



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]
© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work.

[fieldguides.fieldmuseum.org] [1282] version 2 3/2

The pictures in this guide were assembled to help restoration volunteers identify ripe seeds of native species. The squares are 1" on a side in the indoor shots with white squares on the gray background. The seed shots are on a metric scale (mm divisions). Names used are those of <u>Flora of the Chicago Region</u> by Gerould Wilhelm and Laura Rericha. Our heartfelt thanks go to Laurie Ryan of the McHenry County Conservation District for her review.

Harvest notes

Successful collection of viable seed requires an understanding of when to collect, how to collect, how to store, how to process, and when to sow. Determine these criteria and have a plan before harvesting seeds, especially of uncommon species. The species are listed in order of the photo dates, so will give an approximate time for collection, but collection dates vary according to local weather effects on blooming and pollinators; proximity to Lake Michigan; slopes; sun vs shade, etc. Many seed harvest charts are available with collection dates, but it is best to scout each site rather than relying on historic dates.

Seeds collected before mid-June should be sown right away. They are intolerant of dry storage and most of them require both warm & cold treatments to stimulate germination. Late June seeds are more tolerant of dry storage; sow these seeds soon, but you can let them dry for a few weeks. Seeds ripening July and later can be held for fall/winter sowing, sow by Jan 1st for best results.

Collect ethically & sustainably. Everything is protected in forest preserves, including seeds. Collection is only allowed by staff and volunteers in our restoration programs. If you are collecting within those programs, it is important to avoid overharvesting wild populations. For perennials: leave 50% behind. For annuals, biennials, rare, threatened, or endangered species: collect only 10% of the seed.

Seed Groups

Time sensitive groups – seeds disperse in a few days or weeks due to wildlife, sensitivity to wind, etc.

Elaiosomes are "ant candy" attached to the seeds. Ants are strong and motivated, able to quickly carry the candy back to their home and tossing the heavy "candy wrapper" (seeds) into their compost piles. Check these species frequently; ants will rapidly collect all of the seeds. These seeds have higher germination when sown within a day or two.



Ballistic capsules catapult their babies away, up to 30 feet! Search YouTube for "exploding seeds" to see these in action. To harvest: learn the ripening sequence & harvest just before explosion; store in a *sealed* paper bag or mesh bag for a day or two. Another option is to cover the seed heads with mesh hoods (*after flowers wilt*) to contain the seeds. Snip the entire stem after the seeds have popped, and carefully open the hoods indoors.



Fluffy seeds are quite common, allowing for wind to efficiently move seeds over long distances. Collect when fluffy. It is ok to collect these seeds *slightly* early, by collecting entire stems with seeds that are either fully poofed or have dropped their ray florets (the colorful "petals"); snip the stems and let them poof in a paper or mesh bag. Spring fluffy seeds are typically more sensitive to strong weather.



Milkweed seeds are ripe when pods are split open & seeds are brown. Ignore the pod color. Pro tip: rubber band the unripe pods, to prevent seeds from flying away.



Berries turn a vibrant color when ripe, as an advertisement to the wildlife to EAT ME and disperse the seed. Collection window is small for some of these seeds. These species need to be sown fresh in damp soil OR cleaned & stored in plastic in the refrigerator (which maintains a higher level of humidity). The natural process of a seed stored in a juicy berry, followed by chewing, digestion, and dispersal in a pile of "fertilizer" means these seeds are not used to completely drying out.





Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]
© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of

the original work.

[fieldguides.fieldmuseum.org] [1282]

Mama's Boys will remain on the stem for a while. Ideal for forecasting future workdays.

Shakers drop seeds very close to the mother plant, when shaken loose by the wind or a passing critter. Usually a Mama's Boy, unless strong weather occurs.

Beaks are a subset of the shaker group, with seed capsules that split open like a beak when the seeds are ripe. Collect when beaks are open.

Coneheads are flowers with a cone-shaped center. Imagine these flowers without their colorful parts, and you know exactly what they look like when seeds are ripe. Seeds are inside the hard cone.

Crumbly Coneheads are cone-shaped or thimble-shaped. Softer than standard coneheads, they crumble when ripe and are easily stripped by hand.

Shattering seeds can be tough to visually judge for ripeness. Use a *gentle* touch test to see if the seeds easily loosen. Spring seeds remain green (perhaps for camouflage) and swell slightly. Fall seeds typically turn brown or beige when ripe. Often found in colonies, these seeds do not travel far on their own. Some of these species drop quickly & are not Mama's Boys.

Hitchhikers are easy to tell when ripe – they hitch a ride on your pants! Color can be an indicator, but not always.



Do Not Collect. This symbol is placed on images of non-native & invasive native seeds, which have been included as comparisons for similar native species. Do not collect these species, unless you are collecting for removal.



version 2 3/2021













Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [fieldguides.fieldmuseum.org] version 2 3/2021

Pale Purple Coneflower

Echinacea pallida **ASTERACEAE**







Photo: 8-8-18

Coneheads. Mama's Boy. Colorful "petals" (ray florets) and the orange of the disc florets (cone) disappear, leaving behind a dark spikey cone. Snip dark heads, ideally when a few seeds have fallen out of the conehead. E. pallida seeds look like candy corn - gray with a brown stripe at the kernel end; E. purpurea is solid gray. The sturdy spikey heads are best processed by machine, or wearing thick gloves, or pliers.

Purple Coneflower

Echinacea purpurea

ASTERACEAE











Coneheads. Mama's Boy. The colorful "petals" (ray florets) of this composite flower have a deeper fuchsia hue than the aptly named "pale" sister. E. purpurea is overabundant in restorations due to its appeal to gardeners & pollinators alike; the less showy sister was historically the more common. Broader leaves, slightly later & longer blooming time, and stripe-less seeds distinguish this species from E. pallida.

Queen Anne's Lace

Photo: 10-12-17

Daucus carota

APIACEAE









Photo: 8-19-20

Hitchhikers. A non-native flower of disturbed habitats, yet this species has a place in people's hearts. Childhood stories of Queen Anne and her bloody lace probably help inspire the connection. White flowers, often with a dark purple floret in the center. Good for pollinators.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of [fieldguides.fieldmuseum.org] [1282] version 2 3/2021

White Prairie Clover

Dalea candida

FABACEAE



Photo: 8-31-17

Crumbly Coneheads. Mama's Boy. The prairie clovers bloom with tutus of flowers, from the bottom to the top of the spike. These legume seeds are ripe when the thimble starts to crumble. Collect when easy to strip by hand.

Purple Prairie Clover

Dalea purpurea

FABACEAE

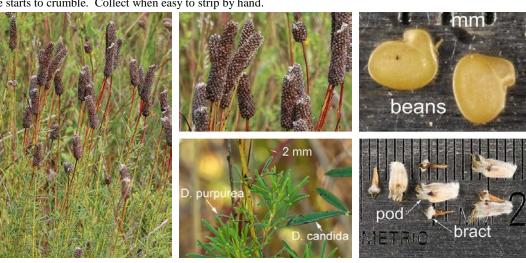


Photo: 8-31-17

Crumbly Coneheads. After the clovers stop blooming, it can be tough to tell the sisters apart. Purple (D. purpurea) has skinnier leaflets slender as pine needles; leaflets of white (D. candida) are 2-3 times wider. D. candida seeds are enclosed in a dry papery hull, black & tan colored; D. purpurea has fuzzy hulls, gray-peachy colored. Seeds do not need be de-hulled, especially if sown in fall.

Deptford Pink

Dianthus armeria

CARYOPHYLLACEAE

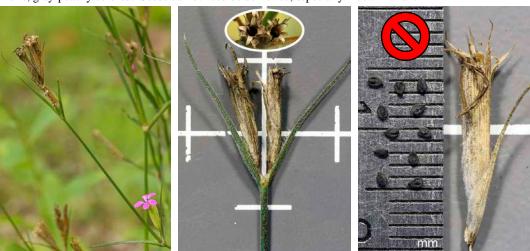


Photo: 9-2-19

Beaks. This bright pink wildflower hails from Europe, notably from the Deptford district in London. Likes disturbed areas. The tiny pops of color are attractive, but don't spread this non-native.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [fieldguides.fieldmuseum.org] [1282] version 2 3/2021

Wild Bergamot

Monarda fistulosa

LAMIACEAE









Photo: 9-7-17

Shakers. Mama's Boy. This common wildflower is found in prairies & savannas. Similar odor to the citrus fruit of the same name, which is popular as an essential oil & in Earl Gray tea. Lavender florets drop off, leaving the tube-shaped calyx behind. Tip the head into your hand, seeds fall out of the tubes when ripe. Popular with many pollinators, including the rusty patched bumblebee.

Rosinweed

Silphium integrifolium

ASTERACEAE





hairs all eglandular





Photo: 9-27-17

Coneheads. Silphiums have composite flowers with fertile ray florets & sterile discs (the sunflower "eye"). This is key for locating the seeds: the flat seeds are sandwiched between sandpapery outer bracts and the inner skinny male florets. Collect when seeds are brown/beige; green seeds will not ripen any further (see examples of ripe and unripe seed in var. neglectum, below).

Bald Rosinweed

Silphium integrifolium var. neglectum

ASTERACEAE









Photo: 9-7-17

Coneheads. There are now 3 varieties of rosinweed recognized in our area. Look at the bracts (greenery behind the flower). In the typical species, the bracts (aka phyllaries) are rough with fine hairs, but hairs lack glands. (Glandular hairs look like lollipops). The varieties have glandular hairs on the bracts; var. deamii also has soft hairs all over leaf undersides; var. neglectum has hairless leaves or hairy veins only.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work.

Prairie Dock

Silphium terebinthinaceum

ASTERACEAE

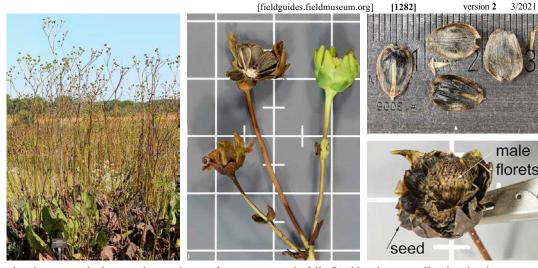


Photo: 9-28-17

Coneheads. This *Silphium* has the ginormous elephant ear leaves that are fun to stomp on in fall. Seed heads are smaller than its sisters. Avoid nodding heads; seeds have aborted due to weevil damage. Can hybridize with compass plant ("compass dock").

Compass Plant

Silphium laciniatum

ASTERACEAE







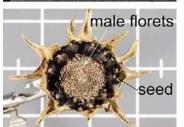


Photo: 10-4-17

Coneheads. Collect seeds when they are shades of brown or beige; the unusual burgundy color in this seed photo is likely a sign of abnormally cold weather. Like all sunflower-relations, birds love to eat these seeds; don't delay too long in collecting.

Yellow Coneflower aka Gray-headed Coneflower

Ratibida pinnata

ASTERACEAE







Photo: 9-7-17

Crumbly Coneheads. Mama's Boy. A great seed for group workdays! Ripe seeds easily crumble & strip by hand. The seeds are graphitegray, tucked between lighter gray chaff. Seeds have a refreshing odor, usually described as citrus-like.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of [fieldguides.fieldmuseum.org] [1282] version 2 3/2021



Hieracium umbellatum

ASTERACEAE





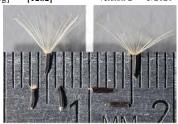




Photo: 9-9-18

Fluffy. Hawkweeds, like all dandelion-imitators, are often overlooked. This conservative species (C = 8) has more leaves on the stem than any other in the area, with over 24 leaves per stem. Likes wet-mesic to dry-mesic prairies and dry-mesic to dry savannas.

Common Partridge Pea

Chamaecrista fasciculata

CAESALPINIACEAE









Photo: 9-10-17

Ballistic. This annual wildflower is very successful in restorations. The bright yellow flowers look similar to Senna and are popular with pollinators. Skinny pods split & spiral open to catapult the seeds away. Collect when pods are brown, store in a closed paper or mesh bag.

Showy Ticktrefoil

Desmodium canadense

FABACEAE







Photo: 9-11-17

Hitchhikers. Mama's Boy. Common in prairie restorations. Leaves are longer than they are wide, the seed "ticks" will be in chains of 3 or more. Leaf underside is hairy across the surface and especially on the veins. The loment (complete pod) is made up of individual "articles" ("ticks") that are rounded rather than triangular. De-hulling is not necessary, especially with fall sowing. Collect when they hitchhike.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [fieldguides.fieldmuseum.org] [1282] version 2 3/2021

Common Milkweed

Asclepias syriaca

ASCLEPIADACEAE





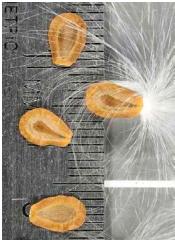


Photo: 10-9-17

Milkweed. Milkweeds are especially popular due to their importance to monarchs. Asclepias are ripe when the pod splits; ignore the pod color. This is by far the most common species and can be identified by the large pods (follicles) covered with soft hooks. Leaves are fuzzy underneath. A. sullivantii has waxy pods (often ridges & points but no hooks); leaves are waxy-hairless, pink leaf vein is common.

Prairie Milkweed

Asclepias sullivantii

ASCLEPIADACEAE





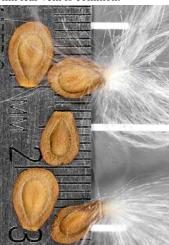


Photo: 9-12-17

Milkweed. The biggest challenge is often the processing. A few options: 1. Collect when pods first split but have not poofed; seeds are easy to remove by hand at this early stage. 2. DIY seed separator from https://MonarchWatch.org 3. A gentle shop vac (low horsepower for smaller seeded species), adding a vortex dust separator helps 4. Sow seed with poof. 5. Do not use fire to clean the seed, it kills it.

Short Green Milkweed

Asclepias viridiflora

ASCLEPIADACEAE







Photo: 9-17-19

Milkweed. This rare milkweed is shorter than most species, often 1.5 feet tall, and leaves are skinny & elongated. Pods (follicles) are located in the leaf axils rather than the top of the plant. Coma (milkweed seed hairs) are sordid (dirty off-white); most species are bright white.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [1282] version 2 3/2021

Whorled Milkweed

Asclepias verticillata

ASCLEPIADACEAE







Photo: 9-28-17

Milkweed. This milkweed loves old fields, a survivor species that is great for early restorations. Skinniest pods of the native species. Skinny leaves whorl around the stem, reminiscent of pine needles, although may be absent by harvest time. Seeds are smaller than other milkweeds.

Common Gaura

Gaura longiflora

ONAGRACEAE





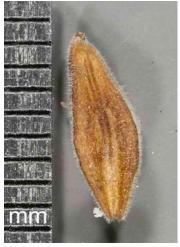


Photo: 9-11-17

Shattering. This annual/biennial species does well in prairie restorations & disturbed old field soils. The white & pink flowers give way to little football shaped seeds. Examine the stem hairs: this species has stem hairs that are curly, appressed (flattened), or strongly ascending. G. biennis has straight spreading hairs (perpendicular to the stem) and Flora suggests this is native a little to the south. Collect 10%

False Pennyroyal

Isanthus brachiatus

LAMIACEAE









Photo: 9-17-20

Shakers. This sweet little purple flower is found in gravelly prairies and fens. Threatened by habitat loss, especially by gravel mining. Plant is typically about a foot tall. Fine hairs cover the plant, stems are square. Seeds are reminiscent of Teucrium, with dimpled surface and seated inside a pointy cup. Up to 4 seeds per cup.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of [1282] version 2 3/2021

Giant Ragweed

Ambrosia trifida

ASTERACEAE







Photo: 9-19-20

Shattering. Ah-choo! Ragweed and its wind-born pollen is the cause of hay fever (not the slandered goldenrods, which are insectpollinated). This species is truly giant, often growing over your head. Leaves have 3 lobes. The ragweeds have been included in "noxious weed" laws for many states. Annual.

Common Ragweed

Ambrosia artemisiifolia

ASTERACEAE









Photo: 9-27-20

Shattering. Common ragweed is a more diminutive sister, usually shin-tall. This species is also on the IL Noxious Weed List, thanks to its allergen abilities. Leaves are lobed & divided. Shows up most often in disturbed soils, and can be an ok 'nurse crop' while new prairies establish; this annual will give way to the stronger perennial natives.

Canadian Milkvetch

Astragalus canadensis

FABACEAE







Photo: 9-19-17

Beaks. This species was historically uncommon, but is the most easily Astragalus found from native nurseries and has been successfully seeded into restorations. Plants have few hairs, and they are connected in the middle rather than attached at the base of the hair. Snip clusters of black pods; the apex of the pod should be open. The creamy-white flowers are attractive to bees. Deer & weevils can be a problem.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of [fieldguides.fieldmuseum.org]

Sawtooth Sunflower

Helianthus grosseserratus

ASTERACEAE







Photo: 9-19-20

Coneheads. If you spot a tall sunflower in a prairie, it's probably this one. Generally not recommended for collection, this species spreads fine on its own, by seeds & rhizomes. Tall, often head-high or taller, with many serrated leaves. Leaves lay flat (not folded along the main vein). Soft hairs on the underside of the leaf. Sunflowers are notoriously frisky, with many natural hybrids and varieties to confuse the issue.

Maximilian Sunflower

Helianthus maximilianii

ASTERACEAE







Photo: 10-16-20

Coneheads. Another tall sunflower, but this one has leaves folded along the keel of the main leaf vein ("conduplicate"). Introduced from further west, this sunflower starts blooming a little later than most species (August). Short hairs on the stems & leaves.

Western Sunflower

Helianthus occidentalis

ASTERACEAE









Photo: 9-21-20

Coneheads. This sunflower often has basal leaves at flowering & harvest time, although sometimes absent just to keep you guessing. A few pairs of smaller leaves on the stem (often only 3-4 pairs). Dry prairies and their associated savannas, especially sandy & rocky soils.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [1282] version 2

Downy Sunflower

Helianthus mollis

ASTERACEAE







Photo: 10-4-20

Coneheads. Well-named, this species is downy with hairs, giving a gray-green cast that is visible from a distance. The leaf shape also stands out: shorter and relatively plumper than most of our native sunflowers. Found most often in the southern part of the region, especially on drier, well-drained soils.

Prairie Sunflower

Helianthus pauciflorus

ASTERACEAE



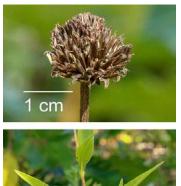




Photo: 10-4-18

Coneheads. Slender seeds are contained within the conehead; snip dark heads. Rough leaves & reddish stems. Leaves are opposite and nearly stalkless, mostly at the bottom half of the stem. Phyllaries (greenery behind the flower) have tiny fringes but are otherwise hairless.

False Sunflower

Heliopsis helianthoides

ASTERACEAE







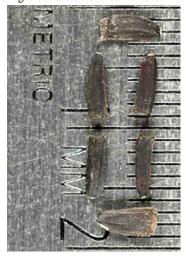


Photo: 10-13-17

Coneheads. Slender seeds are contained within the conehead; snip dark heads. "True" sunflowers have fertile disc florets (the sunflower "eye"). This species is named "False" because it has both fertile ray & disc florets. The ligules, or ray florets, hang on after the color fades.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. version 2

Nodding Wild Onion

Allium cernuum

ALLIACEAE







Photo: 9-20-17

Beaks. Globes of Allium flowers are familiar to gardeners; this native one has little flowers that can be pale purple to white. The main stem has a bend right behind the head, inspiring the common name. Look for clusters to split open in 3s, revealing the black seeds inside.

Pasture Thistle

Cirsium discolor

ASTERACEAE







Photo: 9-23-19

Fluffy. Native thistles are just as attractive to pollinators and birds as the non-native species, but these are far less aggressive! Discolor refers to the 2-tone leaves (green above, white underneath). Lobed leaves. Tall like bull thistle, but without big spines on stem. Pale purple flowers. This species likes mesic to dry-mesic prairies, savannas, and old fields. Collect heads when fluffy. Biennial, collect 10%

Bull Thistle

Cirsium vulgare

ASTERACEAE







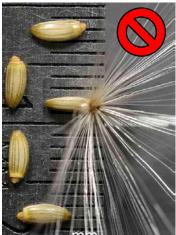


Photo: 10-1-20

Fluffy. This non-native thistle is a beast! Spiny leaves, winged ridges on the stem with spines, and spines on the bracts underneath the flowers. Old fields and disturbed soils. Lake Co has the dubious distinction of the first historic collection for the region, found in 1889.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org] © Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of

the original work.

Pale-spiked Lobelia Lobelia spicata LOBELIACEAE





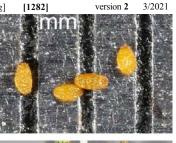




Photo: 9-28-18

Beaks. This diminutive plant is a sister to blue lobelia, with miniature pale blue flowers. The beaks of Lobelias often open up to look like pig noses, with 2 channels within the beak. Seeds are tiny – 1 ounce contains 900,000 seeds! Snip stalks when beaks open.

Foxglove Beard Tongue

Penstemon digitalis

SCROPHULARIACEAE









Photo: 9-28-18

Beaks. This species seeds successfully into prairie & savanna restorations. Look for rusty-brown pods that have split open. The pods are memorably stinky (don't store in a closed container) and are unusually hard; best processed with a machine, strong rolling pins, or stomping.

Prairie Skullcap Scutellaria leonardii LAMIACEAE











Photo: 9-28-18

Shakers. Skullcaps hold their seeds on a little "scoop shovel" with a cap on top. The cap falls off, and the seed will fall to the ground with rain or a passing animal. Collect when caps are beige or loose. This diminutive species lives in prairies & open savannas. Formerly a variety of S. parvula. This species has revolute leaf margins (edges are rolled under) & glandless hairs; S. parvula has flat leaves and glandular hairs.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org] © Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of

Missouri Ironweed

Vernonia missurica

ASTERACEAE



Photo: 10-2-20

Fluffy. Similar to the common ironweed, except the stems & leaf undersides are very hairy. Count the number of seeds (more than 31) to distinguish from V. gigantea. Seed fluff is typically rusty or straw-colored in this species. Vernonia species tend to hold the fluffy heads closed more than other fluffy species, which can make it tougher to process the seed

Eastern Prickly Pear

Opuntia cespitosa

CACTACEAE



Photo: 10-2-20

Berries. Yes, an IL native! Found in sandy soils. 0-2 spines per node. Sunny yellow flowers become plump fruits in shades of yellow, red or burgundy. Can also be propagated vegetatively. Remove a "paddle" and bury halfway into well-drained soil; cute little paddles grow out of the tops like Mickey growing his mouse ears. Handle with gloves, tiny, nearly invisible spines may become stuck in your skin.

Wild Quinine

Parthenium integrifolium

ASTERACEAE



Photo: 10-3-20

Coneheads. Pioneer medicine, with similar properties to Peruvian quinine. Little white flowers turn gray as they ripen, and the flower heads relax & open up to release the seeds. Like the prairie dock family, the seeds are found in the middle ring (sandwiched between the greenery & the center disc florets). Snip heads when gray. Seeds are rounded and smooth on one side, ribbed on the other.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org] © Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of

the original work.

Round-headed **Bush Clover**

Lespedeza capitata

FABACEAE







Photo: 10-4-17

Shattering. Mama's Boy. This legume is seeded extensively in prairie restorations. Showiest in fall, with chocolate brown heads contrasting against its green leaves. Snip dark heads. Almond-shaped hulls contain individual beans; de-hulling is not necessary with fall sowing.

Prairie Obedient Plant

Physostegia praemorsa

LAMIACEAE









Photos: 9-15-19, 10-6-19

Shakers. Mama's Boy. Obedient plant species are fun to play with: the flowers can be nudged around the stem and they obediently stay put. P. praemorsa leaves are less than 1.5 cm wide. Flowers are more than 2.4 cm long. Often has multiple empty bracts that did not flower.

Obedient Plant

Physostegia virginiana

LAMIACEAE









Photos: 9-15-19, 10-6-19

Shakers. Mama's Boy. *Physostegia* bloom from bottom to top; seeds ripen in the same sequence. Up to 4 seeds per cup (the calyx). Collect when seeds are fully brown; cup color is unimportant. Common to have mix of plump viable seed and wrinkly empty seed. P. virginiana leaves are less than 2.3 cm wide. Flowers less than 2.4 cm long. Most bracts have flowers (less than 3 empty bracts per stalk).



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [fieldguides.fieldmuseum.org] version 2 3/2021

Tall Boneset

Eupatorium altissimum

ASTERACEAE





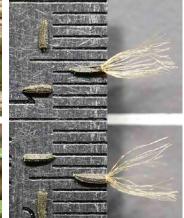


Photo: 10-8-18

Fluffy. Collect when poofy, easy to pluck off of the plant. Stems are hairy throughout. Leaves are stalkless or slight stalks attaching to the stem, but never perfoliate (growing completely around the stem). Leaf is usually serrated on the pointed half, but not the back half of the leaf.

Late Boneset

Eupatorium serotinum

ASTERACEAE







Photo: 10-17-18

Fluffy. The only Eupatorium with petioles (leaf stems) longer than 5 mm. Nearly hairless lower stem. Dense coating of white hairs on the phyllaries (bracts behind the flower), and resinous glands (dots) on the leaf underside help distinguish this from the other Eupatorium species.

False Boneset

Brickellia eupatorioides var. corymbulosa

ASTERACEAE









Photo: 10-13-18

Fluffy. This species is quickly identified as False because the leaves are alternate, whereas true Eupatorium have opposite or whorled leaves. Flowers are similar to the other bonesets, except this species has creamy flowers instead of white. Phyllaries (greenery behind the flower) are strongly striped. Pappus (seed poof) is feathery; most species have straight-haired pappus. Pappus is bright white.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [fieldguides.fieldmuseum.org] version 2 3/2021

Smooth Dogbane

Apocynum cannabinum var. glaberrimum

APOCYNACEAE



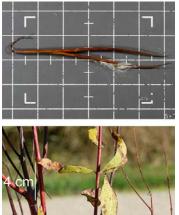




Photo: 10-6-20

Fluffy. Completely smooth. Leaves are on short petioles (3-4mm long). Most of the leaves are ascending to the sky, and overtop the flowers & seeds. Silky seed hairs are more than 2cm long. Consult Flora for varieties. This is a common species that often spreads well on its own.

Smooth Indian Hemp

Apocynum sibiricum **APOCYNACEAE**



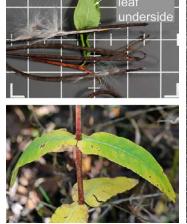




Photo: 10-15-18

Fluffy. Not a milkweed but similar seed dispersal: pods split open and seeds fly away on their attached fluff. A locally aggressive lowquality native; this is rarely collected. Leaves are sessile (stalkless) or close to it; most *Apocynum* species have petioles of 3 mm or longer. Leaves are hairless on both sides; var. farwellii is hairy on the underside of the leaf. Prone to hybridizing with other Apocynum species.

Hairy Mountain Mint

Pycnanthemum pilosum

LAMIACEAE









Photo: 10-9-20

Shakers. Similar to the common mountain mint, but bigger and hairy. Flower heads are double in size, leaves are broader (2-3x) & longer. Downy hairs on the square stem angles & sides (P. virginianum hairy on angles only), hairy leaves, hairy bracts. Naturally rare in the region, but available in commercial nurseries and in some reconstructions. Snip gray heads and/or tip gray heads over to spill out the seeds.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of [fieldguides.fieldmuseum.org] [1282] version 2 3/2021

Velvetleaf

Abutilon theophrasti

MALVACEAE





Photo: 10-12-19

Shattering. This is a common agriculture weed and a sign that your soils were likely farmed. Heart-shaped leaves are velvety soft. This flower gives way to more competitive species; it's not a top priority for eradication.

Common Evening Primrose

Oenothera biennis

ONAGRACEAE







Photo: 10-13-19

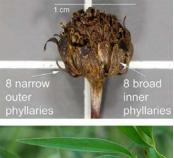
Beaks. Mama's Boy. This sunny yellow primrose missed the memo about blooming in the evening. Loves disturbed soils; this is an early pioneering native species. Self-sows easily, rarely need to collect this one.

Tall Coreopsis

Coreopsis tripteris

ASTERACEAE







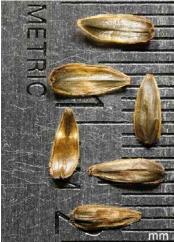


Photo: 10-16-17

Coneheads. Mama's Boy. One of 3 Coreopsis native to the area, and the other 2 are less than 2' tall. Tripteris (3-winged) refers to the leaflets of 3. Look for dark heads. They will be easy to crumble up by hand when ripe.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work. [fieldguides.fieldmuseum.org] version 2 3/2021

Yellowish Gentian aka Cream Gentian

Gentiana alba

GENTIANACEAE







Photo: 10-24-19

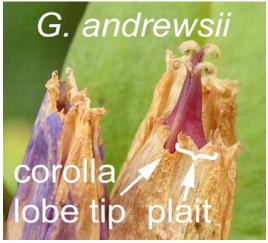
Beaks. The closed cream flower fades to paper bag brown and a pair of plump duck bills emerges. Collect when the beak starts to open. Tiny papery seeds look like a beige fried egg. Hard to ID from G. andrewsii; if both species are present, easiest to flag while blooming. Leaf margins can be keyed with a 10x lens: smooth for G. alba and fringed hairs for G. andrewsii. Consult Flora for hybrids and varieties.

Gentiana alba

VS.

Gentiana andrewsii





The petals of these species are connected by a membrane called a "plait" to form a bottle-shaped flower. (Imagine webbed toes. Plaits are like the webbing, fused between the lobes.) G. alba petals (corolla lobes) extend beyond the plaits, giving a toothed edge. G. andrewsii has a ragged serration, the plaits extend beyond the top of the rounded lobe. These often lose the blue-purple color by the time the seed is ripe.

Stiff Gentian

Gentianella quinquefolia subsp. occidentalis

GENTIANACEAE







Photo: 11-8-19

Beaks. This petite annual/biennial has sweet little purple flowers and forms duck bills of seed, similar its Gentiana & Gentianopsis relations. Like many short-lived species, it packs a lot of blooms into its quick life. Collect 10%. Seeds are tiny beads, look for open beaks.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work.

[fieldguides.fieldmuseum.org] [1282] version 2

Beach Wormwood

Artemisia campestris subsp. caudata

ASTERACEAE











Photo: 10-24-19

Shattering. This short-lived species loves sandy soils. Less hairy than many of its sisters, and leaves are slender and divided. Look for downward facing heads; seeds are enveloped by the bracts. May need to process against a screen to release the seeds from the bracts. Plump seeds are preferred over wrinkly ones.

Cylindrical Blazing Star

Liatris cylindracea

ASTERACEAE







Photo: 10-24-17

Fluffy. The shortest of our native *Liatris* and found in gravelly & sandy soils. Flower heads usually on short pedicels (stalks) but can be sessile (stalkless). Most *Liatris* pappus (seed fluff) is unbranched or barbed hairs; this species has a pappus that looks like a feather duster.

Rough Blazing Star

Liatris aspera

ASTERACEAE







Photo: 10-25-17

Fluffy. This dry-mesic species can be found in the same location as *L. cylindracea*, but this species is usually taller with sessile (stalkless) flowerheads. The green floral bracts at the base of the flowerhead are rounded (hard to see once fully poofed. Wildflower guide books illustrate this feature). Straight soft pappus on seed. Tiny hairs on leaves; a new variety (var. *intermedia*) has hairless leaves.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of [fieldguides.fieldmuseum.org]

Narrow-leaved Black-eyed Susan

Rudbeckia hirta var. pulcherrima

ASTERACEAE





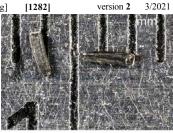




Photo: 10-25-17

Coneheads. Mama's Boy. This beauty blooms quickly after seeding, yet gives way to conservative species, making it a restoration favorite. Hirta ("hairy") describes the leaves, stems, and even the greenery under the flower. Seeds look like graphite from a mechanical pencil. This variety has stem leaves less than 3 cm wide; the straight species has some wider leaves and is present in fewer counties, according to Flora.

Sweet Black-eyed Susan

> Rudbeckia subtomentosa

ASTERACEAE











Photo: 10-25-17

Coneheads. Mama's Boy. Similar seed & head to regular black-eyed Susan, but this is a taller plant & leaves are primarily 3-lobed. Sweet odor (similar to sweet grass & the obnoxious sweet clover). A showy flower suitable for savannas & prairies. Snip dark heads

The Susans

Rudbeckia spp.

ASTERACEAE

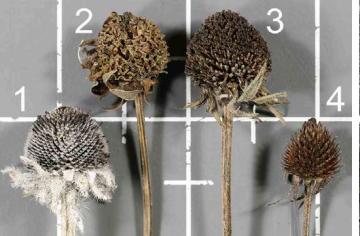






Photo: 11-16-19

Here are four common "Susan" seed heads and seeds side-by-side. They are: 1) Black-eyed Susan (R. hirta), 2) Wild Golden Glow (R. laciniata), 3) Sweet Black-eyed Susan (R. subtomentosa), and 4) Brown-eyed Susan (R. triloba). The seed shots show two seeds and two bracts from each species.



Fall Prairie Forbs

Kelly Schultz¹, Dale Shields²

¹Lake County Forest Preserve District, ²Volunteer Stewardship Network

Photos ©2021 DJShields. Produced by: Dale Shields & Kelly Schultz ©Lake County Forest Preserve District [kschultz@lcfpd.org]

© Kelly Schultz (2021) CC BY-NC 4.0. Licensed works are free to use/share/remix with attribution, but does not permit commercial use of the original work.

Prairie Petunia

Ruellia humilis

ACANTHACEAE







Photo: 11-8-18

Ballistic. This sweet perennial has lavender flowers at the top of the stem and also in the leaf axils. Individual flowers open intermittently on the stalk; pods form in the same sequence. Pods turn from green to brown, then snap open to catapult seed away. Collect brown unopened pods (green pods will not ripen once picked). Seeds are flat silver dollars, in shades of brown and gray.

Horse Nettle Solanum carolinense **SOLANACEAE**



prickles

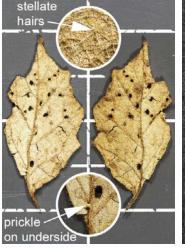




Photo: 11-19-20

Berries. This species is a toxic relative of the tomato; although it may look tasty, don't eat it! Introduced from further south, favors disturbed soils. Unfriendly prickles on the stems and the main leaf vein, on the underside of the leaf. White-lavender flowers become sunny yellow fruits.