

Yellow lady's-slipper orchid, *Cypripedium parviflorum*, Wagner Natural Area, June 19, 2022

From your Publisher:

Welcome to the Wildflower News for July. All this lovely June rain - even if it was a bit of a deluge at times - has certainly benefited the native plants in my yard, as I hope it has in yours. From the postings on various Facebook sites, it seems this is a very good year for many of our native orchids - not only the yellow lady's-slipper, but also the spotted coral root, and round-leaved orchids that are appearing along the the river valley and ravine trails. Keep those eyes on the ground!

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LETTERS

Thank you so much for the special edition! it was exciting to me to read about it, to see all the pics, from start to diagram of area, to people working their way along, and then the individual pics of plants, flowers and grasses... really warmed my heart, so thanks to all who were responsible!

Patricia Pederson

Loved the story about the plant rescue. Warms the heart. I live in Calgary and was curious to know if there is a Calgary Native Plant Society? If not, do you know if there might be interest in starting one?

Thanks! Blair Strachan

WN: The Cochrane Plant Rescue really was superb - the quickness with which it was organised, the support received from business and various government departments, to the numbers of people of all ages who showed up to rescue and conserve the natives.

Blair - we have put you in contact with the organiser of the rescue, as he would be the best person to talk with.

NATIVE PLANTS IN LOCAL GARDENS AND AREAS

WN: Send your photos and captions to engedmonton@gmail.com!

From Sue Panteluk: From the ENPS restoration plots at Bunchberry Meadows: *Sedum lanceolatum* - lanceleaf stonecrop; *Penstemon procerus*, slender blue beardtongue and happy bumblebee...; *Erigeron philadelphicum*, a shy Philadelphia fleabane; *Corydalis aurea*, golden corydalis and *Sisyrinchium montanum*, blue-eyed grass.











Bonus! This beautiful Polyphemus moth was asleep in a large patch of stinging nettles.



From Margriet van Laarhoven: Not sure who enjoys my native plants more! The robin after its bath, or I....

Antennaria rosea, pink pussytoes; asters or goldenrods; Penstemon procerus, slender blue beardtongue; Geum triflorum, three-flowered avens; Linum lewisii, wild blue flax.

WN: With native plants everyone wins! You, the robin, bees, butterflies...

From Kathleen Mpulubusi: Some photos from Fort Saskatchewan Prairie, June 17: *Thalictrum venulosum*, veiny meadow-rue male flowers; *Lonicera dioica*, twining honeysuckle; *Linum lewisii*, wild blue flax.







From Patrick Kyle: Blue giant hyssop and fireweed are starting to bloom in my yard. Still a little too cool for the bees to be out this morning, June 24.





Agastache foeniculum, blue giant hyssop, and Chamaenerion angustifolium, fireweed.

From Nisku Prairie: Shining arnica, *Arnica fulgens*, and yarrow, *Achillea borealis*. June 24, 2022











Photos by Patsy Cotterill.

From Alan Jones' boulevard patch in June:

11th June - Sticky geranium - *Geranium viscosissimum*; 7th June - Blue columbine - *Aquilega brevistyla*; 16th June - Rosy pussytoes - *Antennaria rosea*; 27th June - Brown-eyed Susan/Common blanketflower - *Gaillardia aristata*;



WN: Your patch is looking lovely, and what a huge clump of paintbrush!

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

Tuesdays - Mill Creek Thistle Patrol Pull thistles to save wildflowers. The Thistle Patrol removes patches of creeping (Canada) thistle, a noxious weed, growing in and around Mill Creek Ravine. The group meets weekly at 7 p.m. for an hour on Tuesday evenings from July to September. Ed Retzer, the leader, has been participating in the Thistle Patrol for years and has managed to greatly reduce the number of thistles. Join us by emailing enpsyolunteer@gmail.com and we will send you the specific location for each week.

July 7 - Blazing a Trail at Hopkins Enjoy a day outside with the Nature Conservancy of Canada (NCC) outside of Edmonton and help blaze a path at the Hopkins property. Working in teams and alongside friendly faces, you'll be using loppers and saws to clear branches and overgrown vegetation off the trails. Detailed driving instructions will be provided after registration is received. Please come prepared for the weather. To register, go to https://www.natureconservancy.ca/en/where-we-work/alberta/events/conservation-volunteers/blazing-a-trail-at-hopkins.html

Time: 9:30 am to 3:30 pm Location: Coyote Lake, AB

Saturday/Sunday, July 9/10 - Wagner Natural Area Weed Pulls Help nip these weeds in the bud! Protect rare and sensitive flora against the ravages of invasive weeds. Pick what day you want to come and help. Tools provided. Refreshments and water provided. Come dressed for the weather. RSVP to info@wagnerfen.ca. Located on the south side of the Yellowhead highway (Hwy. 16) between Edmonton and Spruce Grove.

Time: 9:00 am to 1:00 pm

Location: Meet at Wagner parking lot on the north side of the natural area and south of the highway.

Sunday July 10 - Gibbons Badlands Prairie Walk Join Kathleen Mpulubusi and Cherry Dodd for a walk in the Gibbons Badlands Prairie. This unique area is home to prairie plants including native prairie grasses and cactus normally found further south in the Badlands area around Drumheller. Bring water and a snack. Wear sturdy shoes. The area is very hilly and we will be

walking on open grassland and through forest along the Sturgeon River. Space up to 12 participants.

Register at enpsyolunteer@gmail.com

Time: 11:00 am

Location: Meet at Echo Glen Park in the town of Gibbons, north of Edmonton on Highway 28. Echo Glen Park is located on the west side of Gibbons on the south side of the river. We will then drive to the access pull-out for the Prairie.



Sunday, July 31 - ENPS Native Plant Sale - Looking to add more native wildflowers? Want to add one or two to your garden for the first time? Join us at our sale. Wear a mask if you choose and please respect other's desire for social distancing.

Time: 10 a.m. to 1 p.m.

Location: Orchid Resource Centre at 4457-99 Street NW, Edmonton

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

River Valley Trails Damage submitted by Patsy Cotterill

Conservation-minded folk have been complaining to the City of Edmonton about the number and state of single-track, natural surface trails that now permeate the river valley. In response, the Edmonton Mountain Bike Alliance has lobbied local politicians vigorously to keep using and maintaining their mountain biking trails and in a Council motion passed in June they received this concession, even though some of these trails are in environmentally sensitive parts of the valley and ravines.

This same motion included a decision to consider setting aside funding in the next budget cycle for a comprehensive trails strategy that might see some of these trails closed. In allowing these trails to proliferate, and other abuse in the river valley, the City has abandoned its responsibility for protecting the river valley, using the unacceptable excuse of lack of resources.





L. A network of user-created trails creates vegetation islands in Whitemud Park South reserve. R. Damage to vegetation.

If you are upset by what you see happening in the river valley, please contact your councillor and/or phone 311 with details and location. Council needs to hear from the public, not just "special interest" groups.

Canada Summer Job Employee

Please welcome Serena Farrugia, who is very excited to work for ENPS this summer as a Horticultural Technician and and learn a lot more about native plants!

"I graduated last year from the University of Alberta with a BSc. in Environmental and Conservation Sciences majoring in Conservation Biology. I have been volunteering with ENPS since the spring of 2019; mostly at Bunchberry Meadows. I also am an event organizer for a newly founded group called Youth Climate Conversations that's focused on building community and safe spaces for youth to talk about grief and stress related to the climate crisis, and mobilize solutions. I hope I can get some members to come to ENPS guided walks/field trips this year! I will be working primarily at Buttercup's Urban Farm but also Bunchberry Meadows, John Janzen and the Muttart native beds, as well as other projects where I can be of use."

Serena is also an amateur photographer who will be contributing her photos to the Wildflower News, our Facebook page and the website. ENPS is really pleased to have you aboard, Serena!

Action Alert: "Red Tape Reduction" Likely to Threaten our Parks and Public Lands Alberta Wilderness Association's review issued June 6, 2022

Recent legislative changes under the guise of "Cutting Red Tape" could be a threat to Alberta's parks and public lands, and will likely reduce public participation, transparency, and evidence-based decision making when it comes to setting important regulations for these lands. Alberta Wilderness Association (AWA) has reviewed the proposed changes and believes the public needs to be concerned about the erosion of environmental values.

https://mailchi.mp/abwild.ca/action-alertred-tape-reduction-likely-to-threaten-our-parks-and-public-lands?e=8250c3fe01 ENPS, along with AWA, encourages you to write to your local MLA and the new Minister of Environment and Parks, Whittney Issak (<u>AEP.Minister@gov.ab.ca</u>) regarding your concerns about Bill 21, the Red Tape Reduction Statutes Amendment Act, and copy AWA (<u>dearl@abwild.ca</u>)

Fort Saskatchewan Prairie Pollinator Walk Photos by Natasha Stairs.

The Alberta Native Bee Council and ENPS first pollinator walk took place walk in the prairie on June 25th with beautiful weather. Bumblebees, sweat bees, moths and butterflies, and some beetles, were seen, as well as many beautiful native plants. A later visit might be worthwhile, as there will be more pollination going on when the asters and goldenrods bloom.







- L. Ctenucha virginica, the Virginia ctenucha moth.
- C. Caterpillars cocoon themselves in the leaves of a saskatoon shrub, likely a variety of *Tortrix* moth.
- R. Looking for the pollinators!

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Planting at the Inner City High School by Liz DeLeeuw Photos by author.

On Monday, June 20th, Serena Farrugia and Liz Deleeuw of the Edmonton Native Plant Society delivered two loads of plants, shrubs, and a tree to Inner City High School in Edmonton. Planting day had finally arrived.

The project began last fall with Natasha Sarkar, a teacher at the school, approaching ENPS about a memorial planting in the concrete planters around the school using mainly native plants. Cherry Dodd and Liz Deleeuw went to a number of small meetings of interested teachers, staff, students, and even traditional knowledge keeper, Lynn Lush, who spoke to us about Indigenous medicinal and ceremonial plants. We had presentations on native plants, reviewed native plants suited to the three corner beds, talked about seed cleaning and even planted some seeds which the students tended after germination. There was a field trip to the Telus World of Science to visit Indigenous Land Based Learning Navigator, Lynn Lush. There, the students learned about traditional medicines that Indigenous people used and they constructed a model of a medicine wheel garden.



The students had proposed creating a commemorative garden at the school for the children in unmarked graves at Residential Schools. A garden club was formed and teachers incorporated aspects of the project into course work in Social Studies, Outdoor Education, Science, Indigenous Studies and Work Experience. Some students helped with tasks like weeding or topping up the beds with soil towards work experience hours while others helped create bench cards to educate the school community about the sustainability of native plants.





Students planting in the two native plant beds.

Teacher Natasha is a NAAEE 2021 CEE Change Fellow with this commemorative garden as the Community Action project. The fellowship program encourages design of civic engagement (CE) and environmental education (EE) Community Action Projects. The planting day was put off due to factors like rain and schedule conflicts. Finally it all came together on June 20 th, and the day brought a bunch of activity. Liz and Serena placed the plants. Then everybody started planting. A highlight of the day was a ceremony led by school Elder, Marjorie Wright, to mark the planting of the Prayer Tree. The Prayer Tree was proposed by a student who shared ancestry with the children whose graves were found at the Kamloops Residential School in May 2021. The Amur Maple tree, specifically chosen because of its changing leaves, will be central to annual National Day for Truth and Reconciliation ceremonies at the school. Students have also been participating in a traditional drum making ceremony to be used on September 30.

A reduced number of staff and students will tend to the beds over the course of the summer. The plants used are mostly plants which will spread and fill in the space. Showy aster, Lindley's aster, Canada violet, Fireweed, Dewberry, Wild mint and Sweet cicely are some of those plants. There is also a sunny corner of the school where Gaillardia, Meadow blazingstar, Wild

bergamot, Slender blue beardtongue and various grasses and sedges are planted. We will continue to monitor how the various plants do and be available for plant identification and consultation. We hope the garden will bring joy to both occasional visitors and those who come to the school daily. Thanks to the dedicated teachers of the Inner City High School, especially Work Experience teacher Derek Dicks, for coordinating the project all the way to a successful planting.

This project showed how a small number of people can change the world in a small but significant way. One plant at a time.

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Grasses of the Edmonton Region. Part 7 By Patsy Cotterill. Photos by author unless otherwise noted.

This article will be dedicated to some of the common non-native, weedy grasses that frequent our area, most of which flower in mid to late summer. For more information on these species and images, please consult the excellent online resources. One native weedy grass is mentioned.

Smooth brome, Bromus inermis

This tall perennial, strongly rhizomatous grass, produces flowering stems 50-130 cam tall, singly or a few together. The leaves are flat, 5-15 mm wide, and usually hairless, sometimes with a bluish-green tinge. Most have a characteristic crimping or shallow "M" marking somewhere on the blade. The branched panicle is large at 10-20 cm long, open and spreading at flowering time in July but denser and more erect afterwards. The spikelets are also large, 15-30 mm, greenish or purplish in colour, slender and pointed, with 8-10 florets. They provide a good opportunity to study grass floral anatomy using a hand lens. Within each spikelet the oneveined lower glume and three-veined upper glume subtend the florets in which the lemmas are 7-13 mm and hairless. In lacking an awn at the tip of the lemma, or occasionally having an awn only up to 3 mm long, smooth brome is unusual in the genus Bromus. (Fringed brome, B. ciliatus, is an example of a common local brome grass whose lemmas have a distinct awn.) Native to Eurasia, smooth brome, most likely introduced as a forage grass, has found the prairie steppes and disturbed grasslands of North America greatly to its liking. It is the grass people are most likely to see once they step outside carefully managed gardens or specialized and intact native communities. It grows in pastures, fields, degraded prairies and other natural areas, immature aspen stands, roadsides, and disturbed ground generally. It is the bane of managers attempting to restore natural landscapes as it is an aggressive colonizer that can outcompete native species given any kind of disturbance, and forms dense clonal patches or infiltrates compact native plant communities by means of its rhizomes. Even natural disturbance favours it; it will colonize pocket gopher mounds where it is present, and often forms a lush fringe round ant mounds. It occurs all across North America except for the extreme southeastern U.S.

On the plus side, a number of insects feed on smooth brome, and birds and small mammals eat its seeds. Young shoots are eaten by both small and large mammalian herbivores, and it provides cover for wildlife. (Even so, I cannot bring myself to like it!)

A similar, related, native species, Pumpelly's brome, *Bromus pumpellianus*, formerly considered a variety of *B. inermis*, occurs in the mountains of Alberta. It is a hairier plant, with hairs on the stem joints and leaves; usually an auricle (appendage of the ligule) is present, along with a distinct awn on the lemma.





Smooth brome.

L: flowering at Watson Creek campground, Cadomin, 2010.07.29.

R: patch before flowering in Patricia Ravine, Edmonton; 2022.06.22

Quackgrass, couchgrass, Elymus repens

This non-native perennial grass has a lot in common with smooth brome. It is widely distributed across North America except the extreme southeast, and also spreads and forms patches by means of long rhizome, although it is usually not as dense or as extensive. Its flower cluster is quite different, however; it belongs to the group of grasses that have spiked inflorescences formed by stalkless spikelets on both sides of the flowering stem.

Flowering stems rise 50-100 cm; leaves are more concentrated towards the base of the plant, flat and 4-8 mm wide; and may vary from green to dark green to bluish green. The spikes are 5- 15 cm long, erect, and with one spikelet per node on alternate sides. The spikelets are about 10-15 mm long and somewhat overlapping, consisting of oblong, pointed, strongly veined glumes that may or may not be awned and 4-7 overlapping, flattened florets. Lemmas are hairless, of similar size (8-12 mm) and shape to the glumes, and similarly awned or unawned.

Quackgrass seems to prefer more continuously disturbed sites than smooth brome, and often invades gardens, horticultural beds or poorly maintained lawns. It provides good forage. It is easily distinguished from smooth brome when in flower; vegetatively, the leaves lack the crimping of smooth brome and are more likely to have auricles, tiny projections from the very short ligules. (In straw condition, smooth brome foliage takes on a characteristic appearance that, once known, is easily recognized.) Quackgrass is sometimes erroneously referred to as crabgrass (*Digitaria*). Although two species of *Digitaria* occur in Alberta, both non-native, I have never seen any this far north. Crabgrasses are warm-temperate grasses.







Quackgrass. L: flowering spike. Date and location unknown. C: patch at edge of front yard, Edmonton; 2022.06.24, R: rhizome on a herbarium specimen collected in waste ground, Lynn Lake, Manitoba; 1974.08.02.

Green foxtail, green bristlegrass, Setaria viridis

The foxtail genus, Setaria, belongs in a group of grasses that have two-flowered spikelets, of which only one floret in the spikelet is fertile, and has a hard lemma and palea. The whole spikelet falls off at maturity, including the glumes. The group includes the aforementioned Digitaria genus, as well as Echinochloa and Panicum. Representatives of the last two occur in Alberta, including the Central Parkland.

Green foxtail is a non-native, fibrous-rooted annual, often forming small tufts. Leaf blades are flat and about 4 mm wide; the ligules are hairy, with the hairs extending a short way down the edge of the leaf sheath. The panicles, 3-20 cm long, form bristly spikes of densely packed spikelets. These are oval-elliptic, slightly flattened on one side, about 2 mm long and pale green with darker green veins. The bristly appearance is due to 1-3 bristles, 5-10 mm long, located below each spikelet, which are green or occasionally purple. The lower glume is membranous, and short with three green veins; the upper glume about as long as the spikelet and with 5-6 veins. The lemmas and paleas of the sterile lower floret are membranous, but those of the upper fertile floret are hard and minutely ridged, becoming dark brown as the grain matures. The entire spikelet later drops off, leaving the bristles behind.

Green foxtail is a native of Eurasia although the genus as a whole is best represented in warm- temperate countries. It is widely distributed across North America. Locally, it appears to favour warm, well-drained, disturbed soils. For example, it has been a persistent weed at Fort Saskatchewan Prairie, although as an annual it is easily removed.





Green foxtail.

L: Image courtesy of nexles.com

R: Image from soilcropandmore.com.info

Some less common weedy grasses in our area include crested wheatgrass, barnyard grass and witchgrass:



Crested wheatgrass, Agropyron cristatum, is one of only two species in the wheatgrass (Agropyron) genus left in Alberta, former species having been transferred to other genera with taxonomic revision. Crested wheatgrass, a tufted perennial, native to Russia and Siberia, has been extensively planted as a soil binder and for reclamation. This small patch was growing by a bus shelter in Edmonton, probably originating in a seed mix used for reclamation after street work. (2022.06.24).



Large barnyard grass, cockspur grass, *Echinochloa crus-gallii*, is a native of Asia and a robust, tufted annual that prefers moist, disturbed sites. It belongs in the same broad group of grasses as green foxtail, and its branched inflorescence consists of spikes densely packed with spikelets that resemble those of green foxtail but the sterile lemmas are long-awned. Considered a bad weed elsewhere in the world, it is nevertheless used as a forage grass and in reclamation. Photo taken in Edmonton, 2010.08.24.



Witchgrass, common panicgrass, *Panicum capillare*, is in this same group. According to the Canadensys Vascan database, witchgrass's occurrence in Alberta is dubious, but in the past I have found populations in the parking lots of the Edmonton Municipal Airport and Grant MacEwan college on 104 Avenue, since gone. I found a specimen at Fort Saskatchewan Prairie the other day. The broad leaves splayed out in a rosette may resemble those of an undeveloped quackgrass, but at flowering time there is no confusing either species. It is a species of disturbed ground, roadsides, waste ground and shores. As an annual native to North America but weedy, it thus differs from the other four species considered. The photo is of a specimen collected at Edmonton Municipal Airport on 1988.09.24.

References

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Websites of the Month:

From a Facebook post by Terry Thwaites, 20 June, 2022.

POLLINATORS - A Wetlands Story

At one of the Ducks Unlimited sites I volunteer at an amazing transformation takes place each year that deserves its story told. Right now a shoreline of a 100 yds or so is full of a showy plant called Marsh Fleawort - such a so-so name for such an important plant. In that 100 yds. are well over 5000 pollinators working those flowers hard right now. There are roughly 10 types of them from various bug groups literally blanketing all these showy flowers. The other part of this great story is that 6 weeks ago where they stand now it was inches deep in water. A mudflat full of shorebirds working away among the new shoots that were just starting to show. From birds to blooms to bugs the transformation in this important wetland has been awesome to watch. To be surrounded by 100's of pollinators from the teeny tiny to the jumbo bees every step I took was a terrific feeling. DU may talk ducks mostly but this circle of life speaks to much more.

https://www.facebook.com/photo?fbid=10225892082583108&set=pcb.5074680212644809

Alberta Wilderness Association's Wildlands Advocate,

Some great articles in this Summer 2022 issue, especially the *Finding Wild Spaces in Urban Places* by Norine Ambrose, Executive Director, Cows and Fish, and *Big Hill Springs Provincial Park – An Environmental and Geological Treasure* by Tako Koning, P. Geol. and Dale Leckie, Ph.D., P. Geol.

https://albertawilderness.ca/wp-content/uploads/2022/06/20220600 archive awa wla.pdf

Sedges have Edges!

An interesting article on sedges from the now defunct Edmonton Master Naturalists Blog: https://natureedmonton.wordpress.com/2013/08/03/sedges-have-edges/

Run your cursor over the photos to learn the names of the various sedges.

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.

Educate individuals, business and local governments about native plants.

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Grape fern, most likely a *Botrychium* sp. found in mixed woods near Edmonton. Photos by S. Panteluk, June 24, 2022



Spreading dogbane, *Apocynum androsaemifolium*, in Edmonton River Valley. Photos by N. Harris, June 21, 2022