Illinois Native Plant Society

The Harbinger

Newsletter *of the* Illinois Native Plant Society

SPRING 2024
VOL. 41, NO. 1

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

Spring scene of bluebells (*Mertensia virginica*) at River Bend Forest Preserve in Champaign County. Photo by Brian Charles.

In This Issue

Governing Board

Interim President
Dr. Emily Dangremond

Vice President
Susanne Masi

Secretary
Leilah Reich

Treasurer
Becky Croteau

***Erigenia* Editor**
Dr. John Taft

Harbinger
Chris Benda (Editor)
Brian Charles (Editor)
Katie Kucera (Layout)

Membership
Kelsay Shaw

Webmaster
Kate Ahrens

At-Large Board
Angela Kerber
Karen Larson
Daniel Pohl
Eric Ulaszek
Nick Seaton
Carolyn Villa

Message from the President

Dear INPS members,

Happy Spring! I am thrilled to be back in the position of President. I want to thank Janine Catchpole for her leadership during 2023 and hope that she continues to be involved with INPS in the future. Thank you also to our former state governing board members whose terms ended: Anna Braum, Courtney Cartney, and Gretel Kiefer. I would like to extend a big welcome to our new state governing board members: Becky Croteau as treasurer; Kelsay Shaw as membership chair; Kate Ahrens as webmaster; and Brian Charles, Karen Larson, and Carolyn Villa as members-at-large. I hope you save the date for our Annual Gathering, which will be hosted by the Northeast Chapter: July 12 and 13 at Benedictine University in Lisle. See you there!

Spring ephemeral season is my favorite time for botanizing. Enjoy the season!

Sincerely,

Emily Dangremond
INPS President

Spring flora in bloom and later species still unfurling at a forest preserve in Will County. How many species can you spot? Photo by Katie Kucera.

Message from the Editor

Chris Benda with Dr. Robert Mohlenbrock

I'd like to welcome Brian Charles as co-editor of *The Harbinger* newsletter. Brian recently joined the INPS board and is a botanist working for the Illinois Natural History Survey. In this issue, we are pleased to offer a bilingual article on pollination by Imeña Valdes, along with other helpful articles relating to learning the flora of Illinois. I'd also like to share a recent photo I took with Dr. Robert Mohlenbrock, the foremost expert on Illinois botany, who regularly botanizes in the Shawnee with his son Trent. Follow their adventures on social media.
–Christopher David Benda, Co-Editor

Submissions to the newsletter are always welcome!
Please contact editors Chris Benda (botanizer@gmail.com) and Brian Charles (brianmc4@illinois.edu). Deadlines are March 1, June 1, September 1, and December 1 for the spring, summer, fall, and winter issues respectively.

INPS Chapters

CENTRAL CHAPTER
Springfield
Trish Quintenz (President)
trishquintenz@gmail.com

KANKAKEE TORRENT CHAPTER
Bourbonnais
Floyd Catchpole (President)
fcatchpole@comcast.net

FOREST GLEN CHAPTER
Champaign/Urbana, Danville
Paul Marcum (President)
marcum@illinois.edu

NORTHEAST CHAPTER
Chicago
vacant (President)
northeast.inps@gmail.com

SOUTHERN CHAPTER
Carbondale
Nick Seaton (President)
southernillinoisplants@gmail.com

GRAND PRAIRIE CHAPTER
Bloomington/Normal
Joe Armstrong (President)
jearmstr@ilstu.edu

QUAD CITIES CHAPTER
Rock Island
Samantha Chavez
sjchavez0@gmail.com

Welcome New Members

CENTRAL CHAPTER
Thomas, Amy, and Quinn Allen
Martha Armour
Tammy Bartolomucci
Jane and Katie Denes
Marcie Finlay
Jenna Gibson
Jan Von Qualen and Ted Schullian

FOREST GLEN CHAPTER
Ellen Schonken
Claire and Christopher Stewart

KANKAKEE TORRENT CHAPTER
Beckie Green
Susan Gregory
Marilou Martin

NORTHEAST CHAPTER
Gretchen Anchor
Del Benson
Peggy Bernar
Joshua Campos
Kyle, Donovan, and Della Gorey and Grace Corry
Thad Gleason
Stone Hansard
Daniel Lara-Newman
Rebecca Lasky

cont...

Katie Delk and Tiffany Love
Jerome and Janet McDonnell
Beth Peluse
Mike Flanigan and Michelle Self
Christian Shebesta
Susan Terronez

QUAD CITIES CHAPTER
Cheri and Kenny Burroughs
Kyle Van den Bosch
Paul Fessler
Maranda Klauer

SOUTHERN CHAPTER
Robert Grimmer
Nancy and Bob Weck

Illinois Botanist's Big Year 2023 Report

By Brian Charles and Daniel Pohl

The "Illinois Botanist's Big Year" (BBY) is a friendly competition on iNaturalist, coordinated by members of the Illinois Native Plant Society (INPS) and others, to see who can find the most plants in Illinois in any given year. This was the 8th year of the competition, founded by cassi saari! 2023 was an impressive year, and we're already well underway in 2024—to read more about the competition, learn more about using iNaturalist or gain other tips, and to join the project in 2024, please check out the page on the INPS website: illinoisplants.org/illinois-botanists-big-year/

The winner in 2023 is Abel Kinser (@abelkinser on iNaturalist), who narrowly bested Ryan Sorells (@rynxs) to become a 4-time champion. Both Abel and Ryan broke the prior record for most species found in a year (1,223), set in 2022 by Paul Marcum (@sedge). Abel finished with both the most observations and most unique species in 2023. Spring ephemerals reigned supreme for the most observed species, a title which they will likely never relinquish.

Most Observations

1st	abelkinser	2,668
	rynxs	2,599
	illinoisbotanizer	2,584
	grantfessler	1,964
	mrostrowski	1,657
	zach_skuby	1,396

Most Species

1st	abelkinser	1,309
	rynxs	1,292
	illinoisbotanizer	1,182
	mrostrowski	803
	grantfessler	763
	elfaulkner	647

Most Observed Species

	Virginia Springbeauty	161
	Prairie Trillium	130
	Bloodroot	100
	Sharp-lobed Hepatica	97
	Blue Phlox	96
	Cut-leaved Toothwort	94

Here is what Abel had to say regarding his victory: "I absolutely love iNaturalist! Each month this past year, I would make a list of plants I hoped to photograph and upload to iNat. My goal was 1,200 species and ended up with more than 1,300. Most were from the southern-most counties but I did make a trip to northern Illinois in September and picked up some lifers. I tallied over 70 lifers through the year. Learned many new grasses. It would be hard to pick a favorite from the year. If I had to pick a couple, it would be *Muhlenbergia capillaris* from 9/18/23 in Union County and *Dichanthelium yadkinense* from Pope County." Here are those observations if you want to take a look:

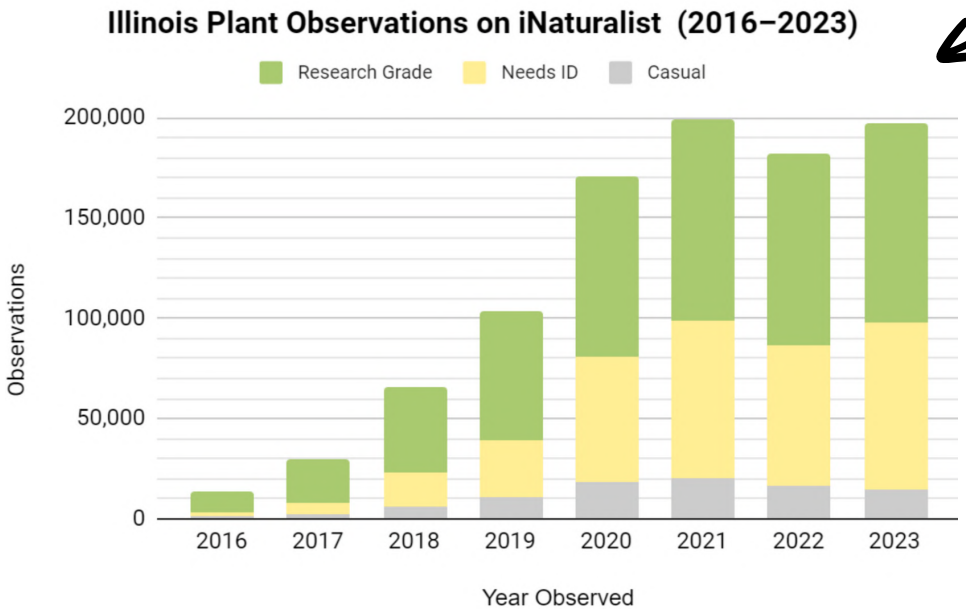
Left: *Dichanthelium yadkinense*
http://www.inaturalist.org/observations/166007664
Right: *Muhlenbergia capillaris*
http://www.inaturalist.org/observations/183921510

Most observations in 2023

1. abelkinser - 2667
2. rynxs - 2590
3. illinoisbotanizer - 2583
4. grantfessler - 1945
5. mrostrowski - 1649
6. zach_skuby - 1393
7. rarecatsnake - 1308
8. danielpohl - 1004
9. elfaulker - 793
10. prairiebeeman - 697

Most unique species in 2023

1. abelkinser - 1309
2. rynxs - 1288
3. illinoisbotanizer - 1182
4. mrostrowski - 800
5. grantfessler - 757
6. elfaulkner - 646
7. zach_skuby - 643
8. danielpohl - 531
9. rarecatsnake - 525
10. prairiebeeman - 441



Here is how the plant observations stack up over the years. 2021 just barely has more observations than 2023. Illinois is now at 990,000 plant observations for iNaturalist, and we will get to 1,000,000 very soon!

Here are some of the plants observed for the first time in Illinois in 2023 on iNaturalist:

Left: *Eriophorum gracile* (slender cotton grass) found on a calcareous floating mat in northern Illinois by Katie Kucera (@kkucera). This species was considered extirpated in Illinois until it was found by Katie! Photo by Paul Marcum (@sedge), who was at the site when the species was rediscovered.

Right: *Corylus cornuta* (beaked hazelnut) seen by @sedge. This species was considered extirpated from Illinois, but was recently found on an algific talus slope in northwestern Illinois. Finding it with fruit was the cherry (or should I say hazelnut) on top of the cake (or should I say talus slope).

Chapter News

For information about each chapter, visit our website at illinoisplants.org/chapter-locations

What is Pollination?

By Imeña Valdes

Pollination is a part of the plant reproductive process by which pollen grains are transferred from the anther (male part) to the stigma (female part) of the same or different flowers, followed by fertilization. After fertilization, the ovary develops into a fruit that produces the seeds which make way for the next generation of plants. Since plants are immobile, pollen transfer occurs by wind, or insects or other animals, called pollinators. Flowers function to attract animal pollinators with various colors, shapes, sizes, and even rewards like nectar. These are called pollinator syndromes, that can be useful for speculating about the type of pollinator that can contribute to successful pollen transfer.

Plants that are wind dispersed include common crops like wheat, rice, and corn. They have small flowers that are pale green or brown and scentless. Other common wind pollinated plants include gymnosperms (e.g., cycads, conifers, *Gingko*), which predate angiosperms, or flowering plants. Most Gymnosperms produce both male and female cones on a single plant, and with the help of wind the pollen from the male cones can travel to the eggs of the female cones to produce seeds.

Pollination by honeybees is the most known form of pollination, but these aren't the only animals helping plants reproduce. Wild bees, butterflies, beetles, flies, moths, wasps, ants, birds, bats, and a variety of mammals can all be pollinators and can be categorized into two groups: generalists and specialists. Generalists are insects that will pollinate any flowers if they can access the nectar and/or pollen. Certain flower shapes, like those of coneflowers, help make this possible because the nectar and pollen are easily accessible to any insect as they provide a landing pad. Specialist insects often primarily collect floral resources from one species or genus of plant. One example is the spring beauty mining bee (*Andrena erigeniae*), which primarily collects pollen from spring beauties (*Claytonia virginica* and *Claytonia caroliniana*).

This spring, keep an eye out for pollinators emerging from their hibernation. So far, I've already seen a honeybee pollinating a *Crocus*!

La polinización es una parte del proceso reproductivo de las plantas por la cual los granos de polen se transfieren de la antera (parte masculina) al estigma (parte femenina) de la misma flor o de flores diferentes, seguido por la fertilización. Después de la fertilización, el ovario se convierte en una fruta que produce las semillas que dan paso a la siguiente generación de plantas. Como las plantas son inmóviles, la transferencia de polen se produce por el viento, o por insectos u otros animales, llamados polinizadores. Las flores funcionan para atraer a los polinizadores con diversos colores, formas, tamaños e incluso recompensas como el néctar. Son conocidos como síndromes polinizadores, que pueden ser útiles para especular el tipo de polinizador que puede contribuir al éxito de la transferencia de polen.

Las plantas que se dispersan por el viento incluyen cultivos comunes como el trigo, el arroz y el maíz. Tienen flores pequeñas que son de color verde pálido o marrón y no tienen olor. Otras plantas comunes polinizadas por el viento son las gimnospermas (por ejemplo, cycas, coníferas, *Gingko*), que preceden a las angiospermas, o plantas con flores. Las gimnospermas producen conos masculinos y femeninos en una misma planta y, con la ayuda del viento, el polen de los conos masculinos puede viajar hasta los óvulos de los conos femeninos para producir semillas.

La polinización de las abejas de miel es la forma más conocida de polinización, pero no son los únicos animales que ayudan a las plantas a reproducirse. Las abejas silvestres, las mariposas, los escarabajos, las moscas, las polillas, las avispas, las hormigas, los pájaros, los murciélagos, y una variedad de mamíferos pueden ser polinizadores y pueden clasificarse en dos grupos: generalistas y especialistas. Los generalistas son insectos que polinizarán cualquier flor si pueden obtener el néctar y/o el polen. Ciertas formas de flores, como las de los conos, ayudan a que esto sea posible porque el néctar y el polen son fácilmente accesibles para cualquier insecto, ya que proporcionan una plataforma de aterrizaje. Los insectos especializados muchas veces recogen recursos florales de una especies o género de planta. Un ejemplo es la abeja minadora de la belleza primaveral (*Andrena erigeniae*), que recoge principalmente el polen de las bellezas primaverales (*Claytonia virginica* y *Claytonia caroliniana*).

Esta primavera no pierdas de vista a los polinizadores que salen de su hibernación. ¡Hasta ahora ya he visto una abeja polinizando un azafrán!

Imeña is an adjunct faculty member at DePaul University teaching conservation biology.

Honeybee (*Apis mellifera*) looking for nectar in a Crocus flower (seen 02/27!).
Abeja de miel (*Apis mellifera*) buscando néctar en una flor de azafrán (¡vista el 27/02!).

Sweat bee (Halictidae family) on black-eyed Susan (*Rudbeckia fulgida*).
Abeja del sudor (familia Halictidae) sobre Susan de ojos negros (*Rudbeckia fulgida*).

American bumblebee (*Bombus pensylvanicus*) inside foxglove beardtongue (*Penstemon digitalis*).
Abejorro americano (*Bombus pensylvanicus*) dentro de lengua de barba de dedalera (*Penstemon digitalis*).

Fiery skipper (*Hylephila phyleus*) on beebalm (*Monarda* spp.).
Saltarina ardiente (*Hylephila phyleus*) sobre bálsamo de abeja (*Monarda* spp.).

A Field Guide to Wildflower Field Guides

By Jack Shouba

My introduction to wildflower identification books was in a long-ago college class which used *Gray's Manual* (8th ed., 1950) by Merritt Lyndon Fernald. I recently opened it at random to page 892 (of 1652) and within the first few lines on the page I saw the words peduncle, axillary, scapiform, subtending, pedicel, glabrous, villous, pilose, ciliolate, campanulate, cespitose, subligneous, and oblanceolate.

The main thing I learned in the class was that I don't want a field guide with 1652 pages of fine print, 1141 technical terms, sixty ways to say that a plant is not smooth, and that is lacking photographs and/or drawings. I also learned that if you select the wrong choice anywhere along the line in a key, you'll get the wrong result.

Peterson's *Field Guide to Wildflowers* came out in 1968 and revolutionized the identification of wildflowers, arranging them by color, putting similar looking flowers together, and dispensing with technical language. It used line drawings effectively and used arrows to point to noteworthy features; those features were italicized in the text on the adjoining page. It covers northeastern U.S. and southeastern Canada.

Wildflowers and Weeds, by Booth Courtenay and James H. Zimmerman (1972), used a different approach and covered a smaller area, the Midwest. This compact book uses (small) photographs, is arranged by family groups, and gives just enough information about the flower and its habitat to identify it. It was an excellent companion to Peterson, and I carried the two books in the field for years and still refer to them from time to time.

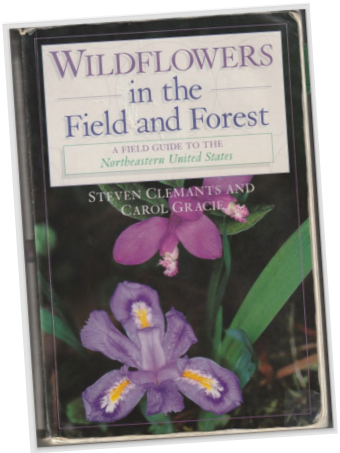
Both books are classics and very dated, but can still be useful. But they don't include new arrivals like garlic mustard, and many scientific names have changed in recent years due to changes in classification.

All field guides are compromises. Do you want a small book that is easy to carry in the field or a bigger one that is more complete? Do you just want it to include the most common plants, or do you want to see all of the plants of a given area? Do you just want to see the plants of your state, or do you want a larger region? Do you just want to identify the plant, or do you want to learn the range, blooming dates, meaning of the Latin name, and other information? Would you prefer photographs, drawings, or both? Would you like all plants of the same color grouped together even if they are not related, or would you like to see related plants together even if their colors differ?

With those questions in mind, here are my favorite wildflower field guides, past and present.

RECENT FIELD GUIDES—MORE LIKELY TO HAVE UP-TO-DATE SCIENTIFIC NAMES

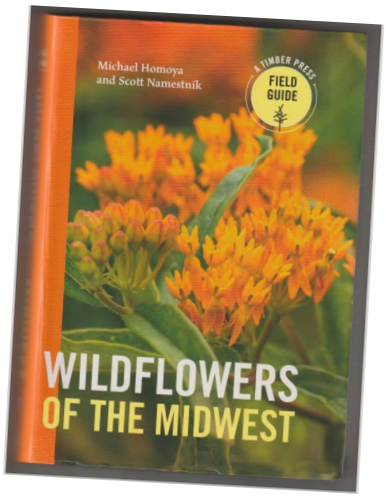
Wildflowers in the Field and Forest: A Field Guide to the Northeastern United States
Steven Clemants and Carol Gracie, 2006



Advantages: (Mostly) up-to-date scientific names. Photographs arranged by color, then by leaves and number of petals or rays. Includes tiny insert photos of leaves or fruits. A simple key gets you to the section of the book with similar plants. Colored maps show range and bloom time (but I can never remember the color codes). Aliens noted. Key characters noted. **Disadvantages:** Color is not always a dependable way to identify plants. Related plants are in separate sections if they differ in color (example: red clover and white clover). Sometimes a drawing would be helpful. **Coverage:** northeast US and adjacent Canada. Contains 1450 species. **Opinion:** this is my current favorite field guide. It's easy to use, not too large, makes clear comparisons of similar plants, and the names are mostly up-to-date. But I've found about a dozen plants that are not in the book (e.g., *Cirsium altissimum, Pedicularis lanceolata,* and *Viola pedatifida*), and some *Polygonums* in here have been moved to *Persicaria*. It's also quite expensive at $50 (although used ones can be found).

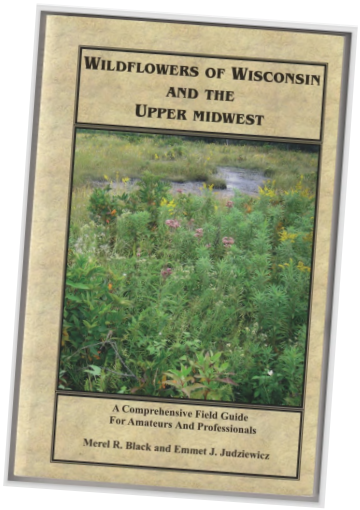
Wildflowers of the Midwest
Michael Homoya and Scott Namestnik, 2022

Advantages: Up-to-date scientific names. Large photographs. Arranged by color, then by family, then by genus. Edges of pages are colored so it's easy to get to the right section. Native or introduced, range, blooming time, characteristics, similar species, and other information is in the text. **Disadvantages:** Color is not always a dependable way to identify plants. For example, Indian paintbrush is in the orange section, but the plant is often red or yellow. Wild geranium is in the blue-violet section, rather than pink-red. Related plants are in separate sections if they differ in color, e.g., purple and white prairie clovers. Sometimes a drawing would be helpful. The index is unusual: purple prairie clover is found under "purple" rather than "prairie clover, purple"; "clover" gets you to sweet clovers (*Melilotus*) rather than clovers (*Trifolium*). Many of the entries start with words such as "wild," "prairie," "yellow," "northern," "tall," or "swamp". **Coverage:** Midwest (IL, IN, IA, MI, MN, MO, OH, WI). Contains 1000 species. **Opinion:** Compared to *Wildflowers in the Field and Forest*, it's more up-to-date and is less expensive, but it's larger and heavier, and the information is harder to find. The range is more limited (Midwest rather than the whole Northeast) which is helpful, but maps would be easier to interpret. The authors place more emphasis on plant families, so as you become familiar with the families, the book gets easier to use. The index is not as helpful as it might be and there is a major typo in the front where you are led to blue flowers with a photo of a blue flower and the words "brown to maroon" where it should say "blue. This is my backup field guide; it contains several plants that are not found in Clemants and Gracie.



Wildflowers of Wisconsin and the Upper Midwest: A Comprehensive Field Guide for Amateurs and Professionals
Merel R. Black and Emmet J. Judziewicz, 2008, 2009 (2nd Ed.)
Review based on 2008 edition.

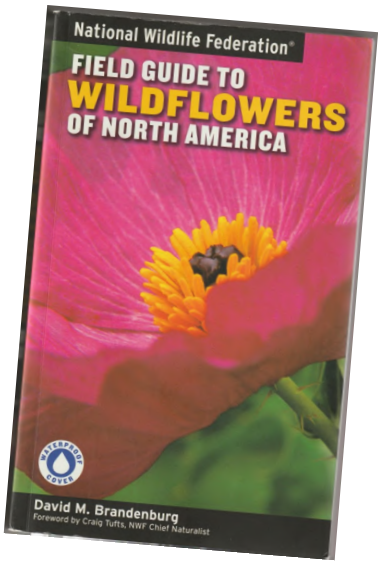
Advantages: Up-to-date scientific names. Arranged by family. Easy-to-use guide to families based on number of flower parts, etc. Introduced plants noted. Origin of names included. Key characteristics that help distinguish between similar species are bolded. Fruit, leaf, and habit described. Wisconsin county distribution maps. Small enough at 371 pages that it can be carried in the field. Coverage: Wisconsin, but includes parts of MN, MI, IL, IN, IA, Ontario. 1087 species from 459 genera. Over 2100 photographs, 300 drawings. **Disadvantages:** Photos are rather small. Distribution maps only cover Wisconsin. **Opinion:** The 2009 edition adds considerable information on habitats, but the plant section is unchanged. Lots of information packed into a small book. Since I live in Illinois, my only excuse for not using it more is that the maps are for Wisconsin.



Missouri Wildflowers (6th Ed.)
Edgar Denison, 2008

Advantages: Photos supplemented by drawings, arranged by color and blooming date. Excellent section on field identification of families. Descriptions arranged by family. Includes meanings of Latin names. Easy to use. **Disadvantages:** Not as many species as some of the others, and Illinois has some flowers Missouri doesn't have. Only three asters, two goldenrods. **Coverage:** Missouri, but Illinois flora is similar. 297 photos, 460 descriptions. **Opinion:** Not my primary field guide (not enough species), but I really like the beautiful photos, the descriptions of families, the combination of photos and drawings, and the meanings of the scientific names. It's an excellent supplement to other field guides. And did I mention the material on plant families?

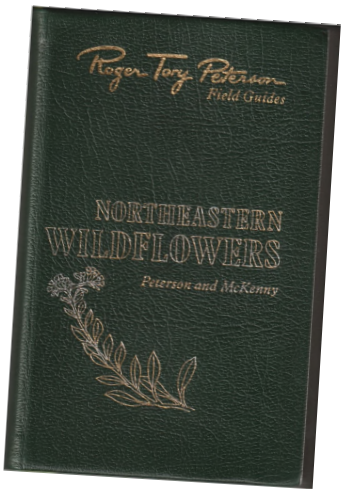
Field Guide to Wildflowers of North America (National Wildlife Federation)
David M. Brandenburg, 2010



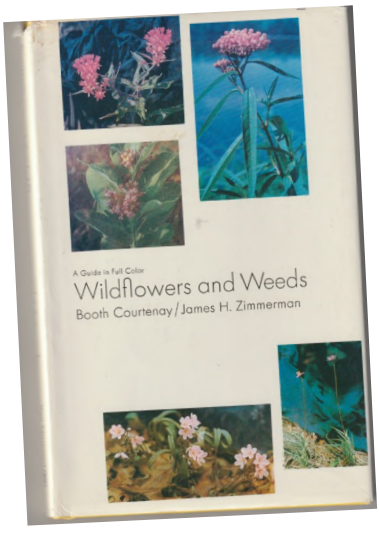
Advantages: Up-to-date scientific names. 2200+ species. Photographs (over 4000!). Arranged by family, then genus. Field marks noted. U.S. range maps with related species color-coded. Season and habitat noted. Quick identification "keys" (photos) by color and shape. Introduced species included. Genus descriptions. **Disadvantages**: at nearly 700 pages, it's a little heavy and thick to easily carry in the field. Wider coverage (continental U.S.) is both an advantage (we can see the full range of a plant) and a disadvantage in that it contains far more species than we need if we are just looking at plants in Illinois, for example. Introduced plants are in a separate section at the back of the book. **Opinion:** I haven't used it much, thinking it would be my go-to book if I travel south or west of the range of my other field guides, but it is a beautiful book with lots of information. I especially like the range maps, and the photos are a nice size. I wish the introduced plants were in with the native plants, since you can't look at a plant and know if it is native or introduced. While it is interesting to see plants from all over the country, I don't use it in the field because it is missing too many species (e.g., it includes only 5 *Symphyotrichum* asters), it is heavy, and it includes many plants that I won't be seeing in Illinois.

CLASSIC FIELD GUIDES THAT CAN STILL BE USEFUL (but Latin names are not current)

A Field Guide to Wildflowers of Northeastern and North Central North America
Roger Tory Peterson & Margaret McKenny, 1998 (softcover); originally published in 1968 as hardcover. That edition is out of print, but used copies are plentiful and inexpensive.



Advantages: Excellent, simple line drawings, arranged by color and shape/number of petals, etc. Similar looking flowers are usually on the same or nearby pages. Distinctions between similar species—the field marks—are clearly marked. Easy for beginners to use, but you won't soon outgrow it. Aliens noted. Families noted. **Disadvantages:** related plants are not necessarily near each other, especially if they have different colors. Color is not always the most reliable way to identify plants. Weak on prairie habitat. Missing some common Illinois species, including garlic mustard. Many plants have been reclassified in recent years so the names are not current. **Coverage:** Northeastern and North Central U.S. and adjacent Canada. Nearly 1300 species, nearly all herbaceous. 1344 drawings. **Opinion:** Doesn't even have simple keys, so you usually just have to page through the section to locate the flower. It's a long-time favorite, but it's outdated. I still refer to the drawings from time to time. I recommend a used hardcover copy, especially the classy 50th anniversary edition.

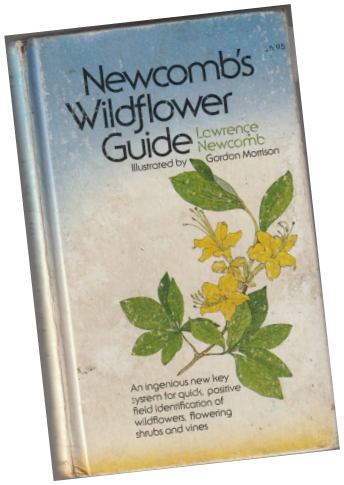


Wildflowers and Weeds
Booth Courtenay & James H. Zimmerman, 1972 (reprinted in paperback 1978, 1992) **Out of Print**

Advantages: Photographs, arranged by family. Easy to use, especially if you know the family. Good, brief habitat information. Similar families together. **Disadvantages:** Sometimes hard to distinguish similar species from the small photos. Descriptions very brief. Missing a few common species. Aliens not noted. **Coverage:** Wisconsin and nearby states. 650+ species, mostly herbaceous. **Opinion:** Long a favorite of mine because of the arrangement by family as well as the concise habitat and characteristics, but the photos are small. It's small enough to easily carry in the field, but so many plants have been reclassified that it is out-of-date.

The Sunflower Family in the Upper Midwest
Thomas M. Antonio and Susanne Masi, 2001

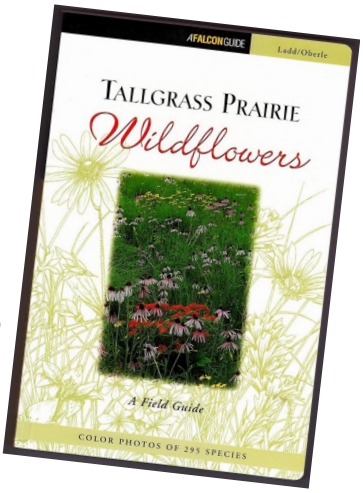
Advantages: beautiful photographs including close-ups of details, distribution maps, keys, interesting facts. **Disadvantages:** large, heavy, expensive, some rare species not shown. Arrangement by color. **Coverage:** limited to composite family in WI, MN, IA, IL, IN, MI. **Opinion:** I don't carry this in the field, but it is a beautiful book that is a good reference on a large and sometimes difficult family. Many names have changed in recent years (especially Asters) so I go elsewhere to check current names.



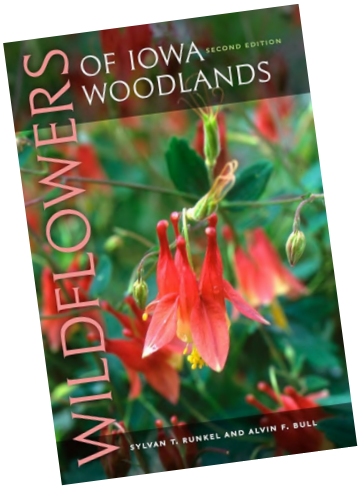
Newcomb's Wildflower Guide
Lawrence Newcomb, illus. by Gordon Morrison, 1989
(originally published 1977)

Advantages: Uses a unique, simple system of keys. Nice drawings. Arranged by flower characteristics, such as number of petals and type of leaves. Similar plants tend to be together, even if not the same color. Aliens noted. **Disadvantages:** As with all keys, one error and you are lost. Missing some common species. Families noted, but not described. **Coverage:** Northeast and North Central U.S. and adjacent Canada. Contains 1375 species, including shrubs and vines. **Opinion:** An excellent field guide; many prefer it to Peterson's Field Guide. But many plants have been reclassified, so it is out-of-date.

Tallgrass Prairie Wildflowers
Doug Ladd and Frank Oberle, 1995, 2005
(review based on 1995 edition)



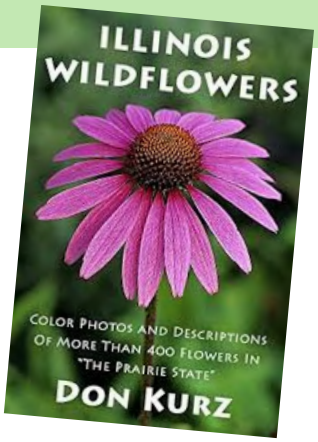
Advantages: Gorgeous photos. Arranged by color. Includes some grasses, sedges, rushes. Includes habitat and range information, historical and cultural notes, comments, prairie directory. **Disadvantages:** Limited to one habitat. **Coverage:** Tallgrass prairie. 295 species. **Opinion:** An excellent book on prairie plants, but too specialized to be a primary field guide.



Wildflowers of Iowa Woodlands
Sylan Runkel and Alvin F. Bull, 2010

Advantages: Full page photos, arranged by blooming date. Gives many common names, origin of scientific name, uses of plant by Native Americans and pioneers. **Disadvantages:** Limited habitat, limited number of species. **Coverage:** Part of a series on Iowa plants. This book covers woodlands, and others cover habitats such as prairies and wetlands. 100+ species per book. **Opinion:** Recommended for photos and fascinating reading, but not really as a field guide. Arrangement by blooming date can be problematic. Many names are out-of-date.

FIELD GUIDES FOR THE CASUAL OBSERVER



Illinois Wildflowers (updated 2021), by Don Kurz, uses color photos and covers 400+ flowers arranged by color and season of bloom. That makes it easy to use, but four hundred is not enough to cover everything you might find, though it should cover the most common ones. Season of bloom can be a little problematic because some plants bloom for a short time while others have a long blooming season. Limiting the book to Illinois means you won't be confused or distracted by flowers from other states, but you will miss out on plants from nearby states.

Wildflowers of the Midwest (2021), also by Don Kurz, includes 600+ flowers and is not limited to Illinois. It was reviewed by Mike Balz in The Harbinger Vol 38, No. 2 (summer 2021). It also uses large color photos, and they are arranged by color but then by family rather than by season. That means that related plants of the same color will be close together, but related plants of a different color will be in a different section. It's easy to use, but if you don't know the family you might have to leaf through many pages to find your flower.

Carex Corner #15

Five Woodland Droopers

By Lindaeus

The grasslike *Carex* often lean over a woodland hiking trail, some with drooping and nodding spikes which offer a pleasant sense of tranquility. The leafy clumps may appear grasslike, but their culms (stems) are triangular, not round like grasses. Perigynia (the sacs which surround *Carex* fruit) are often unique to each species and are studied under magnification for their shape, size, and vein and rib pattern. The teeth on the beak of a perigynium is also diagnostic, and they range from a wide V to straight or none.

Left: *Carex davisii* inflorescence. Center: *Carex davisii* perigynia with long-awned scale. Right: *Carex gracillima* perigynia with short-awned scale.

Carex davisii (awned graceful sedge) is a common sedge with drooping spikes that grows in woodlands in most Illinois counties. The seed head of *C. davisii* is similar to *C. gracillima* (graceful sedge). Both have a long terminal spike with perigynia at the tip of the spike and stamens with scales at the lower end of the spike. When spikes have perigynia grouped above staminate flowers they are called gynecandrous. *C. davisii* culms have sparsely hairy leaves, while *C. gracillima*'s leaves are glabrous. Also, *C. davisii* has long-awned scales aside the perigynia while *C. gracillima*'s scales are short and cap-like.

Along the Lake Michigan coast, another drooper grows in woodlands. *C. formosa* (awnless graceful sedge) can have all male spikes or be gynecandrous like *C. davisii* and *C. gracillima*. Like *C. davisii*, *C. formosa* also has hairs on its sheaths that are easily seen with a hand lens. However, *C. formosa* has scales with short awns as opposed to the long-awned scales on *C. davisii*.

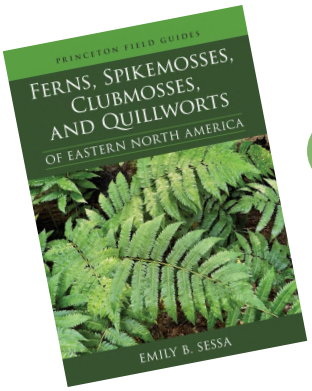
The rare *C. debilis* is another drooper with long cylindric spikes. Its green fusiform (spindle-shaped) perigynia mature to a rich brown. A former variety of *C. debilis* is now a species, *C. flexuosa*. Both have two-ribbed perigynia with fine nerves in between, but *C. flexuosa* perigynia are lance-ovoid in shape, rounded at the base, and not tapered as in fusiform *C. debilis*.

Today, research teams walk the woods identifying plants, and are so well fed that they do not know the food value contained in sedge seed heads. Two hundred years ago, travelers would strip the seed heads and have a handful at the end of day. When the scales were blown off and seeds were ground between two stones, the remaining seed meal was placed on a flat stone with some water next to the campfire all night. Slow cooking for the morning meal (of meal).

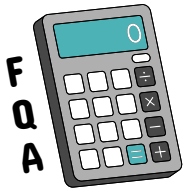
Lindaeus is author Linda W. Curtis who has published Bog Fen Carex*, 2nd ed.,*
Carex of Central Florida*, and fiction* Bench Therapy*, all on Amazon.com*.

Other News, Articles, Web Links, & Videos

"With deep roots and expanding collection, herbarium offers window into plant history"
Read about the **expansion of the Ada Hayden Herbarium** at Iowa State University:
news.iastate.edu/news/2024/01/25/herbarium



Just published, check out the book ***Ferns, Spikemosses, Clubmosses, and Quillworts of Eastern North America*** by Emily Sessa: tinyurl.com/SessaFerns



A new U.S. Army Corps of Engineers **FQA calculator** has been released.
Use it here: fqacalc.erdc.dren.mil/fqacalc/

'A tragic mistake': Decision to close Duke University's herbarium triggers furor:
Read the article by Elizabeth Pennisi in *Science*: tinyurl.com/ClosingDukeHerbarium

Thismia panamensis by @fern1 on iNaturalist (CC0)

Researchers discover **a new plant species** whose name tells a story.
Read about it here: phys.org/news/2024-02-species-story.html

Published in 2012, read this feature in *Nature* by John Whitfield: "A handful of plant collectors has shaped the field of botany. Now they are disappearing, and there are no clear successors."
www.nature.com/articles/484436a

Davenport, Iowa
July 9–11, 2024

JULY 9-11, 2024
CYPERACEAE & JUNCACEAE IDENTIFICATION WORKSHOP

tinyurl.com/SedgeRushID2024

From the INPS Southern Chapter, watch Lane Richter discuss aquatic plants in Mississippi River pools
youtube.com/watch?v=XwB_S39meX0

From the Ames History Museum, watch "A Passion for Prairies: The Life and Legacy of Ada Hayden"
youtube.com/watch?v=nnblFX1djUI

Botany Humor

ILLINOIS NATIVE PLANT SOCIETY
P.O. BOX 60694
Chicago, IL 60660

illinoisplants@gmail.com
www.illinoisplants.org

The Harbinger Spring 2024

You can renew/join by filling out the form below or online at illinoisplants.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!

Join us!

☐ New member ☐ Address Change Only
☐ Renewal ☐ Additional Donation

Name _____
Street _____
City _____ State_____ ZIP_____
Phone _____ Membership Year _____
Email _____

PLEASE MAKE CHECKS PAYABLE TO: Illinois Native Plant Society
INPS, Membership, P.O. Box 60694, Chicago, IL 60660

Membership Categories

- ☐ Student.....$15^{00}
- ☐ Individual.....$25^{00}
- ☐ Family.....$35^{00}
- ☐ Institutional (nonvoting)....$20^{00}
- ☐ Supporting.....$50^{00}
- ☐ Patron.....$100^{00}
- ☐ Business.....$125^{00}
- ☐ Life.....$500^{00}
- ☐ *Iliamna* (Life).....$1,000^{00}
- ☐ *Dodecatheon* (Life).....$2,000^{00}
- ☐ *Erigenia* (Life).....$5,000^{00}

The Harbinger Newsletter is sent electronically via email.
☐ Check here to receive the newsletter BY MAIL.

Erigenia, our scientific journal, is now available digitally as well as in print. Please indicate your preference for receiving the journal.
☐ Email Only ☐ Postal Mail Only ☐ Both

Chapter Affiliation

- ☐ Central (Springfield)
- ☐ Forest Glen (Westville)
- ☐ Grand Prairie (Bloomington)
- ☐ Kankakee Torrent
- ☐ Northeast (Chicago)
- ☐ Quad Cities (Rock Island)
- ☐ Southern (Carbondale)
- ☐ Other/Uncertain

I would like to help with...

- ☐ Leadership & Organization
  Serving on Board at State or Chapter Level
- ☐ Leading Field Trips & Tours
- ☐ Organizing Workshops &/or Seminars
- ☐ Giving Workshops &/or Seminars
- ☐ Public Speaking
- ☐ Fundraising
- ☐ Website Assistance/Management
- ☐ Public Media/Communications
- ☐ Writing/Submitting Articles
- ☐ Photography
- ☐ Other: _____
- ☐ My area of expertise: _____