane Stippler, same location, March 28, 1 PM

Wildflower Slide Show
Colletta Kosiba, Plainfield Library, March 19

Wildflowers and Edibles
Dan Anderson, Ft. Harrison Nature Center, April 15, 10 AM - 4 PM

Nature Books Review
by Tom Potter, photographer and INPAWS member,

Borders Bookstore at Keystone at the Crossing, Indianapolis, at 7 PM on Thursday, April 16

Wildflower Workshop
May 7 - see under "Coming Attractions"

Call Colletta • 317-852-5973 • for more information.

<http://www.inpaws.org>

Visit our website for news and information about INPAWS and native plant issues, as well as links to a wealth of like-minded organizations.

We would like to update our site with **your** news, information, comments, ideas, opinions, suggestions, in short, anything of interest to those concerned with preserving native plants and their habitats.

Please email Anne Wilson • wilson@hsonline.net.

M U L T I F L O R A E

PLANT COLLECTION IN NATIONAL FORESTS

The USDA issued a new policy regarding collection of plants in the Wayne and Hoosier National Forests in 1993, due to the over-harvesting of species such as Yellowroot and Ginseng. Since its issuance, it has become apparent that many people are not aware of the requirements, so we have been asked to publicize them.

- 1 • Plants on the threatened, endangered, sensitive, rare and unique list may not be collected.
- 2 • There are certain areas within each forest where collection is prohibited. These include various research and experimental areas.
- 3 • Plant collectors, whether commercial or individual, must buy a \$10 permit from each district in which they intend to collect. The permit application must state the species to be collected and the area in which the collector intends to operate. Maps of prohibited areas will be available at the district offices.

For more information, please contact Ellen Jacquart, Brownstown Ranger District, 608 W. Commerce St., Brownstown IN 47220 (812-358-2675) or Karen Hughes, Wayne National Forest, 219 Columbus Rd., Athens, OH 45701 (614-592-6644).

last chance for seed

May 1 is the last day to order locally grown native plant seeds at a bargain price! See insert in this newsletter for a catalogue of seeds collected and processed by INPAWS members. Send to Rolland Kontak, 2403 S. Emerson Ave, Indianapolis, IN 46203, or email wilson@hsonline.net. All proceeds will benefit INPAWS.

YOUR HELP NEEDED IN RESTORATION AND MAINTENANCE OF NATURAL AREAS...

Vital to Indiana are its volunteer land stewards who protect native plant communities in our prairies and savannas, wetlands and forests. Listed are some opportunities to get involved in protecting Indiana's natural heritage. If you are interested in helping, please call the numbers below for more detailed information and more dates and times for April, May and June.

Central Indiana Land Trust (CILTI)
765-362-1509

Henry County Cemeteries
March 15, 12:00 noon, Prairie habitats

Gene Glick NP
March 29, 1:00 PM, Woodland habitat, Indianapolis

Burnett Woods
April 5, 2:00 PM, Forest habitat, Near Avon

John Suman's Woods
April 11, 8:00 AM, carpool from Indianapolis

The Nature Conservancy (TNC)
317-923-7547, TNC & Indiana Div. Of Nature Preserve Properties

Gravel Hill Prairies
Tippecanoe Co., March 1, 12:00 noon

Conrad Station Savanna
Jasper Co., March 15, 12:00 noon

Gravel Hill Prairies
Tippecanoe Co., March 20, 12:00 noon

Low Prairie
White Co., March 28, 12:00 noon

Sycamore Land Trust (SLT)
812-336-5382

Bean Blossom Bottoms
March 28, 10:00 AM, Woodland habitat

Sierra Club, Heartlands Group
317-259-4417

Marott Park Nature Preserve,
Indianapolis, April 18, 9:00 AM

Indy Parks
317-327-7180

Holliday Park, Indianapolis
April 18, 9:00 AM

Don Miller • 317-927-3047

NATURE WALKS AT BUTLER UNIVERSITY

Dr. Rebecca Dolan, Director of the Friesner Herbarium at Butler University, will be leading tours on the Butler campus on the following Tuesdays at noon:

March 10
Early Spring Wildflowers

April 14
Spring Wildflowers

May 12
Late Spring Wildflowers

June 9
Wildflowers Along the Canal

Meet behind Gallahue Hall near the greenhouse. Tours will last about 40 minutes. There is no charge and all are welcome. Please come prepared for mud!

If you would like to receive a monthly reminder of the walk, or wish to be dropped from the reminder list, please call Dr. Dolan at 317-940-9413, or email rdolan@butler.edu.

Munchkin Nursery

operated by INPAWS member Gene Bush, is offering a wide selection of native plants in his 1998 catalog. If you would like one, send \$3 to:
323 Woodside Dr. NW
Depauw, IN 47115-9039

Outdoor Indiana

now features articles on native plants among its informative articles and excellent photography. Cost is \$10 yearly. Write:

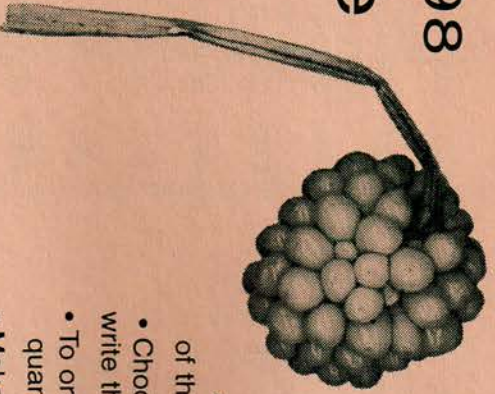
Outdoor Indiana
402 W. Washington W160,
Indianapolis, IN 46204-2742.



INDIANA NATIVE
Plant and Wildflower Society

1997/1998

Native Plant Seed Sale



note: last day to order is May 1

HOW TO ORDER

- All seeds are \$1.00 per pack.
- Add only \$1.00 for shipping regardless of the size of the order.
- Circle the item number of the items you want.
- Choose at least three alternates (per order) and write their item numbers in the blank space provided.
- To order multiple packs of the same species indicate quantity in space below item number.
- Make all checks payable to "INPAWS."

CONDITIONS

- No germination tests have been made.
- The quantity of seeds per pack has been determined by availability, seed size, or rarity/desirability of the species.
- Seed volume is adequate for home culture or experimentation. Quantities are not large enough for large restoration projects.
- Fluff and chaff are to be expected in some species.
- No shipments will be made outside the USA.
- Allow up to two weeks for receipt of order, although one week should be the norm.
- Your order form will be returned with your seeds.
- No cash refunds will be given. Alternates will be used for refund.
- Please report results, disappointments and satisfactions.



PROPAGATION HINTS

In general, best results can be expected when seeds are sown as soon as received, and subjected to outdoor natural influences. However we must guard against rodent intrusions, washouts, etc., etc.

A reasonable regimen is to divide a seed supply into several parts and subject each part to a different influence. These can be varied potting soils, time of planting, moisture control, temperature variation, light or darkness exposure, covering or surface sowing, chemicals, presoaking, (especially legumes). Please report successful methods.

Rolland Kontak
2403 S. Emerson Avenue
Indianapolis, IN 46203

TOTAL PACKS _____ @ \$1 = \$ _____
PLUS \$1.00 SHIPPING \$ _____
TOTAL ENCLOSED \$ _____

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

TELEPHONE _____

EMAIL _____

Much specific information is available from a host of authors. A short list:

Seed Germination Theory and Practice by Norman C. Deno, published privately by NCD.

Address inquiries to:
139 Lenor Drive, State College, PA 16801

Growing and Propagating Wild Flowers by Harry R. Phillips

ISBN 0-8078-4131-5 (pbk)
The University of North Carolina Press

The Wildflower Gardener's Guide by Henry W. Art

ISBN 0-88266-668-1 (pbk)
Garden Way Publishing Co.

Thanks to the following seed donors:

Don Bickel, Gene Bush (Munchkin Nursery), Becky Dolan, Ruth Ann Ingraham, Virgil R. Knapp, Rolland Kontak, Jean Roberts, Anne Wilson, Dianna Zamani, and anonymous.

001	<i>Actaea pachypoda</i> White Baneberry	025	<i>Cimicifuga racemosa</i> Black Cohosh	049	<i>Hypoxis hirsuta</i> Yellow Star Grass	073	<i>Rudbeckia subtomentosa</i> Sweet Black-Eyed Susan
002	<i>Andropogon gerardii</i> Big Blue Stem	026	<i>Cinna latifolia</i> Wood Reed Grass	050	<i>Hystrix patula</i> Bottlebrush Grass	074	<i>Sambucus canadensis</i> Elderberry
003	<i>Andropogon scoparius</i> Little Blue Stem	027	<i>Clematis viorna</i> Leather Flower	051	<i>Iliamna remota</i> Kankakee Mallow	075	<i>Scutellaria incana</i> Downy Skullcap
004	<i>Aquilegia canadensis</i> Wild Columbine	028	<i>Coreopsis tripteris</i> Tall coreopsis	052	<i>Lactuca biennis</i> Tall Blue Lettuce	076	<i>Scutellaria ovata</i> Heart-leaved Skullcap
005	<i>Arisaema dracontium</i> Green Dragon	029	<i>Cornus florida</i> Flowering Dogwood	053	<i>Lespedeza spp.</i> Bush Clover	077	<i>Silphium integrifolium</i> Rosin Weed
006	<i>Arisaema triphyllum</i> Jack-in-the-Pulpit	030	<i>Corydalis sempervirens</i> Pink Corydalis	054	<i>Liatris spicata</i> Dense Blazing Star	078	<i>Silphium laciniatum</i> Compass Plant
007	<i>Aronia prunifolia</i> Chokecherry	031	<i>Delphinium tricorne</i> Dwarf Larkspur	055	<i>Liatris squarrosa</i> Blazing Star	079	<i>Silphium terebinthinaceum</i> Prairie Dock
008	<i>Aruncus dioicus</i> Goat's Beard	032	<i>Delphinium tricorne alba</i> Dwarf Larkspur	056	<i>Lindera benzoin</i> Spicebush	080	<i>Smilacina spp.</i> False Solomon's Seal
009	<i>Asarum canadense</i> Wild Ginger	033	<i>Desmanthus illinoensis</i> Illinois Bundle Flower	057	<i>Lobelia cardinalis</i> Cardinal Flower	081	<i>Solidago riddellii</i> Riddell's Goldenrod
010	<i>Asclepias incarnata</i> Swamp Milkweed	034	<i>Dodecatheon meadia</i> Shooting Star	058	<i>Lobelia siphilitica</i> Great Blue Lobelia	082	<i>Solidago rigida</i> Stiff Goldenrod
011	<i>Asclepias syriacus</i> Common Milkweed	035	<i>Echinacea purpurea</i> Purple Coneflower	059	<i>Ludwigia alternifolia</i> Seedbox	083	<i>Sorghastrum nutans</i> Indian grass
012	<i>Asclepias tuberosa</i> Butterfly Milkweed	036	<i>Elymus canadensis</i> Canada Wild Rye	060	<i>Mitella diphylla</i> Mittewort	084	<i>Spigelia marilandica</i> Indian Pink
013	<i>Asclepias verticillata</i> Whorled Milkweed	037	<i>Eryngium yuccifolium</i> Rattlesnake Master	061	<i>Monarda clinopodia</i> Bergamot, Bee Balm	085	<i>Stipa spartea</i> Porcupine Grass
014	<i>Aster puniceus</i> Bristly Aster	038	<i>Euonymus atropurpureus</i> Wahoo, Burning Bush	062	<i>Monarda fistulosa</i> Wild Bergamot	086	<i>Stylophorum diphyllum</i> Wood Poppy
015	<i>Baptisia australis</i> Blue Wild Indigo	039	<i>Eupatorium rugosum</i> White Snakeroot	063	<i>Panicum virgatum</i> Switch Grass	087	<i>Symphoricarpos albus</i> Snowberry
016	<i>Baptisia leucantha</i> White Wild Indigo	040	<i>Eupatorium serotinum</i> Late Boneset	064	<i>Penstemon digitalis</i> Foxglove Beardtongue	088	<i>Trillium flexipes</i> Declined Trillium
017	<i>Brachyelytrum erectum</i> Long-awned Wood Grass	041	<i>Gentiana andrewsii</i> Bottle or Closed Gentian	065	<i>Petalostemum purpureum</i> Purple Prairie Clover	089	<i>Trillium spp.</i> Various White Trillium
018	<i>Carnassia scilloides</i> Wild Hyacinth	042	<i>Geranium maculatum alba</i> White Wild Geranium	066	<i>Physostegia virginiana</i> Obedient plant	090	<i>Vernonia spp.</i> Ironweed (various)
019	<i>Campanula americana</i> Tall Bellflower	043	<i>Gillenia trifoliata</i> Bowman's Root	067	<i>Polemonium reptans</i> Jacob's Ladder	091	<i>Viburnum acerifolium</i> Maple Leaf Viburnum
020	<i>Carex stipata</i> Common Fox Sedge	044	<i>Helenium autumnale</i> Sneezeweed	068	<i>Polygonatum spp.</i> Solomon's Seal (Various)	092	<i>Yucca smalliana (filamentosa)</i> Adam's Needle, Spanish Bayonet
021	<i>Carpinus caroliniana</i> Hornbeam	045	<i>Helianthus divaricatus</i> Woodland Sunflower	069	<i>Potentilla arguta</i> Prairie Cinquefoil	PLEASE LIST ALTERNATE SELECTIONS HERE	
022	<i>Cassia hebecarpa</i> Wild Senna	046	<i>Helianthus helianthoides</i> Oxeye, False Sunflower	070	<i>Pycnanthemum virginianum</i> Common Mountain Mint		
023	<i>Celastrus scandens</i> Climbing Bittersweet	047	<i>Hepatica acutiloba</i> Sharp-Lobed Hepatica	071	<i>Ratibida pinnata</i> Gray-Headed Coneflower		
024	<i>Chasmanthium latifolium</i> Northern Sea Oats	048	<i>Hibiscus palustris</i> Swamp Rose Mallow	072	<i>Robinia pseudoacacia</i> Black Locust		

COMING ATTRACTIONS:

Wildflower Workshop

Thursday, May 7th, at McCormick's Creek State Park, Spencer, Indiana, sponsored by The Garden Club of Indiana. The workshop is intended to encourage use of native plants along our highways, and to encourage their propagation, conservation and use in our gardens, communities and wild areas.

The workshop will begin at 8:30 AM, and will feature presentations by four INPAWS members: Dan Anderson on wild edibles, Bill McKnight on exotic invasives, Dr. Vic Riemenschneider on plant identification, and Sue Nord on plant folklore. After lunch at the park Inn, a field trip will be led by park naturalists.

Registration, which includes lunch, is \$25.00, and must be made by April 18th. Please send your checks to Mrs. Wayne Huff, 3630 W. County Road 250N, Sullivan, IN 47882. If you wish to stay overnight at the park, please call the Canyon Inn at 812-829-4881 for reservations.

(Katrina Vollmer, President of The Garden Club of Indiana, is an active member of INPAWS).

Ritchey Woods Spring Flower Flings

are scheduled for April 18th and May 2nd, both Saturdays, at 11:00 AM. This will be an opportunity to visit the nature preserve of the Children's Museum at its location on Hague Road, between 96th and 106th Streets, in southern Hamilton County. The cost is \$5 for museum members and \$6 for non-members.

Please register at least a week in advance by calling 924-5431, extension 3826.

Spring Wildflower Pilgrimage

in Great Smoky Mountains National Park will be April 24-26. This will be an extensive series of walks and photographic opportunities led by experienced naturalists, with numerous choices each morning, afternoon and evening. (Tom Potter will be presenting workshops on nature photography). Cost of the program is \$8 per day, not including meals and lodging, for which arrangements must be made by participants. For more information and a program, please call 1-800-525-6834. A package tour from April 21-26 is being offered by Eagle Creek Park. The \$425 fee includes lodging for five nights, transportation and registration. A \$50 deposit is required. Please call the park office at 317-327-7148 for further details.

Division of Nature Preserves Field Trips

April 25

Portland Arch, 10 AM-12 PM, registration not required

June 13

Clark and Pine, Lake County, registration required

August 15

Bloomfield Barrens, Spencer County, registration not required

For directions or registration, call 317-232-4052.

Amos Butler Audubon Society

will hold its annual dinner at the Garrison, 6002 Post Road (Ft. Ben) on March 13th. Social hour begins at 6 PM followed by dinner at 7 PM. The featured speaker will be Peter Stangel presenting a talk on bird migration. Mr. Stangel is the director of the Neotropical Migratory Bird Conservation Initiative of the Fish and Wildlife Foundation. Should you receive the newsletter in time, cost is \$12.50, and reservations may be made by calling 317-254-0639.

Central Indiana Butterfly Club

Interested in butterfly gardening? Join members at 7 PM, April 14th, to hear INPAWS Vice President Kevin Tunesvick talk about butterfly gardening with native plants.

Location: Nora Library on E. 86th Street in Indy. Another presentation on a similar topic will be at Altum Gardens, Indianapolis, on April 25th at 1 PM. If you would like to know more about the CIBC, check their website at www.indynet.com/~burfish3/naba.cibc/index.htm

Wildflower Foray

will be held at T.C. Steele Nature Preserve on April 24-26th. The programs will include lectures, flower hikes, displays and good fellowship.



"At least two of the species of native orchids which grow on my property in Brown County, the crane-fly orchid and the twayblade, did not flower this year where many had bloomed in previous years. Can I anticipate blooms in future years or have the plants probably died?"

Thanks, Ruth Ann Ingraham.

Send your answer (and other questions) to Editor Dan Anderson, 7412 Graham Road, Indianapolis, IN 46250.

Email Dan at danand@netdirect.net or email Anne Wilson at wilson@hsonline.net.

The Root of the Matter - Part II

I guess an edible wild plant enthusiast thinks more about roots after most of the greenery is withered and brown. For the last few years, I have had a few Evening Primroses (*Oenothera biennis*) in my wildflower garden, as I enjoy their spikes of yellow flowers. These plants, of course, are prolific in their reproductive capacity, and our vegetable garden, after the beans had gone, was literally covered with rosettes of the first-year plants. Since we had not intended to replant anything in the fall, I left them alone. After reading that the roots were edible, we pulled a quantity of them.

The size and shape resembled those of carrots. After cleaning and peeling, Sophia diced them, and they were boiled for 30 minutes with three

changes of water. Served with a white sauce, they were much like potatoes but with a slight peppery taste.

We had less success with Calamus or Sweet Flag (*Acorus calamus*). This plant, which is an arum, has leaves superficially resembling those of iris and a long horizontal rootstock which runs below the surface of the mud, putting shoots up every few inches. We processed the root similarly to that of primrose, but found the taste after cooking to be



somewhat medicinal and less than pleasing. It is said that the roots can be candied, but I'll stick with M and M's. Blue flag, a common wild iris, superficially resembles calamus (except when in bloom), but is toxic, so care should be taken to ensure that identification is correct!

Dan Anderson is newsletter editor and a confirmed wild-foods aficionado. Send your comments, recipes, results to danand@netdirect.net, or 7412 Graham Road, Indianapolis, IN 46250.

Book Review

by Ted Harris, Conservation Chairman

The Natural Heritage of Indiana

Edited by Marion T. Jackson,
Indiana University Press, 1997,
(ISBN 0-253-33074-2)

With its beautiful jacket and trim 12-inch length, *The Natural Heritage of Indiana* makes a striking first impression. Hundreds of handsome photographs, maps and diagrams will dazzle a prospective reader who ruffles through the 470-plus pages. Still, this book's real power lies in the words of its authors.

Three dozen author-scientists have collaborated to produce fifty-seven chapters from scientific and historical per-

spectives. These writings fit together seamlessly, as though they were written by one person. The style is very readable, and can be enjoyed by people lacking a scientific background.

Various chapters cover Indiana's Ice Age history, its Pleistocene megafauna, wetlands, caves, prairies, forests, soils, rivers, mammals, birds, reptiles, fish, insects, trees, wildflowers, and much more. A compelling conservation message is expressed in many ways. The concluding chapters offer a prescription for what we need to do to protect, restore and connect Indiana's remaining natural areas.

The Natural History of Indiana is a great reference tool. More importantly,

it is a repository for its authors' knowledge and for their love of the natural world. It is a literary work of art. If you treat yourself to the purchase of only one book in 1998, this should be the one.

(This book was on sale at the INPAWS annual meeting and attracted a great deal of interest, including mine. Although, after much soul-searching, I opted for Plants of the Chicago Region, I heartily concur with Ted's opinion, and recommend the book. - Dan Anderson)

Letters . . .

Dear Ruth Ann,

I'm writing in response to your "Message..." on page 11 of the last INPAWS newsletter. Glory and I would like to volunteer our home, which we are landscaping with native plants, for INPAWS members to visit on an informal basis—"informal by prior arrangement." that is.

We have three acres in Bartholomew County, most of it shaded, with some fine, mature trees. We have both flat and sloped land, some quite steep, mostly clay soil but some that's rather sandy and some that's pure gravel. Almost all of it was mowed for 15 years before we bought it, and probably grazed before that.

Crossing our land is a seasonal watercourse that is heavily flooded in spring, but dry in summer, and heavily shaded. I'd appreciate suggestions from INPAWS members for a shady, dry,

periodically flooded and somewhat erosive area. (I could sure use some *sunny* moist land.)

I've added eight species of native woody plants in and near the watercourse, and have kept most of them. At the herbaceous layer, I've been less successful, but also maybe less necessary, as a lot of interesting stuff has reappeared on its own. Celandine Poppy, Virginia Bluebells, Bloodroot, Tradescantia, and tall Jewelweed are hanging on, among my recent re-introductions, but some others have melted away.

There's stiff competition from *Eupatorium rugosum*, or White Snakeroot (the plant that killed Abraham Lincoln's mother). The snake-root grows four feet tall by September; it spreads both by rhizomes and seed; and it's trying to take over the whole three acres. It makes Microsoft look like a fragile startup. I was amazed to see it

on Rolland Kontak's seed list— I'll give you some for free!

Glory and I have enjoyed our first six years of land reclamation here. Where one used to look out the windows at a vast, sterile lawn, we can now see graceful sweeps of *Eupatorium rugosum*. . . But by walking out and looking closely, we also see Trout Lilies, Blue-Eyed Grass, Solomon's Seal, Sweet Cicely, towering Wild Lettuce, and many more woodland wildflowers that survived the Lawnmower Era here. INPAWS members are welcome to come help us identify and enjoy them all.

Oh, yes, Abraham Lincoln's mother: she drank milk from a cow that had grazed on *Eupatorium rugosum*, and was poisoned. Quite a few settlers died that way.

Art Hopkins, Columbus



INDIANA NATIVE Plant and Wildflower Society

MEMBERSHIP APPLICATION/RENEWAL

Annual dues pertain to the fiscal year January 1 - December 31. Dues paid after September 1 are applied to the following fiscal year.

Student \$10 Individual \$18 Family \$25 Patron \$100 Sponsor \$250 Corporate \$500
 Supporter (Additional Donation) \$ _____ Total Enclosed \$ _____

NAME _____

TELEPHONE _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

COUNTY _____

NEW RENEWAL 3/98

How did you hear about INPAWS?

GIFTS DO HELP. INPAWS donors at the *Supporter, Patron, Sponsor* and *Corporate* levels will receive special recognition. All donations above *Student, Individual* and *Family* dues are most appreciated and can aid our mission. Donations are tax-deductible to the extent provided by law.

Please complete this form and mail, along with your check made payable to:

Indiana Native Plant and Wildflower Society, or *INPAWS*
 c/o Michael Stiffler
 2606 S 600 W
 Morgantown, IN 46160.

I would like information on these committees:

- | | | |
|--|--|--|
| <input type="checkbox"/> Annual Meeting | <input type="checkbox"/> Hospitality | <input type="checkbox"/> Programs/
Field Trips |
| <input type="checkbox"/> Auction | <input type="checkbox"/> Membership | <input type="checkbox"/> Publications |
| <input type="checkbox"/> Conservation | <input type="checkbox"/> Native Plant
Education | <input type="checkbox"/> Publicity |
| <input type="checkbox"/> Demo Gardens | <input type="checkbox"/> Native Plant
Rescue | <input type="checkbox"/> Speakers
Bureau |
| <input type="checkbox"/> Fund Raising | <input type="checkbox"/> Newsletter | <input type="checkbox"/> Special
Projects |
| <input type="checkbox"/> Grants & Awards | | <input type="checkbox"/> Volunteers
Coordinator |
| <input type="checkbox"/> Historian | | |
| <input type="checkbox"/> Other | | |

1 9 9 8 I N P A W S E v e n t s

Saturday, March 21

Book signing with Marion Jackson, editor of *The Natural Heritage of Indiana*, who will talk about the construction of this wonderful book that was published last year. Cooper Science Building on the campus of Ball State University in Muncie - 2 PM.

Saturday, May 2

Spring wildflower hike at Carnes Mill Nature Preserve in Crawford county led by Roger Hedge, INPAWS corresponding secretary and Heritage Biologist with the Division of Nature Preserves. The preserve contains rich mesic forests, cliffs, hemlock trees and mountain laurel.

- details on all events to follow •
- Kevin Tunesvick • 765-354-2775

Saturday, May 16

INPAWS plant auction and sale, Community Center, Augusta Christian Church, 3445 W 71st Street, Indianapolis.
10 AM • donations accepted;
12 PM • sale tables open;
1 PM • auction begins.

Saturday, June 27 and Sunday, June 28

Two-day bus trip to southwest and south central Indiana. On Saturday we will visit Section Six Flatwoods Nature Preserve and Twin Swamps Nature Preserve in southwest Indiana to see post oak flatwoods and cypress swamps respectively. We will overnight in Evansville and then visit Hemlock Cliffs and Boone Creek Barrens to see a variety of beautiful habitats on Sunday.

Saturday, August 1

Program on re-establishing native plant communities on your property. We will discuss converting portions of your property back to native vegetation. We will cover soil type, planting methods and maintenance. Location to be announced.

September ? (to be announced)
Seed and plant sale.

September ? (to be announced)
Mushroom hike at Guin Woods, a beautiful old-growth woods owned by Ball State University. Meet in Muncie to carpool to the site.

Saturday, November 14

INPAWS Fifth Annual Meeting, location to be announced.



INDIANA NATIVE
Plant and Wildflower Society

6106 Kingsley Drive
Indianapolis, IN 46220

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