The HARBINGER depends upon INPS membership for contributions. We publish a lot about northern Illinois and its prairies, but we’d like more from southern and central Illinois. We’d be pleased to hear about member research projects and we’re especially eager to publish authoritative articles on different families of plants, like those that Linda Curtis has written on sedges. Is there anyone who knows native wetland plants? To submit ideas or copy, e-mail the Editor: victorcassidy@yahoo.com.

Victor M. Cassidy, Editor
As I write this issue’s message I am settled in my cozy cabin in Makanda and I am reminded of how incredibly diverse and cool the state of Illinois is. I am surrounded by woodlands and waterfalls, creeks and canyons, trees and topography, but I am reminiscing of my time in other parts of the state and each region has something special to offer. I highlighted this fact by giving 20 programs across the state in 2015 about rare plants and natural areas in Illinois.

With almost 100 new members in 2015, the Illinois Native Plant Society is growing and your membership is greatly appreciated. As a volunteer led organization, membership dues make up the majority of our revenue and it helps us bring you terrific programming and pertinent news relating to plants in Illinois. Please make sure to renew your membership for 2016 and pass along this newsletter to a friend and ask them to join. A membership form can be found on the back page of the newsletter or online registration is available on our website at www.ill-inps.org.

Also notice our new membership levels that provide an option for larger donors or those wishing to make a contribution in memoriam of a loved one. Members or businesses that make a contribution at the Iliamna, Dodecatheon, or Erigenia levels will be recognized on our website and in the newsletter.

Thank you for sending us your completed ballots for our 2016 board members. We welcome Amanda Pankau and Keri Shimp to the board and are fortunate for their service and expertise. We have a board retreat planned for January 2016 and will take that opportunity to build on our successes and set a vision for the future. I look forward to sharing the results with you.

Recently I have working with the Southern chapter board to plan the next Annual Gathering. We are still working on confirming arrangements, I can tell you that it will be in Carbondale, Illinois on June 3-5, 2016. We are looking at Touch of Nature Environmental Center, a splendid site in a rustic setting on Little Grassy Lake. Please save the date and the full registration packet will be in the spring newsletter.

HAPPY HOLIDAYS!

Christopher David Benda, President
NORTHEAST CHAPTER (Chicago)
Andy Olnas, President, reports: I was up in Waukegan conducting wetland surveys this week and came across a couple of cool species, one of which I had never seen before. I was in a marshy area and saw the dried up remains of tufted loosestrife (Lysimachia thyrsiflora), which has a beautiful, fluffy, golden yellow flower around June in the Chicago area. I had only previously seen this one at Kane County Forest Preserves in Batavia and Elburn. The species I’d never positively identified before was common yellow lake sedge (Carex utriculata) and there was a good amount of it growing in a colony adjacent to that marsh.
My understanding is that 159 to 193 species of sedge (the genus, Carex) grow in Illinois, and they frequently have only subtle differences between one species and the next. It’s always cool when you’re able to learn a new one and see what it looks like growing in the field. I was lucky enough to check another one off my sedge “life-list” when we saw fen star sedge (Carex sterilis) on our native plant walk at Hidden Fen in Glacial Park a few weeks ago. Many thanks to the McHenry County Conservation District’s Laurie Ryan for showing us such a cool site and teaching us so many new plants.

Our 2015 field trip season has ended and we’re already looking forward to 2016! We hope to offer more field trips that are widespread throughout Northeast Illinois during the next growing season and hope that you can join us out in the field! You can always visit us on Facebook.

CENTRAL CHAPTER (Springfield)
Annette Chinuge, outgoing President reports: The Central Chapter meets on the second Thursday of each month at Adams Wildlife Sanctuary, 2315 E. Clear Lake Avenue, Springfield starting at 6:30pm.
We have had many very interesting and informative speakers these past months. Each of their presentations has been videotaped and can be viewed by all in the videos section off the Central Chapter menu on the INPS website or here: http://ill-inps.org/index.php/central-videos
We have added a Plant Profile feature to our newsletter. It’s called Henry’s Blog, after the author, Henry “Weeds” Eilers. Henry features a different native plant or group of plants in each article, making his vast knowledge accessible to everyone. Check out recent Plant Profiles at: http://ill-inps.org/index.php/henry-blog
The News section of HARBINGER provides details of the new grant that the Central Chapter is offering in 2016. Up to $5,000 per project is available over a two-year period for work in the central Illinois area. See: http://ill-inps.org/index.php/central-grant-program
Long-time member Trish Quintenz is our new 2016 Central Chapter president. Other new officers will be installed at our Holiday Party in December. We welcome everyone visiting or living in the Springfield area to attend any of our meetings or field trips. For a schedule of events check out the main Central Chapter page on the website: http://ill-inps.org/index.php/central-home.
SOUTHERN CHAPTER (Carbondale)

Chris Benda, President reports: After a summer of plant workshops, the Southern chapter hosted an excellent presentation on a complex topic for our October monthly program. Southern chapter board member Dr. Nancy Garwood presented Where Have All the Dicots Gone? explaining that the dicots are no longer considered monophyletic and have been split into the true dicots (basal angiosperms) and the eudicots. Fragrant specimens from this group were presented to the audience.

In November, INHS Botanist Bill Handel told how he mapped and evaluated roadside and railroad prairie remnants ten years ago for IDOT. He tried to keep it positive, but the reality is that many of the better remnants he found then are now highly degraded now. After his talk, we discussed what can be done to protect and enhance the little bit of prairie habitat that is left in Illinois.

Our annual holiday dinner will be December 10th at 6:30pm at Longbranch Cafe. President Chris Benda will share his best nature photos from this past year. We are working on programming for 2016, and please save the date for two events. Our annual Indigenous Plants Symposium will be April 3-5th and we are hosting the next INPS Annual Gathering on June 3-5th. Both events will be held near Carbondale, Illinois.

NEW INPS MEMBERS

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first member to sign up at the Iliamna level ($1,000)

FIRE: YES AND NO

Last summer at the Annual Gathering, the HARBINGER took the Willow Creek Trail hike led by Gary Wilford, Forest Glen Preserve Education Specialist and Naturalist for the Vermilion County Conservation District. We saw an intriguing variety of habitats including the Howard’s Hollow Seep Nature Preserve and listened to Gary and Floyd Catchpole as they traded opinions about the value of fire in prairie restoration.

Floyd is a great believer in fire, but Gary, who’s been involved with prairie conservation for forty years, has reservations. He called fire “a good tool in the early stages of prairie restoration, but then you should slack off.

“Fire disturbs the landscape,” he continued, “and invasives thrive on disturbance. Once a prairie is established, burn only every ten years. That’s what we do at Forest Glen.”

Gary added that fire helps protect Jack pines (Pinus banksiana) in northern Michigan and the rare Kirtland’s warblers that nest in them. “Jack Pines have extremely tight cones and fire helps to open them and release the seed. Kirtland’s warblers only nest in Jack pines that are less than five feet tall. Before settlement, natural fire ensured a supply of Jack pines where the warblers could nest. Nowadays, forest managers use controlled burns to do this.”
Russell Duffin Woods is one of four Illinois Nature Preserves in the Forest Glen Preserve of Vermilion County, Illinois. This nature preserve is an approximately 200-acre forest site nestled in the county’s southeastern corner. It is characterized by deeply dissected wooded ravines along the Vermilion River just west of the Indiana state line. A rich mesic beech-maple-tulip poplar forest fills the ravine system with dryer oak-hickory forests and woodlands on the level uplands, knolls, and ridge tops.

Russell Duffin Woods is one of the few beech-maple forests in Illinois. While common in Indiana and eastern US, beech-maple forests are found only at the eastern edge of Illinois and in some of the state’s southern portions. The forest contains an unusually rich diversity of native plant species, including several that are uncommon in the area.

More than 145 plant species have been recorded in recent years. Some of the highlights you might be able to see depending on when you visit include, doll’s eyes (Actaea pachypoda), poke milkweed (Asclepias exaltata), blunt-scaled wood sedge (Carex albursina), common beech sedge (Carex communis, State Threatened), cancer root (Conopholis americana), wild comfrey (Cynoglossum virginianum), large yellow lady’s slipper orchid (Cypripedium parviflorum var. pubescens), squirrel corn (Dicentra canadensis), beech drops (Epifagus virginiana), showy orchis (Galearis spectabilis), witch hazel (Hamamelis virginiana), bishop’s cap (Mitella diphylla), ginseng (Panax quinquefolius), broad beech fern (Phegopteris hexagonoptera), firepink (Silene virginica), celandine poppy (Stylophorum diphyllum), reflexed white trillium (Trillium flexipes), and pink valerian (Valeriana pauciflora).

The main trail starts off in a rich upland forest with stately oaks and hickories mixed with tulip poplars and beech, then down a steep stairway to a meandering creek below amidst the steep slopes. A few steep up-and-downs later bring you to a nice stretch along the Vermilion River. For the more adventurous, an invigorating climb up the observation tower provides for an excellent overview of the forest and river valley, which is especially nice during fall colors.

Beautiful at all times of year, Russell Duffin Woods offers lush vegetation in spring and summer, a beautiful array of colors in fall, and quiet solitude with the snows of winter snuggled in the ravines. I hope you too find your way to Forest Glen Preserve and enjoy a wonderful hike in the wilds of Vermilion County.
WOODLAND CUTIES!

*Actea pachypoda*, Doll’s Eyes fruits

*Asclepias exaltata*, Poke Milkweed

*Epifagus virginiana*, Beech Drops

*Silene virginica*, Firepink

*Conopholis americana*, American Cancer Root

*Cypripedium parviflorum* var. *pubescens*, Yellow Lady’s Slipper

*Cynoglossum virginianum*, Wild Comfrey

*Mitella diphylla*, Bishop’s Cap

*Galearis spectabilis*, Showy Orchid
LILY CACHE PRAIRIE

“What’s the difference between a sailboat and a prairie?” Don Nelson asks. “A sailboat is a hole in the water into which you pour money. A prairie is a flat place that gobbles up your money.”

Nelson should know. He and his wife Espie are co-owners of the 37-acre Lily Cache Prairie in Plainfield, IL. They bought the land from Espie’s two brothers in 2003—it was a soybean field—and estimate that 350 native species now grow there.

The prairie is named after Lily Cache Farms, the name of the 50 year old produce and grain farm that preceded Lily Cache Prairie. A one-half mile stretch of Lily Cache Creek bisects the site. The creek varies in width, but is wider at the prairie’s north end where it flows from the Will County Forest Preserve’s Lake Renwick Heron Rookery, through the Prairie and continues downstream for several miles before it empties into the Du Page River. Normally about six to eight in. deep, the creek may add as much as four ft. of water when heavy rains come. Then it overflows its banks and water enters the prairie for a day or two, making it look like a lake. This would not be unusual since most of the Prairie is in the floodway or floodplain. However, the flooding has occurred more frequently in recent years because of new housing and developments in the area.

There’s a low swale across part of the prairie where wetland plants grow. The swale was dug in the 50’s in an attempt to make the land suitable for farming. It didn’t work and that land filled up again with vegetation from the seed bank and many invasives trees and forbs. Over 170 native species were on the land before the Nelsons began their restoration.

Started as a “roguer”

The Nelsons know plenty about native plants and the prairie. Don grew up in a farm area. As a youth, he worked for a company that grew corn for seed. To get pure seed, the corn must be detasseled, which means removing the pollen-producing flowers (the tassel) from the tops of corn plants and placing it on the ground so the plant cannot pollinate itself and ruin the seed. This tedious work can only be done by hand and thousands of young people are paid to detassel corn every June and July.

When a corn plant in a row looks different from the others, it is a called a rogue. If a rogue corn is allowed to mature, it will pollinate (i.e., contaminate) the hybrid corn. Roguers, who are more skilled than detasseler, spot these undesirable plants and remove them.

Nelson spent much of his life working as a chemist, but he retired in 1998 and has volunteered (along with Espie) at Midewin and Will County Forest Preserve prairies. When the Nelsons wanted a prairie of their own, they decided to turn their newly-acquired land “back to what it was like before the European arrived,” as Don puts it. “Our goal,” he says, “was to restore the native plant community in the prairie and along Lily Cache Creek.”

After they purchased the land, the Nelsons kept the tillable 22 acres in soya beans for two years so that the standard farming methods included regular herbicide spraying (Round-Up) to kill the weeds. Then two contractors each planted an 11 acre section with a seed assortment selected specifically for that soil moisture content land portion. A total of 70 species of prairie seed were chosen. They did lesser planting by Lily Cache Creek, prairie plants have moved in there. They continually spray for Reed Canary Grass and other invasive forbs, pull sweet clovers, take out undesirable woody species, and do prairie burns. Of course, every year there is the addition of more plant plugs and seed. The desire is to constantly add new species to the plant list.
Among the plants we saw at Lily Cache Prairie are tall coreopsis (*Coreopsis tripteris*), partridge pea (*Cassia fasciculata*), brown-eyed Susan (*Rudbeckia triloba*), spotted Joe pye weed (*Eupatorium maculatum*), showy black-eyed susan (*Rudbeckia speciosa*), and many sedges (*Carex spp.*). There are plenty of insects, birds, deer, muskrats, and an occasional mink, coyote, and wild turkey have been spotted in the area.

Lily Cache Prairie is a quiet place in a semi-urbanized area. Roads surround it and one can hear traffic in the distance. As one stands by the creek surrounded by prairie, the noise—and civilization—disappear. There is a conservation easement on the land with the Forest Preserve District of Will County. It will never be developed. The prairie is open to the public, but it is private property so check with the Nelsons (espienelson@yahoo.com) first.

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**BARBARA GARST FELL**

Barbara G. Fell passed away peacefully at her home on Saturday, October 24. Born in Coon Rapids, Iowa, she studied botany and biology at Rockford College before taking more advanced science courses at the University of New Mexico, where she graduated with a Bachelor’s of Science degree. Barbara worked as a bacteriologist at the Rockford Public Health Department, where she met George Brady Fell. They married in Rockford on May 21, 1948.

Throughout her life, Barbara and George worked tirelessly to protect natural areas, plants, and animals. In 1950, they accepted an invitation to help transform the Ecologists’ Union into The Nature Conservancy in Washington, D.C. Working as a volunteer, Barbara kept track of memberships, typed and edited correspondence, and did much else for the new organization.

In 1958, the Fells returned to Rockford where George started the Natural Land Institute (NLI), a land trust that protects natural land in northern Illinois. Over the next decades, Barbara helped her husband with the Natural Land Institute, the Illinois Nature Preserves Commission, the Illinois Chapter of The Nature Conservancy, and several other preservation organizations.

Barbara may have been one of the first serious recyclers. When she added a garage to their home, she had the driveway paved with brick that she had rescued from local demolition projects. She was known by her friends for her incredible energy, her passion for environmental concerns, her interest in her flower garden, her tenacity, her fierce loyalty and her independence, which she retained until her recent illness.

Memorials may be directed to the Natural Land Institute, 320 South Third Street, Rockford, IL 61104 for the expansion and restoration of Silver Creek Woods, an area southwest of Rockford that the Fells preserved.
TEASELS: THE OBNOXIOUS ROADSIDE INVADERS
By Jim Alwill

The cut-leafed teasel (*Dipsacus laciniatus*) and the common teasel (*Dipsacus sylvestris*) are monocarpic biennials that were brought into the US during the late 1700s. The seed heads were used to card wool. Both species grow widely in Illinois, especially along roadsides.

Teasels are normally rosettes in the first year, though this stage may last longer. In the second year, they send up an eight to ten-foot tall flowering stalk, flower, set seed, and die. A single seed head can produce over 500 seeds and an entire plant can set 6,000 seeds.

In recent times, the teasel plant was used to create dry wreaths that were placed on gravestones. When the wreaths were no longer needed, they were discarded outdoors, where the still viable seeds germinated, grew into rosettes, flowered, and set seed. When mowers came by, they carried the seed further from the cemetery. Today teasel is found in all 48 contiguous United States, and listed by several states as a noxious weed.

A single teasel plant makes a lot of seed! Each germinating seed turns into a 12-in. to 18-in. diameter rosette. These rosettes can get so thick that the teasel carpet smothers out desirable turf and prairie species.

Mowing Doesn’t Work

Most biennials can be controlled by mowing. Once they are cut down, they will not re-flower and set seed that year. Teasel has a thick, deep taproot that stores a lot of energy. After the plant has been mowed, it can send up a new shoot, flower and go to seed just in time for a fall mow to spread the seed further.

If teasel is mowed so it cannot flower, it sometimes won’t die after the second year and will regenerate in the third year. This means a thicker green carpet that smothers grasses and forbs. Some teasels may have over 30 flower heads on a single plant to make over 15,000 seeds.

Teasel seed can travel far and wide on mower decks or float downstream in ditches and waterways. Municipalities normally mow highway rights-of-way in autumn when the seed is ripe and ready to fall out of the seed heads. This includes mowing ditches where teasel had all summer to grow, flower, and seed. Thus a single plant can multiply from one to 6,000 in the first season and then to 36,000,000 by the second generation. With the mower decks spreading the seeds all over the roadside, the turf soon resembles a thick green carpet of teasel rosettes, especially in urban areas.

Best Time to Treat

The best time to treat teasel is when it is in the rosette form or right before it goes to flower (first week of July). If the plant is in flower, you can buy some time and mow the colony down and spray it when the rosettes start to come back a foot tall. In high quality prairie areas with teasel infestations, I have successfully spot sprayed when the prairie plants are winter dormant and the teasel leaves are still green. In areas where I blanket sprayed teasel carpets, I had to come back in and reseed the bare spots.

The Illinois Department of Transportation (IDOT) has a teasel poster on its website (www.idot.illinois.gov/assets/uploads/files/transportation-system/pamphlet). It shows the lifecycle of the teasel plant, and treatment methods. We came up with this poster as a way to educate the public about the damage the plant is causing and how it can be controlled. If we are ever going to revegetate all the Illinois roadsides with prairie, teasel must be controlled.
THE WEE SEDGES 2

By Linda W. Curtis (Lindaeus www.curtistothethird.com)

The wee sedges are usually not conspicuous when seen from adult height. Children, on the other hand, view things from lower perspective and will see what adults miss. They continuously ask, “what’s this?”, and when it comes to Carex, the adults usually have no answer or say it’s a grass. (gasp).

Sand Prairies are the habitat for C. tonsa. A grasslike tuft perched on sand dunes and ridges, their seedheads are hidden in the basal leaf sheaths. Once on the endangered list, it was understandably under-reported. Now known from seven counties in Illinois, that’s evidence the botanists are crouching to separate the lower leaves. An “ahah!” moment. Swink and Wilhelm’s Plants of the Chicago Region list C. tonsa as blooming earliest on March 24 in the Lake Michigan dunes. brrrr.

Fig 1 & 2. Often growing in lawns, Charming sedge, Carex blandia, mentioned in the previous issue, has nerv ed perigynia with bent beaks when mature and drying. When juvenile, the nerves are not conspicuous. Last month’s issue erroneously showed fuzzy perigynia of C. richardsonii in Fig 2 meant for C. blandia with smooth sacs.

Fig 3. In woodlands, C. jamesii is easily stepped on and covered by a shoe (yours, not mine). Its small culms with seed heads, albeit it with only one or two perigynia, have a tiny upright male spike. Seldom noticed, the spring wild flowers are the eye candy and get all the attention.

Fig 4. The wee bog sedges have tiny seed heads such as C. disperma on the far left, that are only 3 cm long. Next is C. brunnescens, also with spaces between the spikes, then weird C. trisperma, and the far right C. chordorrhiza with a solitary dense seed head.

Fig 5. When the wee seed head of C. chordorhizada grows near a pitcher plant flower, Sarracenia purpurea, it may not be seen at all.

Fig 6. Also a bog sedge, the seed head of Carex canescens is overlooked when growing next to the white flower of bog arum, Calla palustris.
A NEW PEST
A “jumping” or “crazy” worm (*Amynthas agrestis*) was sighted in a Wilmette backyard during September and later in DuPage County. Though the worm has lived in the southeastern United States for many years, these were the first Illinois sightings. According to the Chicago Botanic Gardens, crazy worms multiply very quickly, devour soil organic matter, drastically change soil structure, and out-compete common European earthworms. Found near the soil surface, the worms immediately respond to touch with crazy flipping and jumping. There is no easy way to get rid of the worms. Report findings to the Illinois DNR or the Illinois Department of Agriculture. For more details, visit: http://mychicagobotanic.org/horticulture/crazy-worm-or-jumping-worm.

CASH WANTED

“After 22 years of photography and 4.5 years of writing, editing, and designing, I have finished my book,” says MacDonald. “It’s ‘happening no matter what . . . it’s just a matter of how much in debt I’m going to be.’” He wants to raise $72,000 for the out-of-pocket publishing costs through a crowd-funding campaign. He’s not asking for a handout, he says, but is simply trying to pre-sell books at $72 per copy before publication. The author wants to reach 100,000 people in hopes that 1,000 of them will contribute. ([https://www.gofundme.com/ChicagoBook](https://www.gofundme.com/ChicagoBook)).

CASH AVAILABLE
The Central Chapter is issuing a special one-time request for grant applications. Applicants can request from $1,000 to $5,000 to help support plant-related projects in central Illinois. This special program is in addition to Central Chapter’s ongoing grants of up to $1,000. It provides an opportunity for to propose projects that will take up to two years to complete. Eligible applicants include environmentally-focused not-for-profits, faculty, students, student groups, and environmental/horticulture groups affiliated with an educational institution or individuals doing research or service projects. Twenty Central Illinois counties are potential project sites. Detailed application guidelines and the application packet are available by e-mail from the Grant Committee Chair [EdieSteinberg@aol.com](mailto:EdieSteinberg@aol.com). The application is posted on the INPS website in the Central Chapter section. Applications for the special grant program are due by January 15, 2016.

INHS REPORT
Conservation of the Illinois flora: A climate change vulnerability assessment of 73 plant species, an Illinois Natural History Survey technical report is now available for download at [https://www.ideals.illinois.edu/handle/2142/88335](https://www.ideals.illinois.edu/handle/2142/88335). The intended readership is land managers, researchers, grant writers, and policymakers.

The report tells how a few plants in Illinois may respond to changes in climate by the middle of this century. Included are native species, non-natives, woodies, herbs, perennials, annuals, threatened and endangered species, extirpated and nuisance species, and two halophytes.

Each plant has a vulnerability score associated with it, a likelihood distribution of that score being accurate, a list of biological and ecological factors that may increase or decrease the species’ vulnerability, and a one- to two-page narrative outlining aspects of the plant’s biology and ecology which are of particular interest. Included is a list of next-step recommendations for climate change planning and management in the natural areas of Illinois.

LAKE SHORE HABITAT RECEIVES RECOGNITION
According to the *Chicago Tribune* (Sept. 29, 2015), 3,176 acres along the Lake Michigan shoreline in Lake County, IL, and southeastern Wisconsin have been designated a Ramsar Wetland of International Importance. The wetland, which is called the Chiwaukee Prairie Illinois Beach Lake Plain, is home to the state-threatened Blandings Turtle, the federally threatened eastern prairie fringed orchid, and the piping plover among many other species. Brent Paxton, a Lake County Board member says: “We are joining the ranks of Everglades National Park.”
2015 Winter Harbinger December 2015

You can renew/join by filling out the form below or online at our website, www.ill-inps.org/member

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!!!