Edmonton Native Plant Society

WILDFLOWER NEWS

'Growing Nature's Garden'

NOVEMBER 2020

Blue grama grass, *Bouteloua gracilis*, in the Muttart Conservatory native plant bed.

From Your Publisher:

Welcome to the Wildflower News for November.
"Natura maxime miranda in minimis" - "Nature is most wonderful in little things." I can't find a reliable source for this quote, but it speaks to the sense of awe I feel when looking closely at nature. Thanks to Pat Dunn for bringing this to my attention.

In This Issue:

Letters:

I stopped opening links a long time ago because of the potential for malware. If you ever decide to put the actual newsletter in the body of the email please sign me back up.
Ida
WN: We're very sorry to hear that. You can, however, always got to the ENPS website and read it there http://edmontonnativeplantgroup.org

I have enjoyed your "Wildflower News" for many years - lots of detailed and interesting articles.
Hugh Wollis

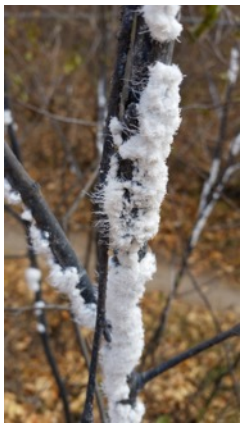
Thanks so much for your newsletter! Love what you do. Take care.
Patrick Crawford

Thank you, Hugh and Patrick! Good to hear.

Native Plants in our Local North Saskatchewan River Valley System:




From Manna Parseyan: red-osier dogwood, *Cornus sericea;* woods' rose, *Rosa woodsii;* rosette gall on MacKenzie's willow, *Salix prolixa;* and false mountain willow, *Salix pseudomonticola,* with a rose gall. The rosettes on these latter two are the result of the willow's response to an insect laying an egg or eggs on the branch tip in spring, forming a wee insect house.


From Judith Golub: *Prociphilus tessellatus,* woolly aphids, primarily found on native alder shrubs, *Alnus* sp.; and sweet-scented bedstraw, *Galium triflorum,* in Edmonton's river valley.

EVENTS - if you would like us to list your event that involves native flowers, please email us at engedmonton@gmail.com by the 20th of the previous month.

Wednesday, November 4 - The Edmonton Native Plant Society's 3rd Annual General Meeting - Because of COVID-19 restrictions, the AGM will be held via Zoom.
Agenda:
President's report - *Note: As we are unable to host a Volunteer Appreciation Evening this year due to COVID, the President's Report will be a slide show to take the place of the presentation usually shown on the year's activities on that evening.*
Financial Report
Ratification of bylaws
Nomination and Election of Board Members
If you would like to attend the above meeting via Zoom, you must register in advance for this meeting: https://us02web.zoom.us/meeting/register/tZwodO2trT4uHdVWefBBJyHn-CzgloeYtNlY
After registering, you will receive a confirmation email with instructions and links to the meeting. Please remember that you can attend through your personal computer, tablet, smartphone or by dialling-in on your telephone.
Please note also that *only members are able to vote on the Financial Report, make nominations, vote on the Slate of Nominees and the ratification of changes to the Bylaws.*

Time: 7:00 to 8:30 p.m.
Location: Zoom
Admission: Free

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

Council votes to tear down green to fabricate green - *Reprinted with permission from the October 22, 2020 newsletter of the North Saskatchewan River Valley Conservation Society.*

On Monday, City Council voted 7 to 6 to approve rezoning which allows Epcor to industrialize and clutter up Edmonton's river valley with 45,000 solar panels, to create a giant solar power plant.

Thank you to Councillors Cartmell, Dziadyk, Knack, McKeen, Nickel and Paquette who voted against it. Mayor Iveson and Councillors Banga, Caterina, Esslinger, Hamilton, Henderson and Walters voted for the proposal.

Graham Hicks summed it up best in a 2019 Edmonton Sun column stating, "All this, because council wanted Epcor to follow its The Way We Green environmental plan, that 10% of the power used in EPCOR's Edmonton operations (electricity distribution, water treatment, water/sewage infrastructure) be produced from local, renewable energy sources.

Our river valley's contemporary history is of the triumph of maintaining and developing pristine parkland over repeated attempts, by real estate developers, industry and organization to construct large facilities/buildings in the river valley. Why make an exception for a solar farm? Multiple bylaws and policies are in place to ensure the river valley stays as pristine as possible. Some exemptions exist. Century-old river valley neighbourhoods have grandfather rights. Some industrial facilities – water and sewage treatment plants – have to be close to the river.

Here's why Edmonton's city council should not allow Epcor's solar farm proposal:

1. The land in question was originally zoned to be river valley park for reasons still sound today … to stop further industrialization/development of the North Saskatchewan river valley.
2. The solar farm is totally unnecessary. The E.L. Smith Plant functions just fine on electricity now coming in on transmission wires. To meet sustainability "quotas", EPCOR could easily purchase "green energy" from providers like Bullfrog Power, or from Capital Power's Halkirk wind farm.
3. Why would city council willfully approve such industry in the river valley, with its visual pollution, in the guise of cleaning up atmospheric pollution? Sorry, but covering acres of parkland with solar panels constitutes an industrial use and would create an industrial look that's the antithesis of an urban wilderness park.
4. To approve this project is to tolerate the gradual, incremental intrusion of non-park uses into the river valley. If EPCOR can change the zoning, how about all the property developers holding river valley land upstream from the Henday Bridge, patiently waiting for the day they too can get zoning exemptions?

There's enough intrusion into the river valley as it is – golf courses, existing neighbourhoods, the Kinsmen Fieldhouse, the Convention Centre, water treatment facilities, transportation corridors and the spilling of downtown past the Chateau Lacombe into the downtown river valley."

If you feel the same as Hicks, remember Edmontonians get to express their feelings on this decision in October 2021 city elections. Until then, you can thank or criticize your Councillor and the Mayor by emailing them at council@edmonton.ca

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Grassy Mountain Mine Will Compromise Seriously the Welfare of Albertans *from an October 27 info email from the Alberta Wilderness Association.*

Today marked the beginning of the Joint Review Panel hearings into the Grassy Mountain Coal Project – an Australian company's plan for an open-pit strip mine in Alberta's Crowsnest Pass.

Alberta Wilderness Association, the Canadian Association of Physicians for the Environment, Extinction Rebellion, the Grassy Mountain Group, Livingstone Landowners Group, and Timberwolf Wilderness Society add their voices to oppose this venture. The Joint Review Panel must not approve this project. The Panel's decision will set an important precedent for the other foreign-owned coal mining companies that hope to strip mine Alberta's Eastern Slopes.

"Pursuant to the federal impact assessment law, the Joint Review Panel should find that the Grassy Mountain project will cause significant adverse environmental effects and that those effects are not justified in the circumstances," says Dr. Ian Urquhart, AWA Conservation Director. "As our experts will argue during the hearings, Benga Mining has severely understated the costs of this project and exaggerated the benefits."

Much of the mine's proposed footprint is located in one or more environmentally significant areas. *It will destroy species at risk such as Whitebark Pine and will destroy the critical habitat of threatened westslope cutthroat trout* – another species at risk. In addition, *the project poses unjustifiable risks to the air and water quality of those who live*

downstream and downwind of this project. It will *cause irreparable damage to the lands and waters* that are at the heart of Alberta's identity.

"Protecting these areas is a step toward protecting the health of Albertans. In order to protect the well-being of future generations of Albertans we must say no to coal today."
- Dr. Andrea Hull, Cdn Assn of Physicians for the Environment

"Approving this mine would be a step backwards for Alberta. We need to protect what part of the natural world we have left."
- Erica Guglielmin, Extinction Rebellion Calgary

"The Grassy Mountain Mine not only cannot be approved as designed, but no conceivable change in the mine plan would make it legal under the Species at Risk Act to either approve or to build."
- Dave Mayhood, Timberwolf Wilderness Society

For more information:
Dr. Ian Urquhart, Alberta Wilderness Association, (780) 937-4692
Dr. Andrea Hull, Canadian Association of Physicians for the Environment, (403) 561-7155
Erica Guglielmin, Extinction Rebellion Calgary, (403) 464-6129
Dave Mayhood, Timberwolf Wilderness Society, (403) 283-8865

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Smith Blackburn Homestead Conservation Land
Some good news! The Edmonton and Area Land Trust announced the public opening of Smith Blackburn Homestead, a 73-acre land parcel donated to the Trust in 2018 to honour the memory of Cec Blackburn. It is in the Beaver Hills UNESCO Biosphere Reserve. With close proximity to Elk Island National Park, the Cooking-Lake Blackfoot Recreation Area, and Beaverhill Lake, it is part of a close network of conserved areas in this region, which provide a large area of connected habitats, wildlife corridors, and stepping stones for wildlife, in a region that is otherwise highly fragmented.

The Smith Blackburn Homestead is an additional piece to this mosaic of natural areas that provides homes for breeding waterfowl and songbirds, large mammals, carnivores, and plays an important overall role in maintaining biodiversity in this region. Information at https://www.ealt.ca/smith-blackburn

Planning a Pollinator Bed by Cherry Dodd

It's the end of the season and I am looking at the successes, failures and challenges in my garden and making plans for next year. A lot of people are looking at supporting bees by adding a pollinator bed that includes native flowers, so here's a short outline of how to have a successful pollinator bed.

Start Small

Some people are dreaming big - out with the lawn! In with the vibrant flower-strewn meadow! However I encourage you to start small and dip a toe in the shallow water before diving into the deep end. A small perennial bed looks lovely and is easier to manage.

"What is there to manage?'" people ask. "Native plants are tough. Isn't it just a matter of putting in the plants, adding a layer of mulch to keep down the weeds and standing back. No fertilizer is needed and no watering either once the plants have settled in. It should be easy."

Yes, the planting is easy but even tough perennials have to be weeded and the worst weed in my yard is lawn grass. It creeps in everywhere, hides under plants and establishes itself with its roots firmly mixed together with the perennial's roots before I even see it. Even lawn edging does a poor job of keeping it out. So I make a "no grow" border strip around my bed that has a thick layer of mulch to keep annual weeds down.

The border strip has another benefit if your bed is in the front yard. It tells your neighbours that this flamboyant and showy patch of flowers is intentional and cared for. If you wanted to go a step further, you could add a small decorative fence and a colourful sign that says something like "This bed is for the bees."

Another invasive non-native grass is quack grass. It is easier to spot because the leaves are larger and taller. However it is very hard to get rid of because it forms a network of rhizomes under the soil. Every inch of rhizome will form another plant if it is cut or broken.

So it is important to have only flowers in your bed until it is established. That way you can spot the grass before it has a chance grow its root system. I find that it helps to prepare the bed and then leave it fallow for a month before

planting. That way you can spot and weed out any grass before you fill the bed.A pollinator bed can have both native and non-native plants, but it is the native flowers that will most attract the native bees.

Choosing Your Plants.

Most native plants are perennials which will grow well in a garden and look as lovely as traditional garden flowers. However before you pick, it's important to know their habits. I find their most endearing habit is their ability to constantly surprise me. For example, native flowers are very adaptable. Take Joe Pyeweed for example. In the wild it will only grow in damp peaty soil. In your garden it will happily adapt to regular soil and average moisture conditions. If it is a drought year, it will adapt by growing 3 feet tall rather than its usual height of 5 feet.

So feel free to experiment. If a plant isn't doing well you can always move it. Sometimes native plants will move themselves to new locations. And sometimes they appear quite a distance away from where they were originally planted. I'm not sure how they manage this - it's another surprise! I also enjoy the way the bed changes from week to week as new species start to bud and flower and then produce seed heads. Every week is different. The season starts in April with Prairie Crocus and tiny Prairie Buttercups and doesn't end till October with the sunflowers, asters and goldenrods. Some species such as Three-flowered Avens, and Meadow Blazingstar also have really attractive seed heads. But what I like best is the huge variety of bees and other insects visiting the flowers and the birds coming through in the fall to forage for seeds. Every time I walk out of my front door it's a different show.

Planting Your Bed.

When you plant, leave enough space between the plants. Most native species are used to filling up empty space. Some become larger clumps and some self-seed generously. This is another reason to start with a smaller bed. You get to decide if you want to divide the clumps in spring and weed out or pot up the seedlings and create space again, or if you want to go for the English cottage garden look and let them all mix and mingle. A few species such as Rhombic-leaved sunflowers or Golden Bean (Buffalo Bean) can be invasive and should not be planted unless you have lots of space for them. They are great on an acreage or as an alley planting.

Next month I will go into more detail about the various species, what flowers are available, where they should be planted in the bed, when they bloom, how they spread, if they are edible and what birds and insects they attract. Let me know what points you would like me to cover.

Extending an existing bed - lawn removal.

Ready for the plants to go in.

Plants established with a no grow zone between new plants and lawn edging.

Blue flowers in the middle are Slender Blue Beardtongue. Blue flowers behind them are Tall Lungwort.

These pics are from years ago in my garden when I still had lots of lawn.

Getting your wildflower bed ready for winter by Kate Wilson

Fall maintenance

Most of the wildflowers and grasses in our Edmonton native beds are perennials. They've evolved to survive harsh conditions by developing strong root systems. Grasses and many forbs also retain nutrients above ground through the winter, giving them value as forage for over-wintering grazers such as deer if you happen to live near a creek or ravine. Dead stalks are also important for native bees and other insects to burrow into, until spring.

Here are some fall maintenance basics to guarantee your perennials make it through winter while allowing wildlife their natural capacity to find food and shelter through to spring:

• Remove as many weeds as you can, including their roots and seed heads, before the seeds spread.

• Thin out the smaller volunteer natives that have sprouted. You can transplant them into pots for spring or fill in empty spaces.

• Cut off the top portion of the taller or more aggressive plants such as aster, giant hyssop and common tall sunflower. It allows the plant to focus on roots before the onset of winter. But leave 30 to 35 cm, as these dead stalks are important for overwintering pollinators. The seed heads don't have to be wasted though, as they can be left in a tray for wildlife and birds. Or collect them for sowing next season.

• Mulching with leaves or even the dead material you've cut back provides an extra layer of insulation and retains moisture.

• Don't forget to water. Perennials rely on strong roots to come up again in spring, and giving them a soak before freeze up gives them a boost before heading into dormancy.

• Plants that are in pots, even natives, need to be protected from extreme weather. A good option is protection with burlap, or put them into a sheltered space away from desiccating wind and exposure.

• Don't overdo it. Native plants, with their accompanying layer of debris and above-ground dead material, are a haven for hibernating pollinator insects and arthropods. Central Alberta is also home to the tiger salamander, which overwinters in spent plant material or in the ground, protected by plants.

With some attentive care, you can maintain your native bed's shelter and food storage capacity so important for overwintering fauna, while at the same time showing your neighbours you're not leaving it to grow wild and weedy.

The variety of textures and colours of native plants' dormant stage are beautiful against a snowy backdrop. Let them keep adding to the splendour of all our Edmonton seasons.

Top left and center: Giant hyssop stalks, among others, provide an invaluable overwinter haven for hibernating pollinators.
Top right: Green needle grass is one of several bunch grasses that offer wildlife a food source over winter.
Bottom left: Leave dead plant material, such as these artemesia stalks, as mulch and a seed source for overwintering mice and birds.

Seed heads that you cut from the main plants can be left on a tray or a log for overwintering mice and birds.
Mulching with leaves or dead plant material insulates native perennials from extreme temperatures and retains moisture.

A Retrospective on the Local Prairie Season by Patsy Cotterill

Nisku Prairie

Our first visit on the 24th April was more of a bird-watching visit as we gave up on a winter- bedraggled prairie and instead watched newly migrated water birds enjoy themselves on the extensively flooded Gwynne Channel alias Blackmud Creek. Generally, the Prairie remained very wet until July and we didn't manage any transplanting of native species into two small areas cleared of smooth brome until August and September. It was a good year for grasses and sedges, though, and plains rough fescue (*Festuca hallii*), sign of an undisturbed prairie, flowered in large numbers for the first time since 2016. Wet conditions unfortunately also favour the introduced forage grass, meadow foxtail (*Alopecurus pratensis*), which has become super invasive in the Prairie in the last decade or so. It is similar to but a bit taller than timothy, and the cylindrical heads are softer to the touch. I spent some time trying to beat it back with judicious use of a herbicide supplied by the Alberta Native Plant Council, co-stewards of the prairie. We did find that heavy dumps of hay, obtained by raking leaf litter at the beginning of June, put a crimp in its growth.

Left: Plains rough fescue, Nisku, 14 June, 2016.

Right: Meadow foxtail, Nisku, 25 June, 2020.

Interestingly, rather than the white-and-blue palette of northern bedstraw and slender blue beardtongue that paints the fields in mid-season, this year sunflowers, mainly rhombic-leaved (*Helianthus pauciflorus* subsp. *subrhomboideus*), but also some common tall sunflower (*H. nuttallii*), upstaged them and put on a magnificent show. The latter species would certainly have appreciated the extra moisture. Apparently, sunflowers did well in many places this year.

Sunflowers, Nisku, 8 August, 2020.

Nisku Prairie is always a good place to spot prairie rose, *Rosa arkansana*, 8 August, 2020.

Fort Saskatchewan Prairie

Our season in FSP turned out to be anything but routine when in May AltaLink went in and cleared a whole bunch of ground on the sandy knolls prior to installing three new pylons on the property (a right-of-way with two powerlines runs through the centre of the Prairie). It was eye-opening to see how quickly the vegetation regenerated with the summer moisture and heat, including the suckering of beaked hazelnut and chokecherry which had been cut back.Spreading dogbane (*Apocynum androsaemifolium*), which had become quite scarce in the Prairie, despite once forming extensive patches at the south end, suddenly appeared in numbers, only to be outnumbered by a conglomerate of other species later in the season. Not surprisingly, the non-native smooth brome and Kentucky bluegrass quickly re-established

themselves too. I urged the City of Fort Saskatchewan Parks to solicit reclamation dollars from AltaLink to combat the brome and other weedy species that would sprout from the seed bank on the denuded land, but they did not listen. Inspecting it late in the season they were satisfied that natural regeneration had taken place. They do not distinguish between natives and non-natives. Anything green is good! It will be interesting to see what sort of a plant community evolves next year; so far it looks as though the shrubs have a definite advantage.

One nice find this year at the south end of the Prairie was of specimens of clustered broomrape (*Aphyllon fasciculatum*), which lacks chlorophyll and is parasitic on prairie sage (*Artemisia frigida*). This occurrence would appear to be somewhat north of its usual range.

Revegetation was under way by 26 June.

Virtually complete cover by 17 July.

Clustered broomrape with prairie sage, 26 June.

We are always looking for volunteers for these two prairies, so if you aren't already on our list for these sites, please email us at engedmonton@gmail.com to express your interest, ready for next season.

Website of the Month

The Agroforestry and Woodlot Extension Society (AWES) is pleased to announced the launch of a Native Species Database, a search engine and species database developed to assist landowners and land managers with selecting appropriate native trees and shrubs for their Agroforestry projects in Alberta.

It will be useful for anyone looking to plant a native tree or shrub, as it provides plant and site characteristics along with a fairly comprehensive description.

www.awes-ab.ca/species

Recommended Reading

A couple of members have mentioned books they enjoyed reading:

from Pat Dunn: *The Nearsighted Naturalist* by Ann Zwinger.

from Kate Wilson: If you're looking for a great read about Edmonton's gardening and nature preservation history, and its champions, you have to sit down with *Why Grow Here - Essays on Edmonton's Gardening History* by Kathryn Chase Merrett. There's even a piece about the early days of ENPS. And it's well written. It's available at Edmonton Public Library, with 4 1/2 stars!

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 enpgmembership@gmail.com or visit one of our booths at plant events in your area.

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Cherry Dodd, editor
Judith Golub, publisher
www.edmontonnativeplantgroup.org

Dead and decaying logs are important in providing a substrate for mosses, liverworts (probably Peltigera neopolydactyla) and lichens - even some vascular plants like twinflower – to grow on, raised above the litter of the forest floor.