

From your Publisher:

Welcome to the Wildflower News for February.

This is the month to think about starting some seeds of your desired native plants. Planting even a few native plants in your yard will greatly increase its usefulness for native insects, birds and other wildlife.

Some seeds need stratifying, which will be mentioned on the seed packet.

Different methods for stratifying native seeds can be found as a drop-down under the Native Plant Sources menu on our website <http://edmontonnativeplantgroup.org>

edmontonnativeplantgroup.org

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©Manna Parseyan

Highbush cranberry (*Viburnum opulus* var. *americanum*), December 2021.

Native Plants in Local Parks

From Manna Parseyan - seen in Millcreek ravine, January 27, 2022 - Canada buffaloberry, *Shepherdia canadensis*; buckbrush, *Symphoricarpos occidentalis*; paper birch, *Betula papyrifera*.



WN: Keep sending us pics of your “natural” flower beds and yards that include some or a lot of local Edmonton native wildflowers. We love ‘em! Overviews of the beds, and close-ups of the flowers would be lovely, as would some info on whether the plants are in full sun, early morning sun, dappled sun, or full shade. Your general location in the city (i.e. SE, NW, Central, etc.) would be appreciated, as would letting us have permission to use the photos in future publications, slide presentations, our social media, etc. ENPG always indicates photographer, if known, for any photo we use. Send your photos to engedmonton@gmail.com

LETTERS:

Thanks so much for the photos by Sue Panteluk in the January newsletter! I keep going back to the ones of bees and wasps tucking-in inside the harebells and the gaillardia. Not just for the smiles, they're a reminder that life at this scale has its everyday challenges, and innate savvy. katrina w

WN: Quite delightful, aren't they? We have a few more this month to lift our spirits.

EVENTS - if you would like to post an event that involves native flowers, please email us at engedmonton@gmail.com

Saturday, February 12, Sakaw Community Gardens Seedy Sunday - ENPS will have a table with native plant seeds. For more information: https://drive.google.com/file/d/1JmxXce3_2Mj9eQeDQR4oSPmZlbdgeDSo/view
Time: 2:00 to 4:00 pm
Location: Millhurst Community League hall at 5811 19a Avenue in Edmonton.
Admission: Free. Please note COVID restriction exemption program guidelines at the bottom of the poster.

Monday, February 21st - ENPS presentation - Bryophytes with presenter Brittney Miller. Learn about the hidden diversity of mosses, great places to seek them out, and general tools and tips. To join Zoom Meeting: <https://us02web.zoom.us/j/82312657921?pwd=TmZPS3VVMnBqbVAzc1FFc3BwNVdzdz09>

Saturday March 12 - 2022 Alberta Native Plant Council Virtual Workshop Growing Native Plants - Here you will learn from expert growers and restoration professionals presenting on successful native plant gardening and restoration projects. Presentations will touch on seed collection and propagation, considerations for planting sites such as soil, moisture and sunlight, as well as choosing appropriate native plant species. Through case studies, presenters will highlight the benefits of using native plants species, including water conservation and the creation of wildlife and pollinator habitat. Opportunities for open discussion, photo sharing and fun activities will also be provided. Workshop Schedule is coming soon and registration will open February 1, 2022. Check <https://anpc.ab.ca>

NEWS... If you have a news item involving native plants that you would like posted, please email us at engedmonton@gmail.com

River Valley Modernization Plan Registration

The City of Edmonton’s stakeholder and public engagement sessions on the RVMP and Ribbon of Green plans is open. If you are concerned about the fate of our river valley, please register and participate to provide an ecological voice. Online submissions are also available.

It is important that the new City Council get the message that a majority of Edmontonians are interested in ecological protection of the river valley and ravines as a first priority.

https://www.edmonton.ca/city_government/initiatives_innovation/ribbon-of-green-public-engagement

A Plant For Every Reason, Part 3 Photographed, researched and written by Wayne Oakes, Edmonton

Today I'll start my reflections of trees, some more known than others. I've noted that all of them provide food to a limited number of woodland animals and birds. Unlike plants that feed a host of various species, these play just as an important or perhaps an even greater role in the survival of nature's habitats. As for being food, with some plants it just might boil down to either well established or acquired tastes. In a future issue I'll further cover the role plants play in nesting and reproduction needs within Whitemud North.

Sometimes we just can't 'see the forest for the trees'. At times each of us will stand in awe of individual trees and other times we'll be in awe of the overall forest vista; fall colours can be epic. Either way trees of all shapes and sizes, along with a host of other forms of flora and fauna provide many of us with incredibly relaxing places to enjoy all aspects of nature. Every facet plays an integral role in a healthy outdoor habitat.

Tree tops provide many of our fine feathered friends with essential places to rest, places to mate and to seek nesting sites, to search for food, and to watch for predators or prey.



Great Blue Heron, resting, May 2, 2016.
They also nest in tree tops.



Red-tailed Hawks, Apr 23, 2021.
Female and male just before mating.



Bohemian Waxwings, Mar 27, 2016.



European Starlings, Oct 20, 2018.



Pine Grosbeak, female and Bald Eagle.
Best to be in your face, not your belly,
Nov 10, 2019.



Northern Goshawk actively hunting,
Nov 27, 2015.

Balsam Poplar, *Populus balsamifera*.

In their old growth existence these are some of our most grand deciduous trees. They are described as fast growing trees with very soft wood which likely helps to make them a favourite food source for Beavers. Often, but not always, older trees will die in the center and become hollow due to feeding by Carpenter Ants, other insects and the plain old rotting process. Many trees will continue to live and in fact will thrive for many more years or decades even with dead and hollow centers. It is very common to see many of the older specimens with seemingly large dead sections, and healthy live trunks and limbs still growing well beyond the dead zones.

Balsam Poplars are true survivors, being able to withstand both severe flooding and long periods of drought. Mature trees can grow to a height of 80 to 110 feet tall and cover a width of 20 to 50 feet. They can be prone to sending up suckers up to 50 feet away from the main tree. I have read that they can live up to 70 years, however I've heard many folks say that they can have a life span of more than 100 years.

Many of our Woodpecker species will actively feed on insects within both live and dead sections of our Poplars, including: Downy Woodpecker, Hairy Woodpecker, Northern Flicker and Pileated Woodpecker. They will also use areas of the dead trunks for nesting sites. I'll cover how such holes are then used in subsequent years by other birds in a future issue. Another fascinating aspect of nature's recycling and repurposing process.

This tree species is not recommended for residential areas or housing lots. The likelihood of large limbs falling with a greater impact than a falling Grand Piano on you or your house makes them not suitable for home plantings. They make for good windbreaks in rural areas and are best left to grow in natural woodland areas.

Let's have a photographic look at aspects of the life and times of the Balsam Poplar.



Female Catkins, Apr 12, 2016.



Male Catkins, May 3, 2021.



Fruit / Seeds (Poplar Snow) and Leaves,
Jun 13, 2021.



Very large tree felled by Beavers,
Bucked (Sawed) by Man, May 25, 2017.



Felled and Bucked (Chewed)
by Beavers, Sep 28, 2016.



Felled by Beavers, Sep 23, 2021.



Chewed by Beavers, healed,
and lived on, Apr 3, 2017.



Hollow, broken trunk; looks dead?
Dec 12, 2021.



Same trunk, very much alive!
Jul 15, 2021.



Bug eaten trunk, nature's recycling,
Sep 19, 2021.



Start of a new dam, Poplar limbs,
Aug 17, 2016.



Old established dam, variety of trees,
Sep 28, 2020.



Beaver's winter food cache,
Oct 5, 2020.



Beaver's early winter feeding hole,
Nov 3, 2019.



Nesting in a natural hole of a live tree -
Great Horned Owls.
Owlets about 42 days old, May 23, 2019.



Nesting in a long dead tree.
Hole pecked by Pileated Woodpeckers,
Jul 1, 2021.



Pileated Woodpecker and Northern
Flicker searching for bugs and ants
to eat, Nov 25, 2018.



Carpenter ants eating dead wood;
square hole pecked by a Pileated,
Aug 9, 2021.



Many years of post-life feeding,
Jan 20, 2017.



Seeking food on a live tree,
Feb 26, 2016.



Brown Creeper, hunting for bugs,
Mar 14, 2019.



Black-capped Chickadee
caching a berry, Jan 31, 2018.



Left: Red-breasted Nuthatch, caching
seeds, Feb 25, 2021.



Right: White-breasted Nuthatch,
caching seeds, Nov 12, 2018.

Grasses of the Edmonton Region. Part 2. by Patsy Cotterill. Photos by author unless otherwise noted.

Some Spring-flowering Grasses

Identifying grasses depends first and foremost on what they look like, of course, but other characteristics can provide clues to identity, such as habitat and, to a lesser extent, time of flowering. Most grasses flower from midsummer onwards, raising tall flowering stems aloft to the level of the general vegetation giving their flowers a good chance of wind pollination. Hence when grasses flower early they stand out from the crowd. In this article, I'll look at four species that flower in May or early June.

***Oryzopsis asperifolia*, rough-leaved ricegrass**, formerly called white-grained mountain rice, is a perennial native grass which grows in relatively dry, open forests. It is easily seen in the Edmonton river valley, flowering from the middle to the end of May while the ground vegetation is still spring-sparse, especially on well-drained escarpments. It is also common on sandy soils in local pine forests, where it is often found with purple oatgrass (*Schizachne purpurascens*), which I will deal with in a later article. It is a tufted grass with basal, relatively broad (4-9 mm wide), flat, leaves that are rough to the touch, especially below; they are erect when young but later splay out over the ground in a looser tuft. The flowering stems, 25-65 cm tall, bear only reduced leaves with short blades and are topped by a cylindrical, spike-like panicle of greenish spikelets to 13 cm long.

The spikelets are 5-7 mm long with thin, green-veined glumes of about the same length that have translucent sides and tips and contain a single floret. The lemma is hard, whitish and shiny at maturity, sparsely hairy except for the tuft of short white hairs at the base and with a terminal awn 5-10 mm long that soon falls off. The lemma margins overlap, enclosing the similar palea, both in turn enclosing the grain and falling altogether in late spring as a unit that resembles a rice grain, hence the plant's Latin and common names.

With its broad tufts of leaves which can be bright green or bluish-glaucous, I think this grass makes excellent ground cover, although it does not seem to be widely cultivated. It might do well mixed in with other vegetation such as juniper or common bearberry. Also called winter grass because its leaves remain green during the winter, it supplies a splash of green as soon as the snow melts, followed by the bright new leaves and flowering stalks of the season, another sign of spring.

Rough-leaved ricegrass occurs widely across Canada and the northern U.S.



L: Rough-leaved ricegrass in the river valley at Rio Terrace showing a tuft of new leaves and flowering stems, 2009.05.09.

R: magnified portion of two flowering stems showing slender-ovate spikelets with spent anthers; awns have already been lost. Coyote Lake Natural Area 2009.05.23.

Meadow foxtail (*Alopecurus pratensis*) and creeping foxtail (*Alopecurus arundinaceus*) are both tall perennial grasses, native to Eurasia, that have been widely introduced to the cooler parts of North America for forage and have become increasingly common in Alberta. (See Derek Johnson's article and local commentary at https://www.anpc.ab.ca/wiki/index.php/Alopecurus_arundinaceus). They both flower from mid May to mid June, and are very similar to one another, having flat, broad leaves (4-8 mm wide in meadow foxtail, up to 12 mm in creeping foxtail) and very narrow, spike-like panicles, 3-10 cm long, produced on flowering stems from 30 cm to over a metre tall, and densely packed with softly hairy spikelets. An obvious difference between the two species is that meadow foxtail is densely clumped, with only short rhizomes and several flowering stems per clump, whereas creeping foxtail produces single stems from long, creeping rhizomes and hence is patch-forming. Both occur in the moist soils of meadows, fields, shores and roadside ditches, with creeping foxtail particularly favouring this last habitat. (Road development has a lot to answer for in promoting the spread of non-native species!)

There are subtle differences between the two species in spikelet morphology, although in both the spikelets contain only one floret consisting of a lemma (without a palea) nestled between two equal-sized glumes. In meadow foxtail, however, the spikelet is elliptic or oblong-ovate in shape and the tips of the glumes are either parallel or point towards each other, whereas in creeping foxtail the spikelets are somewhat urn-shaped with spreading tips. The lemma is as long as the glumes in meadow foxtail and has a 5-10 mm long, bent awn, attached towards the base and extending for 5-10 mm beyond the lemma; in creeping foxtail the lemma is shorter than the glumes and the bent awn is shorter, barely extending beyond the length of the lemma. In both the green keel and lateral nerves of the glumes are long-hairy, giving the panicle its soft feel.

Superficially, the foxtails resemble timothy (*Phleum pratense*), and are often confused with it. However, the spikelets of timothy, a tufted grass of pastures and a frequent escape into natural communities, lack the soft hairs of the foxtails, and the panicle feels rough to the touch. Another give-away is that when post-mature and before disintegrating, the panicles of the foxtails turn black, and the spikelets fall completely away from their little stalks, whereas the fruiting panicles of timothy are brown and the (single) floret per spikelet falls off while the glumes remain attached to the stalks.

A good place to see creeping foxtail is at the corner of Highway 16 and Atim Road east of Spruce Grove, as one turns to access Wagner Natural Area. Here it has extensively colonized the ditch. Meadow foxtail is a problem at Nisku Prairie where it may have spread into the drier upland prairie from the Gwynne Channel and thrived in wetter seasons. Herbiciding has reduced its numbers somewhat but we have also had some success smothering it with mown hay! Unfortunately, the creation of any bare ground, say, by removing smooth brome, favours its spread. (The catch-22 of invasives!)

I will deal with another locally common but native *Alopecurus* species, short-awned foxtail (*Alopecurus aequalis*), when I consider some wetland grasses.



L: Single panicle of creeping foxtail at Wagner Natural Areas, 2009.06.14; apparently florets bloom from the top down so the stamens at the top appear after the whitish stigmas (protogyny);

Middle: a patch of creeping foxtail in a Wagner ditch;

R: single fruit, showing divergent glume tips and keels with long hairs, and almost hidden central floret.

Hairy sweetgrass, northern sweetgrass (*Anthoxanthum hirtum*, formerly *Hierochloa odorata*) is a perennial grass, native to both northern Eurasia and the northern parts of North America. It is very popular ethnobotanically because of its coumarin content, which produces a vanilla-like scent that retains its fragrance on drying. It is used in religious ceremonies and for medicine by Indigenous peoples in Canada and is called holy grass in Britain because of the former practice of strewing it in church doorways on holy days.

It produces tufts of bright-green leaves, 2-5 mm wide and characteristically shiny on the underside, from creeping rhizomes. The flowering stems grow 40-80 cm tall and bear two to three sheathing leaves with short blades, characteristic of the plant (and an aid in identifying the grass in vegetative condition). The panicle is 7-15 cm long, open, and with two spreading branches at each node; a single, shining, greenish or purplish and later brownish spikelet is borne at the end of each branch tip. The spikelet, 4-6 mm long, is elliptic to ovate, with pointed tips, and contains three florets only the central one of which is bisexual and fertile, the two lateral, boat-shaped ones producing stamens only. The floret is subtended by a pair of membranous, broadly ovate glumes of more or less equal size and the same length as the spikelet. The staminate lemmas have hairy margins and the lemma of the bisexual floret has a hairy tip; the latter is slightly smaller than the staminate lemmas at 3-3.5 mm long.

Hairy sweetgrass grows in the moist soils of fields, roadsides, verges, and sandy areas; being rhizomatous it can often form extensive patches. It flowers in May although its panicles often persist in a dry condition throughout the summer. In popular

demand, it can be propagated by its rhizomes, but growing it from seed has proved difficult because viable seed is scarce. In part this may be because collecting isn't undertaken early enough: the fertile floret falls away, leaving the glumes and staminate florets behind, giving the impression of an intact panicle. Or the florets may become infected with insects, or, there may be other reasons... The literature suggests that lack of viable seed is common. If anyone knows of a population producing good seed, please let us know...!



L: Hairy sweetgrass in flower in Rio Terrace yard, 2011.05.18.

Middle: portion of flowering stem on mounted specimen showing two stem leaves with sheaths and characteristic short blades.

R: Structure of spikelet and florets of hairy sweetgrass. Minnesota Wildflowers image.

References

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More Sleeping Bees and Native Wildflowers at Bunchberry Meadows by Sue Panteluk



It's 'Hug an Aster Day'.

Dancing in the pollen.

Forty winks in the fleabane.

Golden accommodations for the night.



I don't always powder my nose, but when I do I use Gaillardia!



Tucked under the aster.



Awaiting wing de-icing before liftoff. First frost overnight.

* * * * *

Websites of the Month:

Feb 10 - webinar - Protecting Biodiversity and Indigenous Culture in Coastal Zone of Eeyou Istchee

The Cree Nation in Quebec is giving this land a voice to protect nature and their way of life. As we face the twin crises of climate change and species loss, we will hear from Cree Deputy Grand Chief Norman A. Wapachee about their nation's efforts to restore and protect nature.

The Deputy Grand Chief will share the story of Eeyou Istchee and how conservation efforts there are healing the land, strengthening the community, and advancing reconciliation.

Zoom registration for webinar: https://us02web.zoom.us/webinar/register/WN_-Hld8IPyTVO2vgKU1-uCHw

AWES Native Agroforestry Species Database

The database includes information on the growth characteristics and site preferences of trees and shrubs that are naturally found in Alberta's grasslands, aspen parkland, foothills, or boreal forest. Some native species are not listed, but it is still a worthwhile resource.

<https://www.awes-ab.ca/species/>

Something Different:

To get by in a changing climate, plants need animal poop to carry them to safety

Fruit-eating animals spread the seeds of plants in ecosystems around the world. Their decline means plants could have a harder time finding new habitats as the climate changes.

<https://www.npr.org/2022/01/18/1073164501/plant-seeds-animal-climate-change>

Lifetime ENPS Membership

You can now become an Edmonton Native Plant Society member for life. Memberships are \$20 and can be purchased by emailing enpgmembership@gmail.com or visit one of our booths at plant events in your area.

Aims of the Edmonton Native Plant Society:

- ❖ Promote knowledge of the Edmonton area native plants.
- ❖ Conserve our native plant species and their habitats.
- ❖ Preserve native plant species and habitat for the enjoyment of present and future generations.

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Coming soon to a prairie or garden near you...prairie crocus, *Pulsatilla nuttalliana*; prairie buttercup, *Ranunculus rhomboideus*; early blue violet, *Viola adunca*.