



WILDFLOWER NEWS

'Growing Nature's Garden'

Welcome to the February Wildflower News!

In this issue:

Events

- **Feb 2:** World Wetlands Symposium
- **Feb 9:** Emerging Landscape Novelty
- **Feb 16:** Re-introducing fire as a process
- **Feb 23:** Prescribed fire and adapting for resilient futures
- **Feb 27:** Lessons from a botanic garden

News

- Jasper National Park Buys Out Tonquin Valley Leases to Help Caribou Survive
- Black Knot: What is it and Why do we Care?

Member feedback

Website of the Month

Remembering Summer

Articles

- Gibbons Prairie Snowmobile Report
- Easy to Grow Wildflowers
- Different Methods for Stratifying Native Seeds

February is the month when I just want to grow something. I just want to get my hands back in some soil. I think a lot of people feel this way. Fortunately we can start in a small way. This month is a great time to stratify seeds that need this treatment.



Blue grama grass, *Bouteloua gracilis* seed heads. Photo by Brenda Bohmer

Events

February 2 – World Wetlands Symposium 2023

Place: Ross Glen Hall, Mount Royal University Campus, Calgary.
4825 Mount Royal Gate SW

Time: 8:30 am - 4:00 pm

Cost: Free.

[Click here to register](#)

February 27 - Lessons from a Botanic Garden. How the aims of botanic gardens align with ENPS - Patsy Cotterill

Place: Online on Zoom

Time: 7-8:30 pm

Cost: Free.

[Click here to register](#)

Columbia Mountains Institute CRED Talks

February 9 – Emerging Landscape Novelty

Place: Online on Zoom

Time: 1:00 -2:00 pm MST (12pm PST)

Cost: Free

February 16 – Re-introducing fire as a process: Restoring disrupted fire regimes across landscapes

Place: Online on Zoom

Time: 1:00 -2:00 pm MST (12pm PST)

Cost: Free

February 23 – Prescribed fire and adapting for resilient futures

Place: Online on Zoom

Time: 1:00 -2:00 pm MST (12pm PST)

Cost: Free

[Click here for CRED Talks descriptions and registration information](#)

Events in March:

March 2 – CRED Talk: Cultural Burning

Place: Online on Zoom

Time: 1:00 -2:00 pm MST (12pm PST)

Cost: Free

[Click here to register](#)

March 18 – Seedy Saturday organized by the Sakaw Community Gardens

Place: Sakaw Elementary School at
5730 11a Avenue NW

Time: 1:00 - 3:00 pm

Cost: Free

March 26 – Edmonton Seedy Sunday

Place: Alberta Avenue Hall, 9210 118 Ave NW

Time: Details to come

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

Member Feedback

"I see, in your January newsletter, that you are looking for feedback and things people are interested in seeing more of.

I thoroughly enjoyed the pieces by Wayne Oakes, and if he is willing to write more, I would certainly enjoy reading more.

Thank you for all that you do. It is very important work." — Karen Kvill

WF News: Thank you for your feedback and your great suggestion - we'll reach out to Wayne about writing for a future issues of Wildflower News!

News

Jasper National Park Buys Out Tonquin Valley Leases to Help Caribou Survive

from Alberta Wilderness Association

[Full article here](#)

Black Knot: What is it and why do we care?

by Edmonton & Area Land Trust

[Full article here](#)

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

Website of the Month

This month's featured webpage is the Alberta Native Plant Council (ANPC)
<https://anpc.ab.ca/>

The Alberta Native Plant Council is a provincial organization. Their website is full of information about conservation, various native plants, and native seed and plant sources throughout Alberta.

This year's ANPC annual workshop will be on April 22nd and is titled, *How Plants Inspire Us*. It will be held at Cattail Crossing Golf and Winter Club in Sturgeon County, close to Edmonton. Registration is open if you want to sign up. Find out more at <https://anpc.ab.ca/>

Remembering Summer

Three wetland species from Lois Hole Provincial Park



From left to right: Skullcap, *Scutellaria galericulata* - used as a sleep aid; water parsnip, *Sium suave* - very poisonous; speedwell, *Veronica americana* - a tiny plant - flowers range in colour from pale blue to bright blue. Lois Hole Provincial Park, Summer 2022. Photos by Kathleen Mpulubusi

Scroll down to read this month's
articles!



Articles

Gibbons Prairie Snowmobile Report

by Kathleen Mpulubusi

In the winter, the Sturgeon River becomes a highway for snowmobiles through the Town of Gibbons. Unfortunately, the snow-covered slopes of the Badlands Prairie area on the west bank of the river are irresistible to the snowmobile and off-road crowd. It's easy to go up the bank from the river and roar up and down the hills, over the rock exposures and exposing the soil and cryptogamic crust that protects the slopes from erosion. The area is fenced along Highway 28 but there is nothing along the river bank. This is not a new problem - I have photos from 2019 documenting the activity. But, this is the worst I have personally seen. I am heartsick seeing this desecration of a special gem of an area.

ENPS has emailed the Town Manager, Farrell O'Malley, about our concerns. He has replied that the Town By-Law Enforcement will be monitoring the situation. We would like to see stronger, specific signage (i.e. Protected Area - No Off-Road Vehicles Allowed) along the top and the river bank to alert users. We hope we can have a continued conversation with the Town of Gibbons to look at ways to protect this unique area.



Gibbons prairie, Summer 2022. Photo by Kathleen Mpulubusi



Snowmobile damage at Gibbons prairie. Photo by Kathleen Mpulubusi

Three Easy to Grow Wildflowers - Wild Bergamot, Slender Blue Beardtongue and Golden-aster. Plus One Challenging Plant - Purple Prairie Clover

By Cherry Dodd

This month's easy to grow flowers are all perennials like most native plants. In your garden, they will be small plants the first year because they like to establish a strong root system before they put energy into top growth. In their second year they put on a nice growth spurt and flower. They are easy to grow from seed, but hard to find as plants for sale. However ENPS will be selling both seeds and plants this spring.

Wild Bergamot, *Monarda fistulosa*

Wild bergamot is a member of the mint family, but it will not spread like mint. However, like mint it prefers damp soil. Like many native species, it has several common names. Monarda and beebalm are among those most often used. This plant has spectacular showy, pink flowers that attract hummingbirds as well as butterflies and native bumblebees. They love the abundant tubular florets that make up each flower.

This is a bushy, medium-tall plant that adds more flowering stems each year. When the plant gets too big for its location, it is easy to divide it in spring, using a spade. This species is not for sale at garden centres, even though it appears to be at first glance. If you look closely at the label you will see that the plant for sale is actually *Monarda didyma*, a different species native to eastern Canada.



Wild bergamot, *Monarda fistulosa*.
Photo by Liz DeLeeuw



Close-up of wild bergamot, *Monarda fistulosa*. Photo by Liz DeLeeuw



Slender blue beardtongue, *Penstemon procerus*. Photo by Cherry Dodd

Advantages of Wild Bergamot

- This is a sturdy, showy plant.
- The flowers and leaves are edible and make a great tea that is supposed to have a calming and relaxing effect. Even the dry seed heads have a wonderful scent.
- It does self-seed, but it is not an abundant spreader. It is very easy to grow from seed and easy to transplant.
- It is happy in sun or semi-shade and can adapt to most soils including heavy clay. It prefers damp soil, but will grow well with normal garden moisture. It has a deep fibrous root system which helps it adapt to drought conditions.

Disadvantages of Wild Bergamot

- The seeds have a low germination rate. Plant twice as many as you think you will need. It has a fairly short bloom time, but the seed heads are attractive.
- Wild bergamot is sometimes affected with powdery mildew. You can prevent this by spraying a mixture of baking soda and water on the leaves every week. Use 1 tablespoonful of baking soda to one gallon (American) of water. Add half a teaspoon of non-detergent dishwashing soap and mix well and pour into a spray bottle to use.

Fascinating Facts

- Wild bergamot has this common name because the scent of the flowers and leaves is very similar to the scent of the citrus bergamot used to flavour Earl Grey Tea.
- Wild bergamot has antimicrobial properties and can be used as a tea for colds, fever, sore throats and coughs. It can also be used as a wash to help heal wounds. It has many more medicinal uses.

Nuts and Bolts

Height - 50 - 70 cm

Distance between plants - 50 - 60 cm

Bloom time - July, August

Growing Conditions - Most soils, sun or semi-shade, damp to normal moisture conditions

Seed collection time - September, October. It is hard to tell when the seeds are ready, even when the seed head is beige or brown, and dry. When they are ripe, the seeds will fall out of the tiny holes in the top of the seed head, so just tip the seed head over onto your hand and see if any tiny black dots appear on your palm.

Growing from seed - The seeds can be planted in spring in a nursery plot outdoors or started inside using a commercial seeding mix. Make sure the seeds are covered lightly.

Slender Blue Beardtongue, *Penstemon procerus*

This is one of my favourite flowers. It is a short, spring-blooming plant and the blooms come in an array of shades of blue, purple and even pink on occasion. The leaves are small and sparse, so the flower spikes stand out even though they are also quite small.

It is a pioneer species, the first to spring up on disturbed land if there happens to be a seed bank in the soil. After the trees at Little Mountain Natural Area were destroyed, hundreds of slender blue beardtongue plants appeared, as if out of nowhere. It was a while before the site was cleared and houses built, so we were able to get permission to collect seeds and plants for a couple of years.

At Nisku Prairie the slender blue beardtongue plants mix and bloom with three-flowered avens and create a wonderful show every year.



Slender blue beardtongue, *Penstemon procerus*. Photo by Liz DeLeeuw



Golden-aster, *Heterotheca villosa* bed at Old Man Creek Nursery. Photo by Cherry Dodd



Golden-aster, *Heterotheca villosa*. Photo by Liz DeLeeuw

Advantages of slender blue beardtongue

- The flowers and foliage don't take up a lot of space and look wonderful mixed with other spring bloomers such as three-flowered avens and early blue violet, or heart-leaved alexanders.

Disadvantages

- It is fairly short-lived as a mature plant, however it self-seeds abundantly, so you will always have plenty of replacement plants. The seedlings are small and are easy to transplant, give away or weed out.

Fascinating Facts

- You will be entertained watching bumble bees hanging upside down on a flower much smaller than they are so they can reach the nectar inside.

Nuts and Bolts

Height -25-45 cm.

Distance between plants - 30 cm

Bloom time - May, June

Growing conditions - Regular moisture conditions and sun or semi-shade. These plants look great as a mass planting, or mixed with other early blooming perennials. They can be planted in most soils, even heavy clay.

Seed collection time - August, September, October

Seed collecting - In fall the flower stem becomes the seed stem with tiny pouches along the length of the stem. When the stem is brown and dry the seeds should be ready, but do the hand test to make sure. The seeds are like dust so you might not see them at first. Sometimes it is easier to shake the seed head onto a white sheet of paper.

Growing from seed - If you are growing from seed, this is a species that needs stratification. The seeds are as fine as dust, so it is easy to sow too many. To stratify the seeds, mix a tiny pinch of seeds with a small amount of fine sand and an equal amount of damp seed starter mix. Put this mixture into a small plastic bag, seal and put in the fridge for 6 weeks. Check every week that the mixture is not drying out and the seeds are not sprouting prematurely. After 6 weeks spread the mixture very thinly onto the surface of a pot filled with seed starter mix. Don't add more seed starter, just press the seed mix down a little.

For more information on the stratification process check out Liz DeLeeuw's article on stratification methods.

Golden-aster, *Heterotheca villosa*

Golden-aster (also called hairy golden-aster) has a hyphen in its name for a reason. It is not really an aster. True asters have blue, purple or white flowers, never yellow. This is just another example of confusing common names.

This small plant with its sunshine yellow flowers and soft grey-green leaves is another pioneer species. Several years ago, the University of Alberta spread a diverse mix of native seeds on the bare sand of the slope that borders the parking lot at Bunchberry Meadows. The seeds were spread in the fall and the next year only the golden-asters appeared. Several flowered even though they were first year plants. Now, four years later, there is a healthy population of golden-aster scattered across the slope.



Golden-aster, *Heterotheca villosa*, colonizing a bare slope at Astotin ex-natural area. Photo by Cherry Dodd

Advantages of golden-aster

- This species is very drought-tolerant and will happily cover a bare, hot, sunny and dry slope where other plants refuse to grow. The leaf colour is a clue. Plants with grey-green foliage are usually drought-tolerant.

Disadvantages of golden-aster

- It must have full sun and a well-drained soil. Like most pioneer species it self-seeds readily. However it is very easy to transplant, give away, or weed out unwanted seedlings.

Fascinating Facts

- Golden-aster has the unusual habit of sprawling on the ground, so it acts and looks like a ground cover, especially when several plants grow together. The foliage shades the soil and creates conditions for other species to germinate and thrive. Golden-aster is one of the few species that often bloom the first year.

Nuts and Bolts

Height - 15-40 cm

Distance between plants - 30-40 cm

Bloom time - July, August

Growing conditions - Golden-aster only grows in sand in the wild, but it will adapt to most soils in your garden so long as they are well-drained. It does need sun.

Seed collection time - August, September. Golden-aster has fluffy seeds that are easy to see. They are ready when they detach easily from the seed head.

Growing from seed - Each seed is attached to a white fluff. You do not have to remove the fluff. They have a high germination rate and the seedlings grow fairly quickly. They can be planted in spring in a nursery plot outdoors or started inside using a commercial seeding mix. Make sure the seeds are covered.



Purple prairie clover, *Dalea purpurea*. Photo by Liz DeLeeuw

Purple prairie clover, *Dalea purpurea*. So beautiful and so challenging

I love purple prairie clover. The plants are medium height and have fine textured foliage and narrow spikes of vivid pink flowers.

The Edmonton Native Plant Society's restoration plot at Bunchberry Meadows has everything that this species needs - steep well-drained slopes, sandy soil and lots of sun. However, less than 10 per cent of the seedlings that I planted there have survived, and they grew so slowly that they took 3 to 4 years to bloom.

The ones that did best were planted on the wetland side of the plot at the top of a very steep bank. These plants grew faster, were taller and bloomed the second year. So what was the difference in ecosystems that helped the plants grow faster and establish better on the wetland side?

The wetland side of the plot used to be part of a cattle watering hole so the sand is very fertile. It also has more organic matter in the form of peat. This should not matter to this species. It is a legume, so in theory the plant creates its own nitrogen fertilizer. However if this ecosystem has lost the beneficial microorganisms that purple prairie plants rely on, then the added plant nutrients would help.



Purple prairie clover, *Dalea purpurea* close-up. Photo by Liz DeLeeuw



Purple prairie clover, *Dalea purpurea*.
Photo by Liz DeLeeuw

However, here is another theory. Purple prairie clover plants have huge root systems, sometimes up to 2 meters deep. It takes them a while to grow such a sturdy base, which might explain the slow top growth.

Maybe the seedlings on the fertile wetland side felt no need to grow an oversized root system, and focused on top growth instead? In this case the tiny sparse plants on the sandy prairie side would actually be stronger than the lush wetland ones, and they would have more chance of surviving a prolonged drought.

If you would like to take on the challenge of growing this vibrant flower you will need a south-facing sunny slope, and sandy soil. Add some gravel and a good amount of compost to the planting hole.

Sowing from seed - These seeds have a tough seed coat that will have to be roughed up a little to allow water to penetrate. Rub the seeds between some sandpaper. This process is called scarification. Then the seeds need to be stratified. Pop the seeds into a small plastic bag with a small amount of damp sand and a tiny amount of seed starting mix. Put the bag into your fridge for 6 weeks or longer to stratify the seeds. Once the time is up, use the same ratio of sand to potting mix and plant the seeds. If it is still early in the season, before the middle of April, the seedlings will need to be under a grow light once they emerge.

Different methods for stratifying native seeds

By Liz DeLeeuw

Native plant seeds have different requirements for achieving germination. The Edmonton Native Plant Society has learned through experience and research about which seeds will grow without stratification. This is noted on the seed packages that we sell.

Success in germination depends on things such as the age and viability of the seed, the stratification (if needed), the planting methods, the amount of moisture, the amount of available light, the temperature, and likely many more factors. Many native forbs, sedges, and some grasses, require stratification for germination. Stratification inside or outside provides the seeds with the conditions of cold and moisture that signals they can start the germination process. A few species like blue-eyed grass are more particular and may need a warm moist period as well.

Methods of stratification:

Fall Dormant Seeding - Sow seeds directly into the garden in the fall. The seeds will naturally be stratified as the spring comes. If you do plant directly into the garden be sure to mark the planting area well. Also be sure to know what the seedlings will look like, and be ready to protect the seedlings from weeds. This method does not have the best results.

Fall/Winter Dormant Seeding - We recommend that you sow your seeds into pots filled with potting soil or mix in the fall. Alternatively, you can do the sowing in around February. In either case make sure the pots are outside covered by snow in the winter, and are in a spot that will thaw evenly in the spring (no excessive sunlight). Make sure the pots are kept moist after the snow is gone. The seedlings will not have to compete with garden weeds, and can grow in the pot until they are ready to be put into the garden. Many native plants spend the first season developing their root structure so the plants generally do not get that large very quickly.

Cold Dry Stratification - You can put the seeds into the fridge for six weeks before planting them into pots indoors. This is a simple cold stratification and we have found this is a technique that works for many native plants. With this method you can plant seeds directly into their own pots. Growing tips are included in the description of the next method.

Cold Moist Stratification - To optimize results, and to mimic natural conditions more closely, use a mix of potting soil, sand, and/or peat moss with added moisture. My method is to mix equal portions of sand and peat moss. Use five parts of that mixture to approximately 1 part of seed. Mix the seed in well and place in a baggie. Add just enough water to dampen the mix. Do not over moisten it. You can use more of the sand/peat moss mix if you would like more spacing between the seedlings when they come up. Place the baggie in the fridge for six weeks. Check it every few days to see if the seeds have sprouted - if they have, it is time to pot them up.

When the six weeks are past spread the mixture on top of pots filled with a growing medium (seedling mix) that does not have soil in it. This helps prevent the seedlings “damping off” which is a fungal disease that causes the stem and the roots of the seedlings to rot. Cover them lightly according to seed size if necessary. Place the pot where it gets light either from a window or grow light. Keep it moist, but not wet until the seeds germinate.

Some growers run a fan occasionally to create a breeze which helps to strengthen the stems and help to prevent rot. I run a fan with a timer. With this method you will get a pot with a lot of seedlings in it.



Seedlings. Photo by Liz DeLeeuw

Next month in the Wildflower News: More easy to grow wildflowers, and information on starting seeds inside

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. Purchase by email: enpsmembership@gmail.com or visit one of our booths at plant events in your area.

ENPS members are also eligible for a free Lifetime Membership with Nature Alberta.

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www.edmontonnativeplantsociety.ca/



Bunchberry Meadows, Winter 2022. Photo by Liz DeLeeuw