

Cornus canadensis, bunchberry, October 2021

From your editor:

Welcome to the Wildflower News for November. If you're still raking leaves, don't forget to pile them in an unobtrusive corner of your yard to provide winter shelter for ladybugs, certain butterflies that overwinter as adults, native bees, and other beneficial insects!

Check out Wayne Oakes' article to discover just how many different species of birds eat the berries of *Cornus sericea*, red-osier dogwood,

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Something Different

Native Plants in Local Gardens

From Patrick Kyle:

Helianthus pauciflorus, rhombic-leaved sunflower. Six rhizomes and shoots dug out of veg garden and potted up for spring.





WN: Nice to see the root system and dormant shoots.

From Manna Parseyan:

Plants setting seeds in my native plant garden in Edmonton. Photos October 16, 2021.

Gaillardia/blanketflower, *Gaillardia aristata*; great northern aster, *Canadanthus modestus*; Lindley's aster, *Symphyotrichum ciliolatum*; yellow evening primrose, *Oenothera biennis*; wild bergamot/native beebalm, *Monarda fistulosa*.



WN: Seed heads can be quite attractive too.

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

Monday, November 15 - What Is That Plant?? Join Karin Lindquist with Battle River Research Group and Kristyn Mayner with the Alberta Native Plant Council for a **free** informational webinar on plant identification and native plant species management in Alberta. Kristyn Mayner will be giving a presentation on the importance of native plants in Alberta and some of the resources that the ANPC provides.

Time: 6:30pm until 8:30pm on Zoom

Free Registration: https://gatewayresearchorganization.com/what-is-that-plant/? fbclid=IwAR0mfdBsbwXAGYoHtTL_GE85jCAXHL_Wyc3PI3_VCOCkWvMpQyVz90PaJU

Thursday, November 18 - Grassland Restoration Forum Fall Information Session. This one day Fall Information Session gathers a variety of industry and grassland stakeholders to exchange current information on grassland restoration and conservation through a variety of presentations and mini updates.

Time: 8:30 am - 3:30 pm

Cost: \$40 regular; \$20 student/agriculture

Registration: <u>https://grasslandrestorationforum.ca/events/our-perennial-gathering-grassland-restoration-forum-fall-information-session/</u>

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

Flora of Edmonton and Area iNaturalist project

With the ever-changing restrictions related to the pandemic, the Alberta Native Plant Council's Central Alberta Plant Study Group (Edmonton) will not be able to meet as a group anytime soon. In the meantime, to help fulfil your botanizing needs, the *Flora of Edmonton and Area iNaturalist Project* remains open. To participate:

1. Sign up to iNaturalist, if you haven't already - https://inaturalist.ca/.

2. Visit the "Flora of Edmonton and Area" project page: <u>https://inaturalist.ca/projects/winter-flora-of-edmonton-and-area</u> and join the project.

3. Upload / Add Observations to your profile. Visit "More Help" for any further guidance you need with iNaturalist.

4. Before saving your observations, link it to the project by typing the project name into the Projects tab.

5. Visit the project page to see added species by all participating members of the Central Alberta Plant Study Group, including yours.

6. Note, you cannot add observations directly to the "Flora of Edmonton and Area" project page. You need to add all observations under your own profile, and add the project name to link it to the project. Once you have joined this project (step 2.) you can easily navigate to it from "Community - Your Recent Projects" tabs.

Thank you for participating in this project.

A Plant For Every Reason, Part 1 Photographed, researched and written by Wayne Oakes, Edmonton

I have been observing, photographing and learning a lot about the various aspects of 'everything nature' along the maintained trails of Whitemud North within the Whitemud Ravine Nature Reserve over the past six years. This portion of Edmonton's river valley parkland areas has long been reported to have more animal, bird and plant species than anywhere else within this remaining wilderness corridor. The most likely number one factor is Whitemud Creek, the only remaining creek that flows freely through the city proper emptying directly into the North Saskatchewan River.

My experiences quickly taught me that it isn't any one or two features that make for a successful wildlife habitat, it is the sum of everything contained therein. Accordingly it is vitally important to document, research, understand and respect every element as each plays a key role in the survival and success of all forms of flora and fauna.

I have been asked to prepare an article, or two, speaking to my observations around the critical importance of our various plant species, many of which may not be well regarded or unfortunately are exploited. City of Edmonton's Parkland Bylaw 2202 provides some very good legal guidelines, protection and restrictions. This is an essential read for all travelling into the river valley areas. I'll address suggested enhancements later on.

Plants, whether native, introduced, even invasive, species perform an array of functions; they are the habitat. From the living to the dead and decaying, all interact with each other often in critically supportive roles: food, soil preservation, water retention, shade, and shelter. I'll focus on the food aspect directly relating to animals and birds.

Many plant's reproductive processes produce some form of berry, fruit, nut, or seed. There are other avenues, however, these four are the most openly observed. Pollinating insects rely on the blossoms for food which in turn enables a plant's reproductive processes to be successful. Occasionally various predators will feed on the pollinators.



L: Three different pollinators.

R: Crab Spider feeding on a pollinator.

Many of our summer-resident bird species and those already travelling through our area in the fall consume a wide range of berries, fruits, nuts and seeds to build strength and store energy reserves for their long journeys ahead, some migrating many thousands of kilometers. Others that come here for the winter are equally reliant on a good supply of these food items needed to successfully survive our cold, harsh winter season.

Red-osier Dogwood Berries are likely consumed by more species than all our fall food sources combined. Mice, Red Squirrel, Least Chipmunk, Coyotes, Woodpeckers, Juncos, Sparrows, American Robin, Pine Grosbeak, American Crow, Common Raven, Orange-crowned Warbler, Blue-headed Vireo, Philadelphia Vireo, Red-eyed Vireo, Western Tanager, and Cedar Waxwing to name a few that I personally have observed.

Unlike us, they cannot go to a store for their life giving foods. Vibrant and productive naturally occurring food sources from a wide range of plant sources are essential for a wide range of forest inhabitants throughout all four seasons of the year.

Let's begin with the Red-osier Dogwood, Cornus sericea ssp. sericea.









Pileated Woodpecker, female



Yellow-shafted Northern flicker, male



Hairy Woodpecker, female



Downy Woodpecker, female



Philadelphia Vireo



Red-eyed Vireo



Song Sparrow



Fox Sparrow, slate-colored



American Robin



Dark-eyed Junco, slate-colored



Pine Grosbeak, russet-morph female



Least Flycatcher



House Finch, male

Purple Finch, male



Least Chipmunk



White-throated Sparrow, white-morph



Western Tanager, female



Cedar Waxwing



Black-capped Chickadee



Orange-crowned Warbler, gray-headed



American Crow



Black-billed Magpie

Crabapples, Chokecherries, Beaked Hazelnuts, Fairybells, Red Elderberries, Highbush Cranberries, Prickly & Wood's Rosehips, Saskatoon Berries, Common & Western Snowberry, Star-flowered False Solomon's Seal and various Grass Seeds are additional foods commonly consumed by a variety of wildlife. While I do not have photographs of every creature feeding on every berry, fruit, nut and seed; I will do my best to cover as much as I can in future articles.

Now, please take a moment to consider what needs to be done to protect this critically important aspect of any and all areas such as our river valley parklands. As mentioned above Bylaw 2202 provides a number of provisions intended to offer some aspects of protection. There is one area in particular that I feel needs to be strengthened; a provision to ensure all of the critical food sources are left untouched. I have, and I encourage everyone to reach out to Edmonton City Council addressing the need for a simple amendment; the addition of a few words displayed below, <u>underlined in blue</u>.

CITY OF EDMONTON BYLAW 2202 PARKLAND BYLAW

PRESERVATION OF NATURAL AREAS

Section 8

While on Parkland no person shall:

- (a) enter into any undeveloped or natural area other than on an Improved Trail or an Unimproved Trail;
- (b) remove any rock, gravel, sand or soil;
- (c) move, remove, cut or damage any tree, shrub, flower, berry, fruit, nut or seed, other plant or deadfall; or
- (d) possess a chain saw or machete.

A Willow called Autumn - by Patsy Cotterill. Photos by author unless otherwise noted.

Ever noticed what look like cotton balls stuck in otherwise leafless shrubs when driving country roads, especially those bordering peaty swamps, in October and November? If so, you are almost certainly witnessing autumn willow, *Salix serissima*. It stands out as the only willow to have conspicuous fruits still left on the plant at this time of year. Its Latin name, *serissima*, comes from the Latin word for "late," *sera*, and means "very late." This willow flowers in June, about the same time as its leaves are expanding, the latest to flower of all the 42 willow (*Salix*) species that occur in Alberta (about 19 in our area). The rest bloom variously in April through to late May according to species; the fruits develop throughout the early summer and are usually gone or withered by fall. However, in autumn willow the fruits are ripe for dispersal in autumn and some remain on the shrub for most of the winter.



Left: Tall shrub of autumn willow at the edge of a wetland in Wagner Natural Area, 2005.10.08

Right: Fruiting catkins of autumn willow in Clifford E. Lee Nature Sanctuary, 2021.10.26. Photo: Manna Parseyan The white cotton effect derives from the cluster of seeds that stick together in a ball as they emerge from the splitting capsules; each minute seed is equipped with a tuft of dense, bright-white hairs. All willows have seeds similarly equipped, the hair tufts designed to promote wind dispersal, although if the seeds become wet they may never be dispersed and may simply wither and fall off the plant on the catkin. Male (staminate) and female (pistillate) flowers are borne on separate plants. In both sexes the flowers are tiny, numerous and crowded into elongate clusters called catkins, each flower in the angle of a bract along with one or more tiny nectaries at its base which serve to attract pollinators.

The staminate catkins of autumn willow bear flowers each with 3-9 stamens in the axil of a very hairy bract, the whole catkin becoming an exuberant spike of yellow when the anthers open from the bottom up and begin shedding pollen (anthesis). The capsules on the pistillate catkins are 7-9 mm long, hairless, and at maturity a glossy orangey-red.

The smallest branches are reddish and highly glossy with leaves that are elliptic to narrowly elliptic in shape, narrowed to a pointed tip, and 5-9 cm long. They are leathery in texture, dark green and glossy above, paler green below, and have gland-tipped teeth along their edges. The base of the leaf blades has tiny glands at their edges.





Left: Developing capsules on female autumn willow; Wagner Natural Area, 2009.06.28

Right: Herbarium specimen of male autumn willow; Wagner Natural Area, collected 1990.06.22

Autumn willow has a preference for soils of high pH (calcium-rich) as well as organic soils. It can be seen in the shrubby hollows between sand dunes in the Devon Dune area, where peat accumulates, for example. It was once evident along the ditches of 199 Street in Edmonton bordering the treed fen of the McDonagh peatland before it was destroyed for development. However, it never seems to form dense patches and its occurrence is listed as "occasional" in the *Flora of Alberta*. One would expect it to be common in Wagner Natural Area's fens and a few plants are known from there, but it seems to have declined in numbers: shrubs that could be seen from the Marl Pond Trail no longer exist. It occurs in Clifford E. Lee Nature Sanctuary, in marshy ground bordering open water, although I fear some specimens have been lost during the flooding that occurred last year.

ENPS members have not to my knowledge attempted to cultivate autumn willow, although it would be worth trying, to supply acreage owners with peaty areas, for example, or to repopulate Wagner Natural Area. The shrubs are very attractive when the capsules are ripening, and the "cotton ball" effect in fall and winter is a distinctive feature. The seeds of most willows germinate immediately in appropriate conditions of moisture and temperature, but those of autumn willow are reported to go dormant and germinate, or can be planted for germination, the following spring.

The staminate catkins of willows fall off the plant once the pollen is spent or dispersed, but the developing fruits of the pistillate ones remain for variable times throughout the summer, providing a valuable aid in identification. Male autumn willow shrubs and females without ripe fruits are most likely to be confused with *Salix lasiandra* var. *caudata,* whiplash willow, to which the species is related and a commoner species locally. However, this species which, unlike autumn willow, can reach tree proportions, is more likely to be found along shores of creeks and rivers than in peaty swamps. Its leaves are longer and narrower at 6-15 cm long, and drawn out to a long, slender point. Its capsules are longer, 7-9 mm long, and tiny appendages at the base of the leaf stalk called stipules are somewhat leaf-like, the shape of an egg cut in half, and glandular.

At Clifford E. Lee, a female autumn willow grows in close proximity to a female velvet-fruited willow, *Salix maccalliana,* conveniently accessible along the boardwalk. With similar, leathery leaves and reddish stems, the two could easily be confused when lacking flowers, but when autumn willow exists in full "cotton-ball" fruit on short, rounded catkins at this time of year, the longer, slender fruiting catkins of the *maccalliana* are withered on the shrub or have fallen off, a valuable clue. Our willows certainly present plenty of opportunity for detective work in the field, and with careful continued (lest one forget) attention, it is possible to identify many of them in fall and winter, adding lots of botanical interest to off-season field trips!



Autumn willow with ripening (but not dehiscing) fruiting catkins. Marsh on Enoch Reserve, West Edmonton. 2020.08.14.

References:

Flora of North America. Vol. 7. Page 45. *Salix serissima.* http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242445867

Kershaw, Linda and Lorna Allen. 2020. Vascular Flora of Alberta: An Illustrated Guide. Self- published. Kindle Direct Publishing.

Moss, E.H. Flora of Alberta. 1983. 2d edition, edited by J.G. Packer. Toronto, University of Toronto Press.

A Backyard of Wonder by Liz DeLeeuw. Photos by author.

I had a live meeting with some people in the early part of 2020 in the pre COVID era. Lynn, her family, and a family friend wanted a landscape plan of a backyard garden that was mostly comprised of native wildflowers, grasses, and shrubs. A couple of them were selling their houses, and moving to a new addition to form an extended family dwelling on one property. The backyard would be a clean slate due to the construction of the addition.

COVID struck. Like everyone we were hit with restrictions, and fear of a virus which at that time was not well understood. It was then that I had my first virtual design meeting ever. We gathered online a few times, and looked at photos of my notes and

drawings. Luckily we had someone who understood how to share screens and the like. Online we determined the hardscape of the yard and eventually got the garden plan on paper. Some non-native plants were also a part of the plan but it was mostly comprised of native plants.

It was late August by the time the yard was ready for preparation and planting. It was early September when we planted the bulk of it. Because of some inevitable changes to the tree and shrub installation, the plant placement differed somewhat from the final drawing. This often happens in construction and in formal settings an "as built" drawing is done after the construction to reflect changes. (With native plants you could do such a drawing every year as they tend to move around a bit.)

The plants were placed using the final drawing as a general guide. This worked well as we had enough plants for the area. The locations just changed somewhat. I should mention that all of the wildflowers and grasses were purchased from the ENPS. Some non-native perennials were added in places.



Above: Detail from design drawing.

In the spring I had a quick meeting with Lynn and her daughter and they chose some more plants to fill in some sections of the garden. It was decided that mulch was not going to be used so there was some weeding to be done this growing season. The object was to let the plants fill in. The garden progressed through the summer and now in late September a full year has passed.

Here are comments from Lynn on the garden this summer:

"I think we would add that our garden is a source of great satisfaction and constant change. We walk through it often to see what is new and have made the garden our favourite meeting place. Favourite plants are blue flax, sedge grass, blue star grass, tall purple aster, three flower avens and blanket grass. Actually we just love them all!!"

Note: This is how common names are born as people bond with plants in their own way, and many common names apply to each species. My best guess is Wild blue flax, Blue-eyed grass, Lindley's aster perhaps, Blanket flower perhaps. The sedge was unidentified, and I believe it spread by rhizomes.

All in all the project was a success. It will be interesting to see the progress next year. According to Lynn they weeded well in the spring when the weeds were tiny. After that the weeding was very manageable for the rest of the season.



The grass area with rocky mountain fescue, *Festuca saximontana*, June grass, *Koeleria macrantha*, poverty oat grass, *Danthonia spicata*, some small bunch sedges, *Carex* spp., smooth fleabane, *Erigeron glabellus*, Richardson's alumroot, *Heuchera richardsonii*, and early blue violet, *Viola adunca* in between the stepping stones.



Pink pussytoes, *Antennaria rosea;* small-leaved everlasting, *Antennaria parviflora;* possibly field pussytoes, *Antennaria neglecta;* three-flowered avens, *Geum triflorum,* to the right; pink windflower, *Anemone multifida,* to the left.



Lindley's aster, *Symphyotrichum ciliolatum*, giant hyssop, *Agastache foeniculum*, veiny meadowrue, *Thalictrum venulosum*, rhizimatous sedge, *Carex* spp., wild blue flax, *Linum lewisi*i, blanketflower, *Gaillardia aristata* with non-native veggies and perennials in background.

Website of the Month:

Native Wildflowers at Bunchberry Meadows; A Feast for Your Eyes and Inspiration for Your Garden

A terrific article by ENPS member Natasha Stairs in the most recent Edmonton Horticulture Society's newsletter, *Gardener's Gate.*

https://edmontonhort.com/wp-content/uploads/2021/10/2021-Fall-Gardeners-Gate.pdf. Page 9.

Something Different:

Nature Alberta invites you to their very first <u>Nature Alberta Chit Chat</u> Zoom presentation on **Tuesday, November 9**. Meeting opens at 7 p.m. and begins at 7:15 p.m. Six speakers will present in a PechaKucha storytelling style.

Storytellers include: Steph Weizenbach, Nature Alberta Geoff Holroyd, Beaverhill Bird Observatory Dave Ealey, Wagner Natural Area Society Martin Osis, Alberta Mycological Society Laureen Fie, Boreal Avian Research & Conservation Association John Acorn, Nature Alberta Patron

For more information and to sign up to instantly receive access to this free event, visit: <u>https://naturealberta.ca/</u><u>nature-alberta-chit-chat/</u>

What in the world is a PechaKucha? It's a fast-paced presentation format featuring 20 images for 20 seconds each. In other words, you have 400 seconds to tell your story!

Where solar energy is a conservation loss

This title begins a 5-page article in the Summer 2021 edition of the Alberta Wilderness Association Journal. The AWA Journal article highlights the work of the Edmonton River Valley Conservation Coalition which filed for judicial review of City Council's October 2020 decision. The judicial review of Council's decision will occur November 19.

The grounds for the case arise from a June 2019 Council motion. The first part of that motion required additional engagement activities with the Enoch Cree First Nation. The second part of the motion is the focus of the judicial review application.

It asked for the "work and reporting necessary to allow Council to fully consider whether the location within the River Valley should be deemed essential by Council." The Coalition thinks Council simply ignored the findings of the work and never did what the motion required, deeming that the project was essential in its river valley location.

Read the article, beginning on **page 18**, at <u>https://albertawilderness.ca/wp-content/uploads/2021/09/Advocate-Summer-2021-Web.pdf</u>

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

Please send compliments, concerns and complaints to <u>engedmonton@gmail.com</u>. To unsubscribe, or subscribe, email <u>engedmonton@gmail.com</u>

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



Alaskan birch, *Betula neoalaskana*; Woods' rose, *Rosa woodsii*; bunchberry, *Cornus canadensis;* fireweed, *Chamaenerion angustifolium*. Photos by Manna Parseyan.