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 Flora of the Chicago Region 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.

**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.**

**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.

**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.
Grasses and kin include plants in the Grass Family (Poaceae), Rush Family (Juncaceae), and Sedge Family (Cyperaceae). All of these species have long narrow, parallel-veined leaves and are wind-pollinated. These species are typically identified by their seeds, so any field guide of these species is essentially a seed guide. Check for ripeness with the “touch test” – if they are loose, then they are ripe. Strip by hand or snip stalks.

Cyperaceae (Sedge Family). Sedges have edges: stems are typically triangular, and the edges can be felt by rolling in your fingers. Leaves are 3-ranked: each leaf exits from a different side of the triangle, rotating around the stem. Some species have round solid stems, but are not jointed like grasses. Single seed in each flowering scale. The sheath is closed on the side opposite the leaf blade. The biggest group is the genus Carex, which has a single seed in a papery pouch called a perigynium. Other members of this family have naked seeds and go by common names such as bulrush, woolgrass, spike rush, nut rush, nut sedge, etc. Sedges are very tough to ID. The good news: very few sedges are bad, you can always collect a “woodland sedge mix.” Consult a sedge guide for ID; this guide is intended to highlight a few quick notes.

Juncaceae (Rush Family). Rushes are round: stems are typically round & solid. Some have flattened stems, but they are not jointed. Typically unbranched, simple stems. Three or more seeds in a three-sided capsule. Flower parts come in threes and sixes, most flowers are perfect, having both stamens and pistils. Leaves are thread-like or flat & linear. Many of our common species are relatively short (about knee-high), and appear delicately wiry. Common species include path rush, Dudley’s rush, and soft rush.

Poaceae (Grass Family). Grasses are straws, with holes to the ground: stems are typically round & hollow, like a reed. Some species have flattened stems. Grasses have jointed stems; the joints are called nodes and the stem is solid at that point. There is a single seed in each flowering scale. Leaves are 2-ranked, with each leaf exiting the stem on the opposite side of the one below. The sheaths are open or split on the opposite side from the leaf blade. Grasses can be 1-2’ tall (like poverty oat grass & June grass) or head height (like big bluestem) or even basketball player tall (like the invasive Phragmites).
Common Oak Sedge
aka
Penn Sedge

*Carex pensylvanica*

**Cyperaceae**

**Carex: Acrocytis**

Photo: 6-2-18

Penn sedge is reportedly poor from seed. The truth is that they MUST be sown fresh and you need to cover a lot of ground to collect a decent quantity of these small seeds. Look for round beads, check with the touch test for ripeness. Spreads easily through vegetative reproduction.

Hairy Wood Sedge

*Carex hirtifolia*

**Cyperaceae**

**Carex: Hirtifoliae**

Photo: 6-10-19

Only a few woodland sedges are hairy short bunches. Hairy wood sedge has hairy stems, leaves, and perigynia. Like *C. blanda*, leaves have the accordion fold and similar stature. Perigynia are pointed (unlike the similar *C. hirsutella* with pinecone-like seed heads). Sow fresh.

Common Wood Sedge

*Carex blanda*

**Cyperaceae**

**Carex: Laxiflorae**

Photo: 6-14-19

Well-named, this is an incredibly common sedges of the woods, and can grow in a variety of moisture levels. Perigynia are packed tightly on the stems. Check out the veins on the perigynia under magnification and note the bent “beak” (point at the end) to confirm ID. Sow fresh.
Grass Sedge

*Carex jamesii*

*Cyperaceae*

*Carex: Phyllostachyae*

Photo: 6-14-19

A dense clump of leaves with short fruiting stems (shorter than the leaves) hiding inside. Perigynia are round and abruptly pinches (does not taper) to form the long beak. Leaves are up to 3.7 mm wide. Sow fresh.

Wood’s Stiff Sedge

*Carex woodii*

*Cyperaceae*

*Carex: Paniceae*

Photo: 6-14-19

A woodland sedge growing in clumps or loose rhizomatous colonies. Sheaths are red-purple, especially at the base. Limited flowering stalks. Perigynia are small like Penn sedge (*C. pensylvanica*) but the beaks are practically nonexistent on *C. woodii*. Sow fresh.

Purple-sheathed Graceful Sedge

*Carex gracillima*

*Cyperaceae*

*Carex: Hymenochlaenae*

Photo: 6-20-18

One of a few species with graceful, dangly spikelets of seeds. As the name says, the sheath is purple, especially at the base. Perigynia are practically beakless. Grows in a surprising variety of shady habitats: rich mesic woodlands & savannas, flatwoods, bogs.
Long-beaked Sedge

*Carex sprengelii*

Cyperaceae

Carex: HYMENOCHLAENAE

Photo: 6-20-18

Another graceful, dangling sedge, but the spikelets have a prickly appearance, due to the long beaks & the long scales. Easy to strip by hand. Grows in rich mesic woodlands.

Plains Oval Sedge

*Carex brevior*

Cyperaceae

Carex: OVALES

Photo: 6-24-17

Mama’s Boy. Collect when light brown & crumbles easily by hand. Also called short-beaked sedge (the tapered point of the perigynia) which is noticeably shorter than most species. One of the difficult oval sedges – consult a good Carex book for the nuances.

Copper-shouldered Oval Sedge

*Carex bicknellii*

Cyperaceae

Carex: OVALES

Photo: 6-27-18

Mama’s Boy. Collect when light brown & crumbles easily by hand. Seed looks like a fried egg - crumble the seed heads, and the achene shows through the thin perigynia like an egg yolk. Another “Oh no, Oval sedge!” but this has larger seeds and one of the few prairie sedges.
Awned Graceful Sedge
*Carex davisii*

**Cyperaceae**

**Carex:** Hymenochlaenae

Photo: 6-27-18

This woodland sedge has chunky perigynia, which are bigger than most species this time of year. Sheaths are hairy, stems & leaves are sparsely hairy. Perigynia turn a variety of red, brown, beige colors when ripe, and plumper than many species, like a football.

Long-awned Bracted Sedge
*Carex gravida*

**Cyperaceae**

**Carex:** Phaestoglochin

Photo: 6-27-18

Mama’s Boy. This common species is also known as heavy sedge, with a thick, heavy stalk. The bract sticks out just under the spike. The spikelets (the little “pinecone” clusters of seeds) are tightly packed, with a slight separation of the lowest spikelets.

Short-headed Bracted Sedge
*Carex cephalophora*

**Cyperaceae**

**Carex:** Phaestoglochin

Photo: 7-5-19

Small clusters of terminal seeds, with little bracts sticking out under the spikelets, perpendicular to the stem. Collect when crumbles by hand. Grows in dry-mesic & mesic woodlands.
Straight-styled Wood Sedge

*Carex radiata*

**Cyperaceae**

**Carex: Phaestoglochin**

Photo: 7-4-2018

One of the “star sedges.” *C. radiata & C. rosea* look very similar! *Radiata* is more often in wetter shady spots; *rosea* is more likely in the upland. *Radiata* is generally in a looser, less dense/robust clump. Sow fresh for best results.

Curly-styled Wood Sedge

*Carex rosea*

**Cyperaceae**

**Carex: Phaestoglochin**

Photo: 7-6-2018

*Radiata* has *mostly* straight styles, *rosea* is all curly (check Apr/May). Leaves of *radiata* are *mostly* less than 2mm wide, leaves of *rosea* are *mostly* 2-3mm wide. Both species are great to have, and their habitats overlap. Seeds strip off easily by hand when ripe.

Pale Sedge

*Carex granularis*

**Cyperaceae**

**Carex: Granulares**

Photo: 7-10-19

Mama’s Boy. One of several species with seeds like little granules, this one is common in moist meadows, fens, and ditches. Grows in clumps. Consult a *Carex* book, specifically the sections for Granulares, Griseae, and Laxiflorae. Collect when it easily crumbles by hand.
Fuzzy Wuzzy Sedge
aka
Hairy Green Sedge
*Carex hirsutella*
CYPERACEAE
CAREX: POROCYSTIS

Photo: 7-18-17

One of a few hairy woodland sedges, this one forms loose clumps with wiry fruiting stems. Perigynia are hairless and clustered like rounded pinecones. Collect when easy to strip by hand, typically green.

Loose-headed Bracted Sedge
*Carex sparganioides*
CYPERACEAE
CAREX: PHAESTOGLOCHIN

Photo: 8-5-17

Mama’s Boy. Well-named for the loosely spaced spikelets of seeds. The seed stalks are taller than most woodland sedges, although they are often knocked flat to the ground by the time the seed is ripe.

Spreading Oval Sedge
*Carex normalis*
CYPERACEAE
CAREX: OVALES

Photo: 8-8-2018

Mama’s Boy. Another pesky oval sedge. This one typically has a kink in the stem above the lowest spikelet, pointing off towards the horizon. Shade preferred, but can grow in sun with wetter soils.
Common Woodrush

*Luzula multiflora*

JUNCACEAE

Photo: 6-14-18

Beaks. Common woodrush is not common at all. Brown capsules open up to reveal tiny Oreo-colored seeds inside. Collect when capsules are brown and open. Sow fresh. Grows in savannas, open woodlands, and prefers mesic to dry-mesic soils.

Path Rush

*Juncus tenuis*

JUNCACEAE

Photo: 8-3-18

An ultra-common rush, this wiry & resilient species often pops up in trampled paths (hence the name). Seed capsules turn beige & split open in 3 parts, shaking out teeny tiny seeds – note the seed photo shows them about as wide as the line on a millimeter ruler.

Slender Wedge Grass

*Sphenopholis intermedia*

POACEAE

Photo: 6-19-17

This native annual has feathery seed heads that turn creamy off-white when ripe. Seeds become very loose and can be stripped by hand or clipped. Does well in disturbance, fades away as more conservation natives take hold.
Porcupine Grass

*Hesperostipa spartea*

**POACEAE**

Photo: 6-24-18

Well-named with sharp pointy seeds, ouch! Seeds drill themselves into the soil, as the long awns (seed tails) twist with changing moisture. Look for dark awns contrasted against the pale glumes; seed will come off with a gentle tug. *Best stored with constant humidity, and for as short as possible. Forgotten bundles turn into a tangled nightmare.* If awns are removed, bury the seeds 3/4". Use a nail to make a hole.

Broad-leaved Panic Grass

*Dichanthelium latifolium*

**POACEAE**

Photo: 6-23-18

*Dichanthelium*, are tough to collect. The seeds will ripen sporadically on the same plant. Look for tiny purple florets at the apex of the seed; these are blooming and should not be collected. Seeds are hidden in glumes, like a hairy clamshell and are beige-ish when ripe. Note: all species that have been renamed *Dichanthelium* (literally “twice-flowering”) will form more seeds later (August).

Prairie Panic Grass
aka
Leiberg’s Panic Grass

*Dichanthelium leibergii*

**POACEAE**

Photo: 6-27-18

*Dichanthelium* species are tough to collect & ID. This species has hairy spikelets, with some hairs more than 0.5 mm long. Strip the seeds with feather-light pressure, only a few seeds will be ripe each day. It takes patience & persistence to collect a quantity.
Scribner’s Panic Grass
*Dichanthelium scribnerianum*

POACEAE

Photo: 7-3-19

Very similar to *D. leibergii*, but *D. scribnerianum* has smaller spikelets, 3.1 - 3.3 mm long (3.7 - 4 mm for *D. leibergii*), and spikelet has miniscule hairs, if at all (*D. leibergii* spikelet hairs can be 0.75 mm long). Ligule is a single row of hairs (no ligule on *D. leibergii*).

Common Panic Grass
*Dichanthelium implicatum*

POACEAE

Photo: 7-10-19

This panic grass has much smaller seeds than Leiberg’s & Scribner’s. Common in disturbed & open places. Seeds are ripe when they are beige-ish and are best sown fresh. Panic grasses have seeds arranged in a panicle (xmas tree shape, and each branch has several branches).

Poverty Oat Grass
*Danthonia spicata*

POACEAE

Photo: 7-1-18

Orchard Grass

*Dactylis glomerata*

POACEAE

Photo: 7-4-18

Introduced for grazing, this grass is most often in disturbed soils but can be found in better quality habitats. Looks similar to reed canary grass, but not as obnoxious. Spikelets are rounded and generally upright. Do not collect.

Nodding Fescue

*Festuca subverticillata*

POACEAE

Photo: 7-10-19

This native fescue is found in mesic woodlands. Usually in low abundance, it may be a short-lived perennial. The lowest seed stalk tends to ‘nod’ toward the ground, and the entire panicle nods towards the ground when ripe. Collect when beige and strips easily by hand.

Green Fowl Manna Grass

*Glyceria striata*

POACEAE

Photo: 7-16-2020

Mama’s Boy. This common grass is found most often in wetlands, both in full sun and in shade, but can also be found in dry-mesic woodlands and muddy path edges. *Flora* moves this species from [FACW] to [FAC] for our region. Grass blades have a palm-look to them. Easy to collect: strip beige seeds when loose. Seeds feel granular. Var. *stricta* has leaves 5mm wide or less, often folded; lemmas purplish.
Hungarian Brome

*Bromus inermis*

POACEAE

Photo: 7-24-18

A cool-season pasture grass that readily spreads by rhizomes to form a dense, clumping sod. Usually hairless (also called smooth brome) and has a W-shaped crimp about halfway up the blade. Crowds out natives & needs to be killed or reduced before native seeding can occur.

Bearded Wheat Grass

*Roegneria subsecunda*

POACEAE

Photo: 7-24-19

Mama’s Boy. Collect when seeds are light brown. Glumes (the bottom two scales of a spikelet) may still be green. Bearded wheat grass has longer awns at the peak of the seeds.

Slender Wheat Grass

*Roegneria trachycaula*

POACEAE

Photo: 7-24-17

Mama’s Boy. Collect when seeds are light brown. Glumes (clamshell as the base of the spikelet) may still be green. Awns (points at the end of the seed) are short to absent.
Don’t confuse the invasive Quack Grass, *Elytrigia repens*, with Wheat Grass. Flora of the Chicago Region now separates these genera out from the *Agropyron* genus. *Elytrigia* stems grow from rhizomes so flowering stems are distributed in a patch. *Roegneria* stems are bunched (cespitose). *Elytrigia* spikelets are persistent and come off as a unit. *Roegneria* spikelets separate into individual florets easily.

**Timothy**

*Phleum pratense*

**POACEAE**

Planted as a pasture grass, this species is found in disturbed soils and old Ag fields. The dense spike generally makes it easy to ID.

**Silky Wild Rye**

*Elymus villosus*

**POACEAE**

Mama’s Boy. Compared to other *Elymus* species, this native rye has silky, hairy leaves & sheaths, shorter spikelets of seeds, and typically ripens sooner. *E. virginicus* is upright (like wheat), *E. canadensis* arcs like a long frizzy ponytail. *E. riparius* has hairless sheaths.
Bottlebrush Grass

*Hystrix patula*

POACEAE

Photo: 8-16-17

Mama’s Boy. A staple in woodland restoration and ideal for group workdays due to the clearly unique “bottle brush” forming an X from above. Strip by hand but wear gloves; the knobs where the seeds attach can be rough if collecting a large quantity.

Slender Satin Grass

*Muhlenbergia tenuiflora*

POACEAE

Photo: 8-30-17

This rare grass lives on morainic bluffs & ravines. It is well named; everything about this plant is slender and delicate. Collect when beige.