

Three-flowered avens, Geum triflorum, at Fort Saskatchewan Prairie, April 26, 2022.

From your editor:

Welcome to the Wildflower News for May. Finally, after what seemed an exceptionally long winter, we can once again take pleasure in and enjoy our native spring bloomers. The crocus at Fort Saskatchewan Prairie are in full bloom in amazingly large clumps. Three-flowered avens are beginning to show buds in gardens, as are the odd prairie buttercup! A soul-restoring time of year.

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LETTERS:

[Re April 2022 issue:] Oh, this is just so good! I don't often get a chance to read the newsletter but I did this time and I enjoyed every article. Well done again!

MJ

WN: Thank you and we're very glad you enjoyed it!

Native Plants in Local Gardens (and a few from elsewhere!)

From Sue Panteluk - Things are beginning to emerge at my place. This is wild blue flax, Linum lewisii.



Here's some photos from Bunchberry Meadows restoration plots, April 26, 2022:







Prairie crocus, *Pulsatilla nuttalliana*; prairie buttercup, *Ranunculus rhomboideus*; A bald-faced hornet on a species of the Brassica family.

WN note: The hornet photo shows a_parasitic rust fungus, a *Puccinia* sp. that prevents flowering in its host plant (usually a Brassica or mustard family species). It forces the infected plant to grow clusters of leaves into brilliant yellow "pseudoflowers" bearing the fungal spermatogonia. Insects visiting the pseudoflowers transfer spermatia from one host plant to another, in the same way that pollinators transfer pollen between the true flowers of uninfected plants. In addition, the fungus produces a distinct scent to attract insects, who also feed on a sweet, sticky substance similar to nectar that the fungus forces the plant to produce on the imitation flowers.

Thank you, Sue, for showing us these. Love the "fur" on the crocus.

From Manna Parseyan - Spring has arrived at Fort Saskatchewan Prairie! [April 26, 2022]







Prairie crocus, Pulsatilla nuttalliana.

WN: Thank you, Manna for these beauties. What variation in flower colour!

From Patrick Kyle: Some spring growth in my yard the morning of April 26:







Rhombic-leaved sunflower, Helianthus pauciflorus; hairy yellow evening-primrose, Oenothera villosa; prairie golden bean or buffalobean, Thermopsis rhombifolia.

WN: Thank you for these Patrick - so good to see.

From Margriet van Laarhoven:

Three-flowered avens in my Edmonton yard.

WN: A lovely photo and very healthy-looking plant!



EVENTS... If you have events involving native plants that you would like posted, please email us at engedmonton@gmail.com

Saturday, May 7th - Spring Clean-Up at Wagner Natural Area - Pick-a-little, tote-a-little and before you know it, Wagner is almost pristine again! Anyone who wants to volunteer is much appreciated. Some snacks and water available. Bring rubber boots and gloves. Bags and pick-up sticks provided. Tasks simple-smiles, free!

Time: 10:00 am to 2:00 pm.

Location: Wagner Natural Area - meet at the parking lot.

Saturday, May 14th - Bloomin' Garden Sale 2022 - ENPS will have native plants at this market, at outdoor tables. People are

encouraged to wear masks if they wish, and masks and [hand] sanitizer will be provided on site.

Time: 10:00 am to 4:00 pm.

Location: Alberta Avenue Community Centre, 9210 118

Avenue, Edmonton.



Tuesday, May 17 - ENPS presentation - Intro to Riparian Areas, and the Important Role that Plants Play

Presenters are Tonya Lwiwski with Angie Quist. Tonya has been a Riparian Specialist with Cows and Fish for four years, and is based out of Edmonton. One of her favourite aspects about working with Cows and Fish is the time she gets to spend talking about riparian plants, whether teaching plant ID basics during a field day, or mentoring Cows and Fish field staff with advanced ID. She has a love of all plants large and small, but has a particular soft spot for native prairie grasses. Angie Quist is a Riparian Specialist for the Cows and Fish Eastern Slopes Project. Ranging from South of Sundre to South of Grande Prairie, Angie works with communities and landowners in the northern reaches of the eastern slopes on riparian management to increase watershed and ecological resiliency.

Time: 7:00 pm

Please register in advance: https://us02web.zoom.us/meeting/register/tZAodu-gqTooG9LS817FMUqVOxIvYVYszZaJ
After registering, you will receive a confirmation email containing information about joining the meeting.

Saturday, May 28 - Fulton Place Spring Swap and Sale

Information will be available from Alberta Invasive Species Group, and the Edmonton Native Plant Group will be bringing native plants for the swap. Hope to see you there, rain or shine. Please bring your mask and gardening gloves.

For more information https://www.fultonplace.org/gardeners-swap-sale

Time: 9:00 a.m. to 12:00 p.m

Location: Fulton Place Community League Hall (6115 Fulton Rd).

June 9 -12 - Edmonton BioCity Challenge https://biodivercity.ca

City Nature Challenge (CNC) is an event to document the biodiversity of nature occurring within a particular city. Participate by downloading iNaturalist at <u>inaturalist.ca</u>, search for and join the BiodiverCity Challenge project for your region. More details will be available in the June 2022 Wildflower News and on the ENPS Facebook page.

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

Reminder: Bunchberry Meadows Notice of Temporary Seasonal Closure, April 1 - May 23, 2022

A gate at the access to the property will be closed and locked. This is to allow the trails to rest during the wet/muddy season to protect from damage to the trails and the vegetation surrounding it. Also, the months of April and May are an important time for plants and wildlife on the property. Birds are migrating and nesting, and ungulates are calving, making them sensitive to disturbance.

Thank you for supporting conservation and respecting the closure. We look forward to welcoming you back on May 24, 2022.

- from the Nature Conservancy of Canada.

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ENPS Earth Day Sale at the Downtown Farmer's Market on April 23 was a successful and lively event with many positive outcomes for ENPS! It is very encouraging to see how much interest there is in native plants. The volunteers did a wonderful job of giving people first hand information on growing native plants, selling seeds, plants, books, brochures and memberships. The talks drew a small but intimate crowd and there was much appreciation for the talks. Even though masks were required, there was a back-to-normal pre-COVID feel to the day! From the organizers go profound thanks to all the volunteers who helped. Here's a few photos, taken by volunteer Trudy Haracsi:







* * * *

Montclair, N.J. moves to have native plants only on town property

A town in Essex County, Montclair, New Jersey, is set to approve an ordinance mandating that only plants that naturally grow in the area be planted on town property. This will be the way of the future in every city in North America. We, in Edmonton, have yet to realize the urgency and certainly are way behind.

To read the article: Native plants only on town property

From CBS NEWS, NEW YORK, April 6, 2022

Grasses of the Edmonton Region - Part 5 by Patsy Cotterill. Photos by the author unless otherwise indicated.

Early-flowering bunchgrasses of open areas with well-drained soils

As I have previously noted, most grasses flower in the summer, the exceptions being some we have already seen, such as annual bluegrass and white-grained mountain ricegrass, which flower in May. Several perennial bunchgrasses of grassland habitats, however, flower in June, with their fruits dispersing in July and August. These include three species formerly in the genus *Stipa*, three Hesperostipas; green needlegrass, *Nassella viridula* (formerly *Stipa viridula*), may bloom somewhat later, in July. I will also describe June grass, *Koeleria macrantha*, its common name indicating its flowering time and its peak attractiveness. The former *Stipa* species have in common panicles of large, one-flowered spikelets in which the lemma within the spikelet is hard and encloses the palea to form a narrow, spear-like grain with a sharp-pointed, hairy tip at the base (callus) and a long, needle-like awn, variously twisted and bent, at the tip. The bulk of the leaves form a basal tuft, and may be flat or inrolled.

Needle-and-thread grass, *Hesperostipa comata*, grows 30-70 cm tall with a panicle 10-20 cm long, which characteristically may appear to emerge straight from the upper leaf sheath. The thin, papery, long-pointed glumes are 15-30 mm long and surround a hard, narrow lemma 7-12 mm long that is whitish to pale brown and more or less uniformly white hairy, with a tuft of hairs at the base. The very slender whitish awns, 10-15 cm long, are tightly twisted below but characteristically curled above. A subspecies, subsp. *intermedia*, has straighter awns, stems with nodes not covered by leaf sheaths, and longer glumes.

Hesperostipa curtiseta goes by various common names such as northern porcupine grass, western porcupine grass and short-awned porcupine grass, although the last name, a direct translation of the Latin, is rather misleading, its awn only being shorter in contrast to that of its cousin, plains porcupine grass, Hesperostipa spartea. Despite similar or overlapping dimensions of height, glume and panicle length to needle-and-thread grass it can be distinguished from it by its more prominent panicle, which is fully exserted from the leaf sheaths, conspicuously drooping and branched, and by the brown lemma/grain, which is 12-15 mm long, more painfully (!) sharp-pointed at the base, and hairy only at the base and margins, with a shorter (5-11 mm) but stiffer brown awn, tightly twisted below and twice bent above but with the last segment straight.

Plains porcupine grass, *Hesperostipa spartea*, is the most robust grass of the three, closely resembling *H. curtiseta* but reaching 50-100 cm in height, with the lower stem nodes hairy (glabrous in *H. curtiseta*), and glumes 30-40 mm long. The brown lemma is 10-18 mm long with a stout awn 10-20 cm long, similar to that of *H. curtiseta*.

Green needlegrass, *Nassella viridula*, is a tall (40-100 cm) bunchgrass with panicles 10-20 cm long, which, however, have upright, ultimately appressed branches, and the single-flowered spikelets are much smaller than those of the Hesperostipas. The glumes are 7-12 mm long, greenish, transparent and shiny; the lemmas are 5-6 mm, white-hairy, and dark grey when the grain is ripe. The awn is 20-30 mm long, very slender, and bent twice towards the tip.



Hesperostipas being grown at the Oldman Creek Nursery, 2007.07.16. Needle-and- thread grass is in the foreground, with either northern or plains porcupine grass behind it. These grasses can be difficult to distinguish, so it is a good idea to consult a key and take some measurements to make a definitive identification.





L: *Hesperostipa comata* in flower. Date and location of photo not recorded.

R: *H. comata*. Specimen collected from Fort Saskatchewan Prairie, 2000.07.29, showing papery glumes and characteristically curled awns at seed dispersal time.





L: H. curtiseta at Fort Saskatchewan Prairie, 2009.07.13.

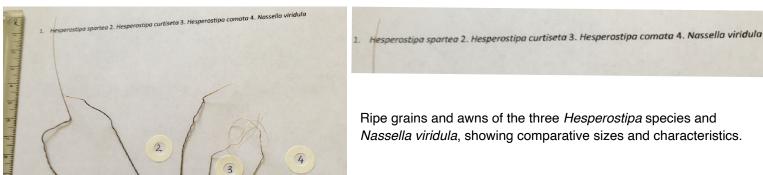
R: Hesperostipa species in flower, southern AB, date not recorded.





L: Flowering panicles of *Nassella viridula*. Photo by J. Derek Johnson (date and place not recorded).

R: *N. viridula* plant on dry slope in Patricia Ravine, Edmonton, showing mature panicles, 2021.07.21.



All four species are grasses of the western plains, although northern porcupine grass and green needlegrass have more northern extensions into the Territories. In southern Alberta needle-and-thread and plains porcupine grass extending over large areas create exquisitely beautiful grasslands, especially when in full flower. They are valuable forage grasses before the panicles develop. Needle-and-thread and northern porcupine grass both occur side by side in Fort Saskatchewan Prairie and Gibbons Badlands, and are most easily seen locally in the sandy or badlands soils of Protected Areas. Green needlegrass appears to have been widely planted in the Edmonton river valley and can be seen on dry cliffs, pathways and bentonitic slopes. It is relatively easy to grow from seed although germination may be aided by cold, moist stratification.

The grains (seeds) of these species show an interesting adaptation. The awns twist and untwist with changes in moisture, drilling the pointed tip of the grain into the ground.

These species belong to the tribe Stipeae of the grass family (Poaceae). Other members of this tribe, showing similar floral characters, occur in Alberta, although only white-grained mountain rice (*Oryzopsis asperifolia*), slender ricegrass (*Piptatheropsis pungens*), which I will cover in a later article, and the rare Canada ricegrass (*Piptatheropsis canadensis*), which occurs for example at Nisku Prairie, grow in our area.

June grass, *Koeleria macrantha*, by contrast, is a much shorter, more compact grass, its spike-like panicle, 2-8 cm long, rising only 20-50 cm above a tuft of narrow leaves. The panicles consist of 2-4 (usually 2)-flowered spikelets 4-5 mm long, and are long-rectangular and shining when in flower, but later close up to become narrow, beige cylindrical spikes. The lower glume is about as long as the spikelet; both the lemmas and paleas are transparent, resulting in the panicle's shining appearance when the spikelets are open and shedding pollen in June.

June grass is a circumboreal species occurring in Eurasia as well as in North America, and is widespread in Canada except the north and east. Locally, it is most easily found in sandy soils, although it is widely planted as an ornamental grass in native plant gardens and will grow in most soils in sunny situations. It is a valuable forage grass as vegetative growth begins early. A species with rather similar floral characters, slender wedgegrass, *Sphenopholis intermedia*, is relatively common locally, but is not likely to cause confusion; it is a much taller grass of moist habitats.





L: *Koeleria macrantha* in flower in garden in Rio Terrace, Edmonton, 2009.07.02.

R: Growing in Red Deer River badlands at Tolman Bridge East, 2020.07.28, showing post mature closed panicles.

References

Canadensys Vascan. Species names and distributions checked.

Hesperostipa curtiseta. https://acrre.ualberta.ca/acrre/wp-content/uploads/sites/45/2018/04/Hesperostipa curtiseta.pdf Kershaw, Linda and Lorna Allen, 2020. Vascular Flora of Alberta: An Illustrated Guide. Self- published. Kindle Direct Publishing.

Moss, E.H. 1983. Flora of Alberta. 2d ed. ed. by J.G. Packer. Toronto, University of Toronto Press. Stipeae in *Flora of North America*, vol. 24, p. 109. http://floranorthamerica.org/Poaceae_tribe_Stipeae Specimens in Cotterill herbarium.

RECOMMENDED READING:



Wildland Advocate; The Alberta Wilderness Association Journal.

The Spring 2022 issue of AWA's *Wildlands Advocate* will immerse you in Grasslands and Prairie from the striking cover photo to comprehensive accounts of projects that threaten native prairie and vital habitats to the untiring dreams of advocates and conservationists. Colleagues from Nature Canada offer a perspective on the Halt and Reverse Nature Loss initiative in an Op-Ed. The issue also includes a number of authors who will help you learn more about wild Alberta, and the people who defend it. The online version is found here: *Wildland Advocate - Alberta Wilderness Association*

WN: there is an amazing amount of good reading here!



Learn to Love Those Latin Names by Ann Willyard.

Ann wrote this book as part of her quest to strengthen collaborations between native plant enthusiasts, amateur naturalists, and academic botanists. The premise is that the scientific names of plants are critical to our communications about them, largely because there are over 386 thousand currently-accepted species of vascular plants in the world. The recent trend to ignore scientific names has handicapped, rather than helped, the talented folks who work with the species in their region. The simple and straightforward explanations in this book will be useful to botanists at many levels, partly by highlighting the problems created by relying only on common names.

Book review from Alberta Native Plant Council April newsletter.

WEBSITES OF THE MONTH:

Colin's Virtual Herbarium

The site contains pictures taken of flowering plants found in Saskatchewan (many of which are also found in Alberta) that have been personally identified in the field. Others are pressed specimens from the George F. Ledingham Herbarium at the University of Regina. The herbarium specimens were collected and identified by many people at the university over the course of many decades, and the photographs of these are included on this web site courtesy of the herbarium. Colin Ladyka lives in Regina, Saskatchewan. Native plants are his hobby.

https://www.colinherb.com/?fbclid=lwAR0tXOe8TFAo2Jx1pdJKfcw1cY3lllBclz9_z6-163_13b5OasOUFNbUhdY

SOMETHING DIFFERENT:

From *River Valley News:* "Edmonton finally undertaking ecological thinking" An opinion piece from the April 14 River Valley News https://mailchi.mp/301af6490562/river-valley-news?e=b75f83fd28.

From the 'Feedback' section of River Valley News, April 28:

"River Valley Patrol needed

Johanus writes "I love our river valley and strongly believe in preserving it as much as possible, so do not like it when people go off trail, especially when they are in protected areas.

I was running on a trail when we came across a spot where someone had chopped down a large tree and built it into a drop-off ramp for mountain biking. This was a large ramp, at least 3m long and over a metre high. They had bent back and broken several bushes to clear the way.

Further on we found where a healthy tree had been cut into pieces and placed over bushes which stop soil erosion, pushing them down so that the bushes wouldn't stick out onto the trail and interfere with quick bike travel in that area.

I wonder if there is anything that can be done about this kind of behaviour? What does the City do about it? Is there any kind

I wonder if there is anything that can be done about this kind of behaviour? What does the City do about it? Is there any kind of patrol that monitors this? If not, I am thinking of trying to organize a volunteer patrol."

WN: Perhaps the patrol should be manned by mountain bike groups??

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.
- Educate individuals, business and local governments about native plants.

Lifetime ENPS Membership

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

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To unsubscribe, or subscribe, email engedmonton@gmail.com.

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www.edmontonnativeplantgroup.org



Beaked hazelnut, *Corylus cornuta*, male and female (feathery red) catkins; aspen poplar, *Populus tremuloides*, female catkin; aspen poplar, *Populus tremuloides*, male catkin.