

The Harbinger

Summer 2020 Vol. 37, No. 2

Newsletter of the Illinois Native Plant Society

"...dedicated to the study, appreciation, and conservation of the native flora and natural communities of Illinois."



Dwarf crested iris (Iris cristata).

I hope this issue of *The Harbinger* finds you well. These are challenging times and I hope everyone is staying safe and healthy. This issue highlights the importance of making plant species lists with two articles on the subject. This kind of data is priceless so look for more articles on the topic in future issues.
Chris Benda, Editor

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Message from the President



What a summer it's been. People seem to be either out of work, little work to do, or swamped with work. I qualify as swamped. I've been reading "Eager, the surprising, secret life of Beavers and why they matter" by Ben Goldfarb. I highly recommend it. I have been watching the changes in the Braidwood Sands Preserves wrought by several families of beaver. It's hard to see some plants flooded out. But the reconnection to the

floodplain and positive ecological changes are happening at a mind-blowingly fast pace. I have been thinking lately how virtually every wetland in the State of Illinois had beaver rotating through the area. Leaving when woodies are chewed away and returning as woodies return.

It's easy to see how virtually all of our glaciated floodplains and wetlands aggraded (opposite of eroded) since the end of the Pleistocene. Rich organic (peaty) soils built up from millennia of rotating beaver ponds, creating the rich sedge meadows, fens, and wet prairie we were blessed with. It will be fascinating to watch the ongoing changes as the ecosystems adapt to the new hydrology.

I hope you are all well and getting out to enjoy nature. Those areas that are being managed seem to be having a good year. Plenty of heat, but plenty of rain, at least where I am. As I look at the flowering spurge and *Liatris* blooming out my front window, I take comfort in the knowledge that we can all make a difference if we try.

Floyd Catchpole, President INPS

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Check out the <u>Illinois Native</u>
<u>Plant Society Events Calendar</u>
for Chapter meetings and
workshops.

Welcome New Members

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INPS News

INPS 2021 Research Grant and Survey Grant Applications to Open Before Thanksgiving

Grad students, researchers, field botanists and citizen scientists, it's not too soon to start thinking of a project involving Illinois native plants that may qualify for an INPS grant award! Thanks to generous donations from many members to the Grant Program and the decision of the Board to generously support this important effort, this year we are able to increase grant awards. Research Grants can be awarded for up to \$2,500 and Survey Grants up to \$5,000, depending on projects. Although there will be some changes for 2021, details on project eligibility from 2020 can be found on the INPS website in the Grants section, as well as descriptions of past and current grant projects.

Application guidelines and forms will be available on the INPS website before Thanksgiving. Application deadline will be January 31, 2021.

CHAPTER NEWS

Northeast Chapter News

The Northeast Chapter had the first in-person event since the pandemic began scheduled for Saturday, July 18, a hike at Boloria Fen in McHenry County. Keep an eye on our website and social media for more events and lots of native plant content! View the Northeast Chapter on Facebook, Instagram, Twitter, and our website.

Central Chapter News

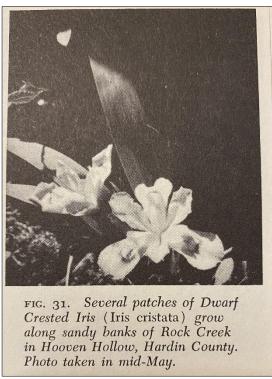
On July 9, Central Chapter met for our first gathering since March. Meeting outdoors at the Edgar Lee Masters home in Petersburg, we each brought a lawn chair and a brown-bag supper for a social-distanced picnic. Had a good turnout! After a brief business meeting, we were led on a walking tour of the native plantings around the courthouse square in downtown Petersburg by Alana McKean who has planned and supervised their installation over the past two growing seasons. Our Grant Committee reports that we have two recently-completed special youth-involved projects and another approved regular grant for a pollinator way-station (currently on hold due to COVID at the applicant's request.) The Grant Committee is currently reaching out to local colleges as it develops options to engage students in native plant projects.

Botanizing During the Quarantine

By Chris Benda.

Springtime is the best time for botanizing. The excitement felt in the early spring is like no other time of the year. Although the careful observer can easily identify plants any time of year, our botanical desires awaken with the greening of plants in the spring and the wonderous emergence of wildflowers. I had a full schedule of spring activities planned this year, from conducting botanical fieldwork, to teaching others about plants, to leading nature tours. I was looking forward to another year of professional botanical splendor.

Then the novel coronavirus pandemic occurred and that changed everything. I know that some have experienced real hardships from the virus and I'm saddened by all the pain it has caused others. But personally, it came as a blessing in disguise. My schedule was essentially cleared and it left me pursuing botanical excursions to my heart's desire! Earlier in the year my friend and botanical confidant Abel Kinser sent me his botanical hit list and that got me thinking about species on his list that I had not seen yet. This summary is an account of three rare species I hadn't seen before and other interesting finds.



From *A Flora of Southern Illinois* (Mohlenbrock 1959).



Dwarf crested iris (Iris cristata).

The unglaciated parts of southernmost Illinois are a botanical oasis and a hiker's playground, especially when compared to the rest of Illinois. Don't get me wrong, I love all the landscapes Illinois has to offer, but it's tough

to beat the vast public lands available for all to enjoy in southernmost Illinois, particularly in the 280,000 acres of the Shawnee National Forest with 80 natural areas. A high quality example of nearly every natural community type present in unglaciated southern Illinois occurs in these natural areas.

Neither Abel nor I had ever seen dwarf crested iris (*Iris cristata*) in Illinois before, so our first exploration was to traverse **Hooven Hollow in Hardin County** to see it in bloom. This is not a state-listed species in Illinois, but there are not many recent collections and it is restricted in its range in Illinois. *A Flora of Southern Illinois* (Mohlenbrock 1959) references this site with a photo taken of *Iris cristata* in bloom along Rock Creek in mid-May. We decided to explore the area on April 14, 2020.

Such as it often is when exploring areas of the Shawnee National Forest, we parked along a gravel road near the site and headed into the woods. After an uneventful bushwhack through the overgrown forest and invasive shrubs along a creek, we descended into the area of Hooven Hollow and upon reaching Rock Creek, we found our first *Iris cristata* in bloom, along with other neat plants like twisted sedge (*Carex torta*), ragwort (*Packera aurea*), wood betony (*Pedicularis canadensis*), sessile bellwort (*Uvularia sessilifolia*), and golden alexanders (*Zizia aurea*). Of course we spent a lot of time photographing the first flowering *Iris cristata* plants we saw, and by day's end, we'd seen many flowering individuals in perfect bloom along the sandy creek terraces. An entire month earlier than the 1959 publication indicated.

But, of course, one rare plant for the day was not enough and that's sort of the way it goes in botanically rich areas. We continued to explore along the sandstone cliffs and saw stonecrop (Sedum ternatum) blooming as we made our way to the blufftop to inspect the glades. This area is cited as the only location for solitary pussytoes (Antennaria solitaria) in Illinois (Mohlenbrock 2017). We didn't see it and I later learned that it is considered extirpated or never vouchered in Illinois (Ebinger et al., 2010). But we did find another rarity not previously documented in this area, Appalachian bugbane (Actaea rubifolia), along with many other conservative species that occur in shaded, mesic woods like doll's-eyes (Actaea pachypoda), blue cohosh (Caulophyllum thalictroides), and Canada waterleaf (Hydrophyllum canadense). Abel kept track of the species we observed on his phone and we recorded 238 species on the 7.4-mile, 6-hour trek. Mission one accomplished. We were hooked.



Stonecrop (Sedum ternatum).



Great chickweed (Stellaria pubera).

As the next week approached, we were hungry for more and set our sights on a species with very limited distribution in Illinois called great chickweed (*Stellaria pubera*).

According to the *Illustrated Flora of Illinois* (2001), this species is only known in southern Illinois at **Burke Branch Ecological Area in Pope County**. We visited the site exactly one week later on April 21, 2020.

One aspect about searching for plants in southern Illinois that I really enjoy is the approach. The areas are often quite expansive and motorized access is limited so it can take a bit of hiking to get to the location of interest. This is especially true for Burke Branch. It is a large continuous forested tract that has been considered for wilderness status. The access road into the area was severely rutted up by UTVs, which is often the case in these remote areas, so we parked our cars and started on foot. It didn't bother us, as Edward Abbey wrote in *Desert Solitaire*, "You can't see anything from a car; you've got to get out of the goddamn contraption and walk," and soon we came to a sunny part of the trail and saw an uncommon plant for this area, the birds-foot violet (*Viola pedata*).

We descended the hill to the creek and it didn't take long for us to notice a forb that we didn't recognize. It had connate leaves like a *Triosteum* or *Bidens*, but didn't seem quite right for either. We continued to see this unknown plant as we proceeded along the creek, but without flower parts, and then found the plant we were searching for, the great chickweed, in Full Glorious Bloom. And it was everywhere! Along the creek bank, on the terraces, and even on the rocky bluffs upland from the creek.

This species is easily distinguished from other chickweeds in Illinois because it has puberulent stems, large flowers with 5 styles, and petals longer than the sepals. After photographing many flowering plants, we realized that the unknown forb belonged to sterile individuals of this species, which are much larger and look different. If we had had the *Illustrated Flora* book with us, we would have seen this beautifully illustrated by Paul Nelson.



Appalachian bugbane (*Actaea rubifolia*). Photo by Chris Benda.

This site is also the only known location of a Mesic Barrens in Illinois. This is a strange natural community type, as barrens communities are typically very dry, which is one reason why they are sparsely wooded. Mesic sites generally harbor trees that are not widely spaced. Unfortunately, these communities at this site are no longer in a high quality condition and haven't been for many years. It is a sight that could bring tears to a biologist's eyes, and has. The natural community today is virtually unrecognizable.

However, we marveled at some other cool plants encountered like richweed (*Collinsonia canadensis*) and yellow star grass (*Hypoxis hirsuta*), and then found Appalachian bugbane (*Actaea rubifolia*) there as well. Formerly called *Cimicifuga rubifolia*, this species is uncommon throughout its range and only occurs in a few counties in Illinois, Indiana, Kentucky, Tennessee, North Carolina, and Alabama. It was formerly a potential candidate for federal listing, but was rejected due to insufficient data on its vulnerability in 1993 (US Fish and Wildlife Service 1993). There are at least 26 populations in Illinois (Miller 1999), making the state a stronghold for the species. Overall, we catalogued 228 species on the 6-mile, 5-hour hike.

At this point, searching for rare plants had become a full grown addiction. I couldn't get enough! So I scanned the list

of threatened and endangered species in Illinois, looking for something I had not seen before and that would be flowering in early May in southern Illinois. The list reminded me of a plant I had wanted to see for a long time, a plant very special to southern Illinois called the Illinois wood sorrel (*Oxalis illinoensis*).

This species was discovered as new to science in Illinois by John Schwegman during his career as State Botanist for the Illinois Department of Natural Resources. In his book, *The Natural Heritage of Illinois* (2016), John mentions that he first collected this species along Little Lusk Creek in Pope County, and when I spoke to him about it, I learned that Martha's Woods (named after his wife), is the type locality for the species, so we headed there next.

We embarked on our 3rd rare plant excursion on May 7, 2020 and were joined by Nick Seaton. As previously mentioned, many of these places have no signs, no parking lots, and often no trails. We parked along a gravel road and followed an old logging road by foot before descending the hill to **Little Lusk Creek in Pope County**. We didn't even get to the edge of the creek before we found some Illinois wood sorrel, and we were in luck, it was flowering! We sat down and looked at the keys in various sources to confirm its identity. The large flowers with red centers separate this species from other *Oxalis* in Illinois. The tubers are the main reason this is distinct from the more eastern great yellow wood sorrel (*Oxalis grandis*), but we of course did not dig up any plants or move any soil to look at that feature.



Twisted sedge (Carex torta)



Illinois wood sorrel (Oxalis illinoensis).



Fibrous-rooted sedge (Carex communis)

Although we had seen our target species, we decided to continue to Martha's Woods by following Little Lusk Creek and it was delightful. Huge swaths of twisted sedge (*Carex torta*) filled the shallow creek beds and we moved like turtles, carefully scanning the area for interesting plants. Pretty soon, Abel called us over to look at a sedge that looked different. We all sat down, got out the book, and keyed out what turned out to be fibrous-rooted sedge (*Carex communis*). This is a species that was delisted in Illinois after the 2020 list review, but one that not all of us had seen before.

Continuing along the creek, we saw many flowering individuals of another native chickweed, this one in the genus *Cerastium* instead of *Stellaria*.

Distinguished by flowers with three styles instead of five, the field mouse-eared chickweed (*Cerastium arvense*) seems to be a misnomer, as in southern Illinois it is a conservative species, relegated to remnant habitats for the most part. It is also a gorgeous wildflower.

The day was getting late and we still had a ways to go to get to Martha's Woods, we had already seen what we were looking for, we were moving so slowly, and we had to turn around and go back the way we came so I told Abel and Nick that I had one more rare plant to look for nearby if they were up for it. Of course they were, so we decided to turn around and go back to our vehicles.

There is one location in Illinois for deerberry (*Vaccinium stamineum*) and it was only a 15-minute drive from where we were. We drove across the county line to Hardin County and although none of us had been to this site before, the shrubs were easy to find and in Full Glorious Bloom! I am familiar with this species from my work in Missouri where it is more common, but I had never seen it in flower before. It was great icing on the rare plant cake, so to speak. We finished the day with 263 species observed.

Chris Benda is a former president of INPS and current editor of the newsletter, The Harbinger. He is a botanist living in Makanda, Illinois and can be reached at botanizer@gmail.com.

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Field mouse-eared chickweed (Cerastium arvense).



Deerberry (Vaccinium stamineum).

Adventures with Plant Lists

By Jack Shouba.

"Dear Friends," Ray Schulenberg wrote to two friends in 1968, "Here are lists of the plants I saw at two stations in Boone County—Flora Nature Preserve and [another prairie]." After apologizing for previously misidentifying an aster [I can relate to that], he concludes, "Thank you both for a very gratifying day on October 6—with good food, good landscapes, and best of all good friends."

I don't know which of his friends were there—perhaps colleague Floyd Swink from the Morton Arboretum and Bob Betz, later to be known as "Mr. Prairie." These "prairie pioneers" sparked my interest in prairies and in plant lists.



Claytonia virginica, spring beauty, may have been there in 1968, but Ray visited in the fall and did not see it.



Rosa multiflora, multiflora rose, is at Flora now; surely Ray would have noticed it (and not been happy about it).

A plant list is just what it sounds like: a list of plants. Ray's list illustrates three key features that make his list still important a half century later: (1) he lists the plants by their **scientific**, **or Latin**, **name**; (2) he notes the **date**; and (3) he tells us the **place**, Flora Prairie. Ray gives us a common name for each plant, too, but it is the scientific name that enables us to identify the plant precisely.

But why is a plant list important? What does it tell us? How can we use it? For one thing, it gives us a snapshot of what kind of community we are describing. Is it a prairie—or a weedy vacant lot long known as "prairie" in Chicago? If it is a prairie—is it wet, mesic, or dry? If it is a wetland—is it a fen, marsh, swamp, bog, or sedge meadow?

A plant list also tells us something about the rarity and quality of the plant community. For example, in 1968 Flora Prairie became Boone County Conservation District's first purchase because it is a rare remnant of the prairie that once covered much of the county, and it became an Illinois Nature Preserve in August of 1993. When a property is nominated to become an Illinois Nature Preserve, a plant list is part of the required documentation.

The search for plants while making a list may reveal the presence of rare, threatened, or endangered species. For Wolf Road Prairie in 1973, Dr. Betz listed white-fringed orchid, *Habenaria leucophaea* (now placed in the genus *Platanthera*). I searched for 20 years, but never saw the plant there and reluctantly concluded it was gone. But in recent years there has been an effort to reintroduce the plant in likely places. Since we have a record that the orchid once grew at Wolf Road Prairie, volunteers are working to reintroduce this federally threatened and Illinois endangered species.

A plant list is also the basis for an ecological assessment called FQA, Floristic Quality Assessment, which looks at the number of native plant species (the more, the better), the number of non-native plants (the fewer, the better), and the number of "conservative" plants—that is, those characteristic of undisturbed natural areas (the more, the better). The result is an indication of the quality of the natural community. Comparing a recent FQA to an earlier one can give an indication of changes in a community or even of the effectiveness of restoration efforts.

For example, wetlands were once thought to be useless, malaria-breeding swamps that needed to be drained, but they are now recognized as important for flood control, clean water, erosion control, wildlife habitat, and recreation. Wetlands even have certain legal protections (which prairies do not have). But how do we know what is a wetland and what is not? The plant list, along with water and soil information, is what defines a wetland.







Ray saw *Geum triflorum*, prairie smoke (left), and *Pulsatilla patens*, pasque flower (right), at Flora Prairie in 1968; they are still there in 2020.

Platanthera leucophaea, eastern prairie fringed orchid, disappeared from Wolf Road Prairie in the 1970s but is being reintroduced.

One more thing about the usefulness of plant lists: consulting a list from a specific park or nature preserve may help me identify a plant I may not know. Even knowing the names of plants that grow with my unidentified plant can help me identify the plant. Flora of the Chicago Region by Jerry Wilhelm and Laura Rericha, as well as the earlier Plants of the Chicago Region by Floyd Swink and Jerry Wilhelm, list what are called "associates" of each plant, offering a clue as to what else I might find nearby.

So far we have been looking at a plant list as static, like the 86 species that Ray and his friends saw that day in October 1968. However, we can be sure his list was incomplete. For one thing, he missed some plants that bloom in the spring, like Dutchman's breeches and shooting star. And surely he did not cover every square meter of the 10-acre site. The logical next step would be to go back again at different times of year, then go back the following year, and the year after that. In fact, others have added to the list over the last 50+ years and there are now over 250 plants that have been seen at Flora Prairie at one time or another.

We can call such a list a cumulative list. Most plant lists are cumulative if they have been around for more than one year. We add to the lists; we don't remove things. A cumulative list tells us every plant that has been recorded at a site since the date of the first list. However, it does not tell us what is there *now*.

There are two disadvantages to a cumulative list. First, we don't know how many plants were there all along that we may have missed or how many have moved in recently. We should strive to make our lists as complete as possible, and we should make a fresh list every few years in order to track changes in the community.

The second disadvantage of the cumulative list is that plants can and do disappear from a site, but *they are still on the list*. Our list of 250 plants is now misleading: about 10% of the plants Ray found that day in 1968 have not been seen since, a few more were seen for a time and then apparently disappeared, and another dozen or so have not been seen in recent years. So unless we make a new list, we won't know what we have lost. One of my concerns is that we don't really know how fast our prairie plants are disappearing.

We have very few sites where there is an old list and a new list for comparison. We have even fewer places where we have three or more lists done over the course of several decades, allowing us to determine if the rate of extinction is picking up, slowing down, or staying the same. (Some data show the rate of loss of prairie plants is increasing.)

Here's where you come in. I'd like to enlist volunteers to make lists. There are nowhere near enough botanists, ecologists, or land managers to do this; they need help from us, citizen scientists. Some natural areas never had a comprehensive list in the first place. Many were based on just one or two visits and they may be several decades old. Others might have been comprehensive when they were done decades ago, but they have not been updated. And many are cumulative lists, which don't record lost plants.

Here are some ideas to get you started. Talk to officials from your local land trust, forest preserve or conservation district, township open space program, or an Illinois Nature Preserves regional director. Find out what their needs are and what information they have available. In Kane County you can find published lists in Dick Young's *Kane County Plants and Natural Areas* and Jerry Wilhelm's *Kane County Natural Areas*, but these lists are often based on one or two visits 40 years ago.

If you'd like to try FQA, go to the web site UniversalFQA.org, type in your list and the computer will do the rest. I use the Chicago Region database because it is up-to-date and useful throughout northern Illinois, but you can choose another database.

Need help identifying plants? My go-to field guide is *Wildflowers in the Field and Forest* by Clemants and Gracie; *Flora of the Chicago Region* is almost always on my desk. The Illinois Botany Facebook group has helpful members that love to identify plants from photos. Many of us use iNaturalist, whose computer is amazing at suggesting identifications; it provides a platform for other members who will help identify or confirm your choices. It even has an option for you to make your own plant lists.



Drymocallis arguta, prairie cinquefoil, has not been recorded since 1987, but I found one plant this year.



Ray saw *Corylus americana*, American hazelnut, in 1968 but it had not been recorded since then so I assumed it was gone, but I found it this year.

Here is something else to think about: there is no central depository for lists. I share my lists with the owner of the property (e.g., a forest preserve district, land trust, township) and/or the Illinois Nature Preserves Commission. But the lists are not readily available to us interested folks. Should we have a central repository?

Who should do that? The Morton Arboretum, the Chicago Botanic Garden, the IDNR, a university, iNaturalist, or UniversalFQA? Should the lists be public or kept private?

So let's all get out there for "good food, good landscapes, and good friends." Or go by yourself, with a peanut butter sandwich. The "good landscapes" will thank you.

To share your questions and comments email me: <u>jackshouba@gmail.com</u>.

Jack Shouba is a photographer and long-time prairie enthusiast. His background includes high school biology teacher, Morton Arboretum botany instructor, and Campton Township Open Space Development Coordinator.

Patience Pays Off: American Columbo Blooms After 28 Years

By Don Kurz.

Twenty-eight years ago, I scattered some seeds of American columbo (*Frasera caroliniensis*) along a wooded edge behind my house in central Missouri. A couple years later, I noticed that 20-30 young plants had taken hold. Year after year the basal rosettes got larger but did not give any indication that they would be bolting and flowering anytime soon. Known as monocarpic perennials, references report it takes anywhere from 7 to 15 years before flowering and then the plant dies, leaving the seeds to carry on the next generation. Dr. Julian Steyermark (1909-1988) author of *Flora of Missouri*, wrote that he transplanted a plant to his garden and after 15 years, it still had not flowered. Well, after 28 years, I am pleased to report that about a third of the population bolted and flowered in late May of this year! This is where patience pays off. There are probably few growers that stick around one place for 15+ years to see American columbo flower!









Further reading: Threadgill, Paul F., Jerry M. Baskin, and Carol C. Baskin. *The Ecological Life Cycle of Frasera caroliniensis, a Long-lived Monocarpic Perennial*. The *American Midland Naturalist*, Apr., 1981, Vol. 105, No. 2 (Apr., 1981), pp. 277-289.

Don Kurz is the author of Illinois Wildflowers and the upcoming Wildflowers of the Midwest.

Plant Profile: White Lady's-Slipper Orchid

By Paul Marcum.

Lady's-slipper orchids are a joy to behold!

There are approximately 45 species of lady's-slipper orchids (genus *Cypripedium*) in the world. They are found nearly throughout the Northern Hemisphere, but especially in temperate Eurasia and North America.

Of the approximately 15 taxa in North America, the white lady's-slipper orchid (*Cypripedium candidum*) is one of the very smallest. The whole plant is often only 15–25 cm tall and the tiny lip or namesake slipper part of the flower is only 17 to 27 mm long.



White lady's-slipper orchid (*Cypripedium candidum*). Photo by Paul Marcum, INHS.

For the complete story, including the status of the white lady's-slipper orchid in Illinois, read the rest of Paul Marcum's <u>article recently published in Naturalists Afield</u>, an online collection of natural history stories, images, and videos captured by Illinois Natural History Survey scientists while visiting natural areas around the state.

Name This Plant: Prairie Penguin or Prairie Progeny?



Photo by Jack White. See the answer on page 15.

Invasive Species News

New case of invasive plant infestation in Texas causes concern for Arkansas fisheries biologists

Another documented report of giant salvinia along the Texas-Arkansas border was confirmed by Texas Parks and Wildlife in June, creating additional concern from Arkansas Game and Fish Commission biologists about the nuisance plant's spread into The Natural State.

Giant salvinia (*Salvinia molesta*) is a free-floating South American plant, similar in appearance to duckweed but much larger. It stays at the water's surface and can rapidly cover a large area and choke out all life in the water beneath if left unchecked. According to Sea Grant Louisiana, under ideal conditions, a single plant of giant salvinia can multiply to cover 40 square miles of surface area in only three months under ideal growing conditions.

See complete article at https://www.agfc.com/en/news/2020/06/24/new-case-of-invasive-plant-infestation-intexas-causes-concern-for-arkansas-fisheries-biologists/.

Other News & Web Links

Field Seminar/Workshop: Ecesis - The Process of Coming Home.

Presented by Justin Thomas of NatureCITE and Gerould Wilhelm of the Conservation Research Institute and co-author of the *Flora of the Chicago Region*. September 5 and 6, 2020. Chicago, IL. Join these presenters as they spend two fascinating days in nature exploring and explaining the beautiful and life-affirming interrelatedness of mindfulness, consciousness, and natural integrity. For more information: http://conservationresearchinstitute.org/educational-offerings

INPS Recognized as Affiliate Organization to IEC

Over the past almost 45 years, the Illinois Environmental Council has been building power for people and the environment in Illinois. We've done that by convening and advocating on behalf of our affiliate organizations working to protect Illinois' communities and environment.

Our affiliate organizations are the backbone of the environmental movement in our state and represent the very best of our community. They've guided our agenda and shaped our strategies over the years. These organizations range in size from small community organizations to large national organizations. They work on a sweeping range of topics from food justice, to open space, to clean energy, to the Great Lakes, and all sorts of things in between.

Their strength is not only a sign of IEC's strength as an organization, but of the strength of our environment and the policies that protect it as well. That's why we are thrilled to announce that IEC has officially reached an exciting milestone: We now have over 100 affiliate organizations operating within the state of Illinois!

You can see the full list of our affiliates for the Illinois Environmental Council and the Illinois Environmental Council Education Fund here.

Rarest Trees in Illinois Webinar

Illinois is home to over 180 native species of trees and shrubs. While many are very common, we do have some very rare species. The webinar, by Extension Forester Chris Evans, covers some of the rarest tree species found in Illinois and discusses why they are rare and what is being done to manage them. Check it out at https://www.youtube.com/watch?v=wsOdMarqpvw&t=9s.

Dicamba Damaging Trees Across Midwest And South

In recent years, farmers have been spraying an increasing amount of volatile herbicides - namely dicamba and 2,4-D - that are causing widespread damage to trees, native plants and natural areas across the Midwest and South. More than 60 areas managed by the Illinois Department of Natural Resources, including state parks and nature preserves, reported herbicide damage in 2018 or 2019. Some of the parks reported widespread death of mature oak trees. Read the entire article by Johnathan Hettinger/Midwest Center for Investigative Reporting.

Photo Resources at the Northern Forest Atlas

The Northern Forest Atlas was created in 2013 to document the current biology of the forests of northeastern North America and to provide tools for the next generation of naturalists and conservationists who will study and protect them. It has three main goals: to create a library of photos and air videos showing the landscapes, plants, and animals of the northern forest; to create photographic and diagrammatic atlases, both paper and digital, for plants and landscapes; and to design and produce a series of modern field guides to plants and ecology. Take a look at the Online Image Library, which currently includes about 5,000 photos of mosses, sedges, and woody plants; grasses and herbs will be added beginning in 2021. All are available for free download from the website, and may be used for any personal, educational, or nonprofit use.

Missing Washington Plant Found in Illinois

Oregon geranium (*Geranium oreganum*) is about two feet tall and has large bright pink or purple flowers with prominent veins on the petals (these reflect UV light and help guide bumble bees to nectar at the base of the flower, much like runway lights help pilots land an airplane at night). Despite its size and showiness, this species has only been found once in Washington, and has not been seen again since 1936, documented by a graduate student at the University of Illinois. Read about the mystery of this long-lost documentation at https://washingtondnr.wordpress.com/2018/04/14/missing-washington-plant-found-in-illinois/amp/.

Lone Star Ticks in Illinois Can Carry, Transmit Heartland Virus

Researchers have confirmed that Heartland virus, an emerging pathogen with potentially dire consequences for those infected, is present in Lone Star ticks in two Illinois counties hundreds of miles apart – Kankakee and Williamson. Lone Star ticks were first detected in Illinois in 1999, but had not been found to be infected with Heartland virus in the state. Read the details in this recent article in Science Daily.

Download the Tick App!

The <u>Tick App</u> is a free app for your smartphone. It provides general information about ticks, how to remove them and prevent tick bites, but was originally conceived to allow people living in high-risk areas for Lyme disease to participate in a tick exposure and human behavior study funded ed by the Centers for Disease Control.

In 2020, the University of Illinois Urbana-Champaign joined the Tick App team via its <u>Illinois</u> <u>Tick Inventory Collaboration network (I-TICK)</u>. I-TICK is a surveillance program to gather information about ticks of public health concern in Illinois. The purpose is to develop a network of volunteers to collect data to help determine the risk of tick-borne disease based on where and when ticks occur. Participants can now submit tick pictures through the Tick App instead of delivering and sending in the actual ticks.

Answer to Name This Plant

Wild quinine, Parthenium integrifolium.

ILLINOIS NATIVE PLANT SOCIETY P.O. Box 271 Carbondale, IL 62903

<u>illinoisplants@gmail.com</u> www.ill-inps.org



Featherbells (Stenanthium gramineum), a state threatened species. Photo by Chris Evans.

The Harbinger Summer 2020

You can renew/join by filling out the form below or online at http://www.ill-inps.org/online-membership-form/.

Please become a member and support this local non-profit organization dedicated to the preservation, conservation, and study of the native plants and vegetation of Illinois!

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