

OCTOBER 2020

# THE NODDING ONION

*Newsletter of the Northeast Chapter of the Illinois Native Plant Society*

## WHAT'S IN THIS ISSUE:

---

Northeast Chapter Elections  
2021 INPS Research and Survey Grants  
New! Illustrated Botanical Glossary  
Creeping Plants of the Chicago Region  
Bladderworts and Skullcaps

Photo: *Bidens cernua*, USGS Bee Inventory Monitoring Lab

## From the President

The Northeast Chapter will be holding board elections for the 2021–2022 term in early December. All positions will be on the ballot, though we are specifically in search of a Field Trips Coordinator.

The Field Trips Coordinator works with our team of board members and other volunteers who plan field trips and other events, including identifying and collaborating with hike leaders and speakers, posting events to our website and social media, and attending a few events each year. Please volunteer yourself or consider those in your network for this role. We would love to see new faces!

Current slate of nominees:

- President – cassi saari
- Vice President – Mark Kluge
- Treasurer – Jason Zylka
- Membership Chair – Kathleen Garness
- Members-at-large – Sheri Moor, Eriko Kojima



The 2019–2020 Northeast Chapter Board. Left to right: Sheri Moor, cassi saari, Kathleen Garness, Anna Braum, Mark Kluge (not pictured: Jason Zylka, Iza Redlinski), photo by Jeff Skrentny, January 2020

*We thank Anna Braum (Newsletter Editor) and Iza Redlinski (Field Trips Coordinator) for their work these past two years!*

Board positions will run from January 2021 through December 2022, with the option to run for multiple terms. See all board position descriptions on our Chapter website and don't hesitate to reach out to us with interest or questions: [northeast.inps@gmail.com](mailto:northeast.inps@gmail.com)

Interested in volunteering in some other capacity? Check out our Volunteers page at: <https://illinoisplants.org/northeast-chapter/volunteer/>

—cassi saari



Outgoing Field Trips Coordinator, Iza Redlinski, at one of our socially distanced wildflower hikes, photo by Mark Kluge

# APPLY! INPS 2021 GRANTS

## RESEARCH GRANT

Students, citizen scientists, conservation groups and institutions are alerted to consider applying for an INPS Research Grant for up to \$2,500 to fund one-year projects. The grant is for research-focused studies on Illinois native plants such as life history, reproductive biology, demography, genetics, comparative site inventories, community ecology, as well as research on threats to native plants and communities, such as invasive species. Laboratory research as well as projects focused on research relating to education about or restoration of native plants and plant communities will be considered. Projects involving student research or volunteers will be given special consideration. All projects must demonstrate how they support the mission of the Illinois Native Plant Society.

## SURVEY GRANT

INPS is also excited to continue its new second grant for 2021: the Survey Grant. This grant for up to \$5,000 will fund searches for Illinois Endangered, Threatened or some rare species for which current data are inadequate to assess their status and for which field surveys and recovery recommendations are needed. INPS worked with the Illinois Department of Natural Resources to develop a priority list of species for the surveys. Experienced botanical field surveyors, either independent or associated with an institution, are invited to apply for this grant. Partnerships are encouraged.

Full application details and forms for the 2021 Research and Survey Grants will be posted on the INPS website by late November.

Applications must be received by January 31, 2021.

Awards will be announced by March 31, 2021.

*INPS is grateful to be able to increase its grant award amounts this year, thanks to contributions from membership fees, generous donations to the Grant Program, proceeds from the 2019 Annual Gathering, and support from the Central Chapter for one grant conducting studies within the Central Illinois counties.*

# New Illustrated Botanical Glossary for the Flora of the Chicago Region

Glossary text by Gerould Wilhelm & Laura Rericha  
 Glossary illustrations by Kathleen Marie Garness

An excellent new illustrated botanical glossary was recently published by the Conservation Research Institute and Indiana Academy of Science. It is a freely available companion to the *Flora of the Chicago Region* (2017), written by Gerould Wilhelm and Laura Rericha. This new resource consists of 14 detailed illustrated plates and a 28-page glossary of botanical terminology, a valuable tool for anyone who needs to work their way through a dichotomous key.

Our own Membership Chair, Kathleen Garness, deftly and meticulously worked to produce the illustrations in consultation with the authors and editor of the flora. The glossary is available on the Conservation Research Institute website and can be downloaded and printed for educational and non-commercial uses.

—cassi saari

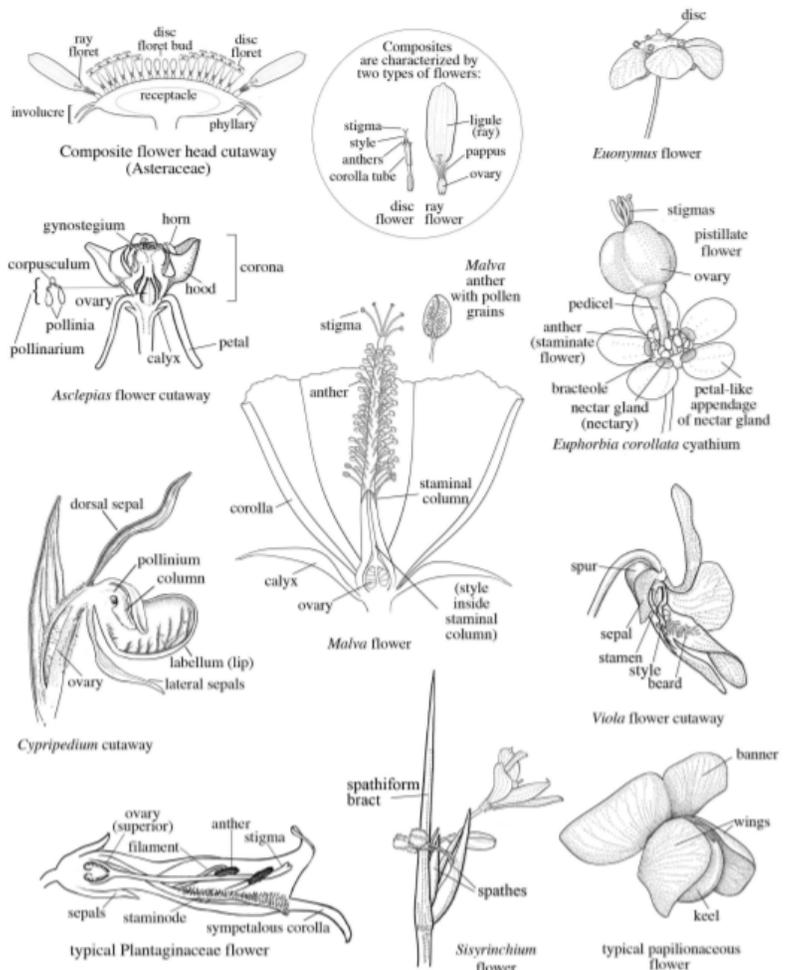
**View on website**

[conservationresearchinstitute.org/flora-of-the-chicago-region](https://conservationresearchinstitute.org/flora-of-the-chicago-region)

**Download PDF**

[conservationresearchinstitute.org/forms/CRI-FLORA-Glossary.pdf](https://conservationresearchinstitute.org/forms/CRI-FLORA-Glossary.pdf)

## PLATE 11: FLORAL MORPHOLOGY VARIATIONS



# CREEPING PLANTS OF THE CHICAGO REGION

In celebration of Halloween, get spooked by some local plants that creep...  
—the Editor



*Agrostis stolonifera* (creeping bent grass)  
by @bouteloua



*Amaranthus blitoides* (creeping amaranth)  
by @dziomber



*Campsis radicans* (trumpet creeper)  
by @skrentnyjeff



*Chamaesyce maculata* (spotted creeping  
spurge) by @sanguinaria33



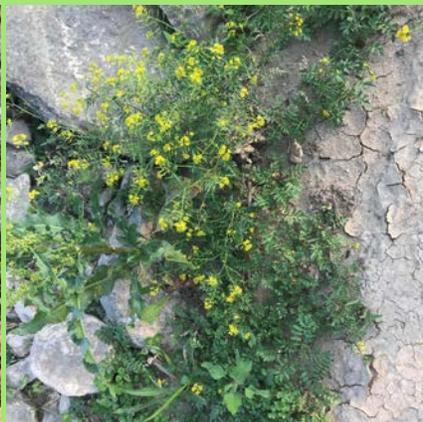
*Glechoma hederaceae* (creeping Charlie)  
by @sedgequeen



*Lysimachia nummularia* (creeping Jenny)  
by @bouteloua



*Parthenocissus quinquefolia* (Virginia  
creeper) by @skrentnyjeff



*Rorippa sylvestris* (creeping yellow cress)  
by @sedge



*Verbena bracteata* (creeping vervain)  
by @matthewt6416

# Plants with Stomachs

By Linda Curtis

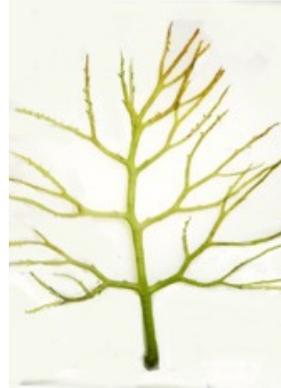
Linda Curtis is a botany consultant, author, and nature photographer. [www.curtistothethird.com](http://www.curtistothethird.com)

Somewhere in a lake near you, in a shallow bay, grows a floating plant with pouchlike sacs on its leaflets. The sacs each have a “spring-loaded” trap door that can open and shut in a fraction of a second. The “triggers” are hairs, known as “trichomes” in plants, around the mouth of the sac. It’s a “touch me and you’ll die” trichome.

As the plant lies out floating on the water’s surface, basking in the sun’s rays to power its chloroplasts, a tiny water creature wiggles by and touches a hair. SNAP! The door opens, the creature is sucked in, the door snaps shut, and digestion begins. The sacs are more akin to stomachs that digest than bladders that excrete, but that’s the name they were given.

A Hollywood sci-fi story? No. Mother Nature’s science fiction? Almost. Plants that live in nutrient-poor soils or waters profit with their side business of capturing prey and using those nutrients. The pitcher plants do it, the sundews do it, and so do the bladderworts.

The genus *Utricularia* has many species, but in northeast Illinois you’ll likely encounter four species in inland lakes and in wet swales along Lake Michigan. You can see the masses of yellow flowers from boardwalks such as those at Moraine Hills State Park in McHenry County, or Volo Bog in Lake County. The yellow flower heads rise straight up out of the water from the stems, sometimes rooted, often floating.



Above (left): Leaves of *Utricularia macrorhiza* (right): *U. macrorhiza* has 2 mm sacs on the leaves. Photos by Linda Curtis.

Two bladderwort species, *U. macrorhiza*, common bladderwort (pictured above), and *U. gibba*, humped bladderwort (pictured below), have round threadlike leaves, rather than flattened ones. *U. macrorhiza* has 2 mm sacs on the leaves, oval in one view, flattened from the side. *U. gibba* is smaller with 1 mm sacs on the stem rather than on the leaves.



Above: *Utricularia gibba*, humped bladderwort, has 1 mm bladders, often scattered on the stem next to tiny, threadlike leaves.



*U. minor* (pictured at left), small bladderwort, has sacs about 1 mm in size that are attached to the tiny, flat leaves. *U. intermedia*, flat-leaved bladderwort, has bladders on separate branches and its leaves are spiny.

If you don't carry a ruler you may want to learn a body dimension to help in the field. Find a 1 or 2 mm mole on your arm to use as a reference. This was a requirement of my students in botany lab.

Along Lake Michigan, you may see the pretty yellow flowers of *U. cornuta*, horned bladderwort (photo at right), named for the long spur on the flower. Its flowers do not arise from a basal whorl of leaves as with other species. It grows aside a marsh with *Carex buxbaumii*, the purple-scaled sedge, and the sedges *Carex aurea*, *C. conoidea*, and *C. viridula*.

The sacs of *Utricularia* species are a bit flattened, not completely round, and if you do more research on this amazing group of plants you'll learn the sacs contract on the sides, creating a vacuum that pulls the prey in once the hair is triggered.

Another interesting "trick" are the turions, the terminal buds that break off the plant and float away to begin life on a different site, wherever wind and waves take them.

There's more, and the more you read, the more amazed you'll be, and the more thankful you'll be that they are minute.

"A Hollywood sci-fi story? No. Mother Nature's science fiction? Almost. Plants that live in nutrient-poor soils or waters profit with their side business of capturing prey and using those nutrients. The pitcher plants do it, the sundews do it, and so do the bladderworts."



*Utricularia cornuta* by Michael Butler CC-BY-NC



## The Scutellaria (Skullcaps) of Northeast Illinois

By Maureen Clare Murphy

*Maureen Clare Murphy is a naturalist, artist, and member of the Northeast Chapter living in Chicago. [www.maureenclaremurphy.com](http://www.maureenclaremurphy.com)*

*Scutellaria* — or skullcap — species can be found in a variety of habitats in northeastern Illinois. These perennials belong to the mint family (note their opposite leaves); more than 470 species of skullcaps can be found worldwide, mainly in temperate regions. The genus name comes from the Latin *scutella*, meaning “square-shaped salver or tray; an allusion to the characteristic dorsal appendage of calyx,” according to Wilhelm and Rericha’s *Flora of the Chicago Region*. (The calyx is the part of the plant from which the corolla or flower petals emerge.)

As for our local species, perhaps our most frequently encountered one is *Scutellaria lateriflora*. It is something of a wetland generalist, occurring in flatwoods, marshes, sphagnum bogs and ditches, among other habitat types. This herbaceous species has toothed leaves longer than 1.5 inches; smooth stems and leaves; and numerous blue flowers, just shy of one centimeter in length, arrayed in one-sided racemes. The common name—mad-dog skullcap—comes from the once-held and false belief that the plant could cure rabies, though it’s also known as the more descriptive side-flowering skullcap. Our other *Scutellaria* species are more specialized but may be frequent or abundant in their habitats.

"They may not be the showiest plants around, but skullcaps reward the observer who makes an effort to take a closer look."

*Scutellaria galericulata*, or marsh skullcap, occurs in marshes, wet to medium-wet sand prairies, and sphagnum bogs. Like *Scutellaria lateriflora*, this marsh-dweller has toothy leaves longer than 1.5 inches, but hairy undersides and pubescent stems. It blooms from mid- to late summer. Illinois is on the southern edge of this species' range.

Preferring drier land, *Scutellaria leonardii*, or prairie skullcap, is a common species in mesic to dry prairies and sunny openings in savannas. Its leaves are less than 1.5 inches long, with mostly smooth edges, and short, curved hairs lying flat across the stem.

While the *Scutellaria* species *lateriflora*, *galericulata*, and *leonardii* can be found in all counties in northeastern Illinois, *Scutellaria parvula* — or small skullcap — occurs mainly in dolomite prairies in the Bedrock Valley Section along the lower Des Plaines and Kankakee rivers. It has small leaves like *Scutellaria leonardii* and both flower in late spring to summer. *Scutellaria parvula* and *S. leonardii* are sometimes considered the same species with two varieties (Plants of the World Online 2020), though they are considered separate in *Flora of the Chicago Region* (Wilhelm and Rericha, 2017). While *S. parvula* has glandular hairs and the leaf edges are flat, *S. leonardii* lacks glandular hairs and the leaf edges are revolute (rolled inwards).

If you are in a riparian woodland, you may encounter *Scutellaria ovata*, or heart-leaved skullcap, a regionally rare species. *Scutellaria ovata* flowers in terminal racemes and, as indicated by the common name, has cordate, or heart-shaped leaves. A conservative plant, its presence suggests a high-quality woodland where the ground flora is in an undisturbed state.

They may not be the showiest plants around, but skullcaps reward the observer who makes an effort to take a closer look.

At left: Three skullcap species observed in Cook County



*Scutellaria leonardii* (prairie skullcap) by Erin Faulkner



*Scutellaria parvula* (small skullcap) by Derek Ziomber



*Scutellaria ovata* (heart-leaved skullcap) by Mark Kluge

Illustration by Kathleen Garness



## **Contribute to *The Nodding Onion***

We're looking for submissions!  
Do you have an article, artwork,  
photos, or other content you'd like  
to share with the *Nodding Onion*?

Contact Anna Braum,  
Newsletter Editor, at:  
[inpsnews@gmail.com](mailto:inpsnews@gmail.com)

## **Northeast Chapter Board**

President  
cassi saari

Vice President  
Mark Kluge

Treasurer  
Jason Zylka

Membership Chair  
Kathy Garness

Newsletter Editor  
Anna Braum

Field Trips Coordinator  
Iza Redlinks

Member At-Large  
Sheri Moor

# Join/Renew/Follow



*Symphyotrichum pilosum* (hairy aster)

The Illinois Native Plant Society is a volunteer-led, member-based organization with dues comprising the majority of our revenue. Please renew and encourage friends to join. Join or renew on our website:

<https://ill-inps.org/member>

**As a member of the Illinois Native Plant Society, you contribute to our mission of promoting the appreciation, conservation, and study of the native flora and natural communities of Illinois.**



*Eupatorium perfoliatum* (boneset)

As a member, you receive:

*Erigenia*: our peer-reviewed scientific journal

*The Harbinger*: the statewide newsletter

*The Nodding Onion*: our chapter newsletter

Notification for and priority RSVP for events, including the statewide Annual Gathering, guided field trips, lectures, workshops, and other events.



*Bidens cernua* (nodding bur marigold)

Photos: USGS Bee Inventory Monitoring Lab

Follow the Illinois Native Plant Society on social media:

[facebook.com/IllinoisPlants](https://facebook.com/IllinoisPlants)

[twitter.com/ilplants](https://twitter.com/ilplants)

Northeast Chapter:

[facebook.com/NortheastIllinoisPlants](https://facebook.com/NortheastIllinoisPlants)

[instagram.com/northeastinps](https://instagram.com/northeastinps)

[twitter.com/northeastinps](https://twitter.com/northeastinps)