

WILDFLOWER NEWS "Growing Nature's Garden"

From your editor:

In this issue, Cherry Dodd provides the first instalment of the restoration project that the Edmonton Native Plant Society is carrying out at Bunchberry Meadows Conservation Area. She does it in the form of a diary of work done by herself and other volunteers for the first three months of the 2023 season (April through June). Cherry's diary serves as a series of snapshots of the challenges, tribulations, surprises and



Season of mists and mellow fruitfulness... Chokecherry (*Prunus virginiana*) at Fort Saskatchewan Prairie, 2023-08-21. Photo P. Cotterill

satisfactions of creating and maintaining native plant gardens in the middle of a nature reserve! The plots provide additional floral diversity to the landscape, and serve as food for pollinators and other wildlife! (See pages 6-10.) The remainder of the 2023 Bunchberry Meadows season will be covered in a fall newsletter.

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Reports: ENPS Guided Walks and Plant Sale

Fort Saskatchewan Prairie Walk

Mostly local residents and Friends of Fort Saskatchewan Prairie braved the heat to tour Fort Saskatchewan Prairie on August 13, which was still very green after the recent rains.

Oleskiw River Valley Park Walk

Text and photos by Patsy Cotterill

We met on the Fort Edmonton footbridge on the evening of August 15, with the threat of rain perfect for the activities of the latest hatch of mosquitoes!

Our first action was to compare the leaves of wild sarsaparilla (*Aralia nudicaulis*) with poison ivy (*Toxicodendron radicans*) in specimens growing together along a mountain bike trail. Distinction could be of practical importance!

We spent a little time photographing a vine scrambling over woody vegetation along the asphalt trail to Oleskiw Meadow, paralleling the river. This year hedge bindweed (*Calystegia sepium*) seems abundant, whereas for the last couple of years it has been rather scarce. According to Canadensys Vascan the subspecies



The vine, hedge bindweed (*Calystegia sepium*) in the Convolvulaceae, Oleskiw River Valley, 2023-08-12.

angulata is native across Canada including Alberta, but there is also Wild sarsaparilla (*Aralia nudicaulis*), Wolf Willow, 2023-08-12. A very common woodland understory plant that can form extensive ground cover. Note the mostly five leaflets per leaf division, in a compound leaf consisting of three divisions. Leaflets are ovate, with pointed tips and fine teeth.

a non-native subspecies, *sepium*, introduced into B.C. and Nova Scotia and "doubtfully" present in this province. Given this population's occurrence in disturbed habitats (this area was once farmed) I have my suspicions: I think the Oleskiw population could be the introduced, invasive subspecies *sepium*, which I know as a problematic garden weed in the U.K. Perhaps

we can discover its subspecific status now that the *Flora of North America* edition containing the morning glory family, Convolvulaceae, has been published.





Poison ivy (*Toxicodendron radicans*), Wolf Willow, 2023-08-12. Note the three leaflets per leaf, with more or less smooth edges.

Flowers and fruits of wild sarsaparilla and poison ivy differ, as these native species are not related, but it is important to recognize the leaves as often these are the only parts of the plant that are evident for much of the season. Poison ivy is rare in the Edmonton area but can form extensive patches where it does occur.



Woolly alder aphid (the white "armbands") on branches of river alder (*Alnus incana* subsp. *tenuifolia*), Oleskiw River Valley, 2023-08-15.

Two other weeds of particular interest, because they are pretty much confined to these old fields of Oleskiw (with some spread into Terwillegar Park across the river), are burnet-saxifrage (*Pimpinella saxifraga*), which resembles caraway and is in the carrot family, and yellow lady's-bedstraw (*Galium verum*). The former was still in flower and had obviously spread into the adjacent river's edge woodland, forming dense mats of ground cover, which short of a total burn of the area would be impossible to remove.

We also spent a little time examining dead and dying trees of river alder (*Alnus incana* ssp. *tenuifolia*) along the river's edge. All were infested with woolly alder aphid (*Prociphilus tessellatus*) and, given that these insect infestations are widespread in the river valley, I predict that we could see complete loss of

river alders along Edmonton's river and creeks in a few years. We lamented the fact that the City does not manage its natural forests and such a loss, if it occurred, might go unnoticed except by a few botanists and entomologists!



Burnet-saxifrage (*Pimpinella saxifraga*), Oleskiw River Valley, 2023-08-12. This rare weed has permeated the old meadow and adjacent riverine woods, occurs in Terwillegar Park, and is spreading into Wolf Willow valley lands.

We ended the evening in a light rain, which did at least put a damper on the mosquitoes!

ENPS Sale at the Edmonton Horticultural Society Garden Festival

The Society held their last sale of the 2023 season, on August 26th at the EHS Garden Festival. We sold both plants and seeds at a brisk rate, and did some great networking with native plant gardeners and others. The plants did not all get sold (for a change) but the remaining plants are tucked away for overwintering (in the back garden of Buttercup's Urban Farm). Thanks to all the volunteers and patrons who made the event a success!

> 2023-08-26. Photo L. Deleeuw



Events

Title: ENPS Project - Mill Creek Thistle Patrol

Dates: Every Tuesday, starting June 27 until late September, from 7 pm to 8 pm **Location:** Mill Creek Ravine

Content: This group works to manually remove the many patches of creeping (Canada) thistle from different areas in Mill Creek Ravine. It meets weekly at 7 pm for an hour on Tuesday evenings until late September. Long pants, long sleeves and thistle-resistant gloves are recommended. Please email volunteer@enps.ca if you would like to help out. Once you have registered, you will get a weekly notification of the exact location. Ed Retzer, the leader, has been participating in the Thistle Patrol for years and has managed to greatly reduce the number of thistles in this part of our city!

Price: Free

Title: Fence Farewell at Astotin Lake with Nature Conservancy Canada

Date: Thursday, September 7 from 9 am to 3 pm

Location: Astotin Lake, (GPS Coordinates: 53.679472, -112.901833)

Content: Located 45 minutes from Edmonton, Astotin Lake features 63 hectares of dry mixed-wood boreal forest and wetlands. Astotin Lake provides a corridor to Elk Island National Park, expanding the protected wildlife corridor in the area and supporting wildlife movement outside of the national park. It also provides habitat for waterfowl, moose and fishers. Volunteers will spend the day removing an old page-wire fence that is obstructing safe wildlife movement through the property.

Price: Free. Register at https://www.eventbrite.ca/e/fence-farewell-at-astotin-lake-registration-698470152027

Title: Harvesting Your Own Seeds

Date: Thursday, September 7 from 7 pm to 8 pm

Location: Online, courtesy of the "St. Albert Public Library"

Content: Master gardener Dale Ford will delve into how to harvest seeds from your own plants, and preserve them for the next growing season. Dale is very involved in the St. Albert native plant community and will cover these in her talk.

Price: Free. Register at https://sapl.libcal.com/event/3734890

Title: The Role of Non-Native Plants in Butterfly Communities

Date: Tuesday, September 19 from 5 pm to 6:30 pm MDT

Location: Online, courtesy of the "North American Native Plant Society"

Content: Sustaining native pollinator populations and reversing declines in threatened pollinators requires enhancing and maintaining habitats across many land use types. Join us to hear the lessons learned from Dr. Heather Kharouba's lab about the butterflies from two very different semi-urban ecosystems in Canada. She and her team hope the knowledge gleaned from this research will help direct restoration activities, like planting native flowers and non-native plant management.

Price: Free. Register at https://www.eventbrite.ca/e/the-role-of-non-native-plants-in-butterfly-communities-tickets-688475327237?aff=oddtdtcreator

Title: Root for Trees - National Tree Day

Date: Wednesday, September 20 from 4 pm to 6:30 pm

Location: Cavanagh Walking Trail (53°24'24.2"N 113°30'49.4"W)

- **Content:** Celebrate National Tree Day with Root for Trees and Tree Canada! Enjoy nature, and learn about the many benefits of Edmonton's urban forest. This unique day will be filled with tree-rific activities for all ages including tree planting, plant giveaways, interactive games and more!
- Price: Free. Register at https://www.eventbrite.ca/e/tree-canadas-national-tree-day-planting-event-in-edmonton-tickets-694772171267

Title: Wagner Natural Area Fall Cleanup

Date: Saturday, September 23 from 9 am to 2 pm Location: Wagner Natural Area (http://wagnerfen.ca/)

Content: Help with trail cleanup, clearing debris along fences, putting up signage, or perimeter fence clearing. This is a good opportunity to become acquainted with Wagner Natural Area, if you are not already familiar with it. As an area of moist woodlands and calcareous fens, it often has plants that flower late in the year. It is managed by the Wagner Natural Area Society and has twice yearly

clean-ups and weed pulls.

Price: Free. Register at info@wagnerfen.ca

Title: Root for Trees - National Day for Truth and Reconciliation (Orange Shirt Day)

Date: Saturday, September 30 from 12 pm to 5 pm **Location:** Kinsmen Park

Content: To recognize National Day for Truth & Reconciliation (Orange Shirt Day), Root for Trees will be gifting native species of trees, shrubs and wildflowers as a way to honour the victims, families, friends, and intergenerational survivors of Residential Schools.

Price: Free.



Sweetgrass seedlings (*Anthoxanthum hirtum*), 2023-05-23. Photo M. Parseyan

News

Naturalization and Tree Planting in Edmonton - Update

The City of Edmonton has now made the report from Phase 2 of its public engagement process (held from May 5-29, 2023) ["What We Heard Report - Naturalization and Tree Planting"] available at https://engaged.edmonton.ca/naturalizationandtrees

"Greener As We Grow" outlines a commitment to the protection and conservation of our urban forest, while driving climate resilience by planting two million new trees as the population grows. This target is part of a larger goal, outlined in the Urban Forest Asset Management Plan, to reach 20 per cent forest canopy coverage in Edmonton by 2071. The City will reach the goal of planting two million new trees primarily through naturalization, and boulevard and open-space tree planting.

To guide this work, the City is developing the Naturalization, Restoration and Reclamation Plan (NRRP) and the Green Infrastructure Expansion Mapping (GIEM) model. The city notes that feedback is currently being reviewed by the City Project Team and potential revisions to the NRRP and GIEM model will be considered based on what was heard during the public engagement process. Specific site-level feedback will be considered for annual planning purposes. Feedback gathered from both phases of public engagement will help improve the City's regular communications and education work around naturalization and tree planting.

For more information, check out the following links:

https://engaged.edmonton.ca/naturalizationandtrees for public engagement and project updates; https://www.edmonton.ca/residential_neighbourhoods/gardens_lawns_trees/new-urban-trees-andnaturalization for additional project information on New Urban Trees and Naturalization. If you have questions, please email the Project Team at: naturalizationandtreeplanting@edmonton.ca

ENPS Native Plant Seed Sales

Apache Seeds (10136 149 St NW) will carry the ENPS seed packages throughout the 2023-2024 winter (while supplies last). Other local stores will also carry our seeds starting in early March, 2024.

Articles

Playing in the Sand: A Seasonal Diary of Restoration Work at Bunchberry Meadows - Part 1

By Cherry Dodd

I have been growing native plants for a long time, but it has only been in the last few years that I have had a chance to experience and work with a sandy ecosystem.



Wetland demonstration plot, south-side of the driveway, 2023-07. Photo C. Dodd

It all started five years ago at Bunchberry Meadows, a Nature Conservancy of Canada/ Edmonton and Area Land Trust site close to Devon. I was invited to replant a small site that had been disturbed because of the construction of the new driveway, parking lot and washrooms.

Things quickly expanded, and there are now four restoration plots that are looked after by different

people. Two plots are next to the parking lot and the two I look after are on each side of the driveway as you first enter.

There is a small pond on the south side of the driveway that was the cattle dugout when this land was a ranch. The wetland plot is the space between the pond and the driveway. The soil here is peaty and very rich thanks to years of cattle going down to the water to drink.

Across the driveway to the north is a flat, sandy area backed by a steep slope. Here the top soil was removed to make a place to park the construction machinery. So the ecosystem on this side is compacted sandy subsoil. Wow, two completely different ecosystems with different soil conditions, separated by the driveway. What an opportunity and what a challenge!

Fortunately, I have a wonderful volunteer team to help look after both of these areas, replanting them and taking out weeds. This is our fifth year of work, and I have about five volumes of material recording what we have done. However, for this article I decided to focus on just the last three months of surprises and challenges at the two plots that I look after. This article consists of the updates that I sent out to my volunteers from April through June.



Sandy demonstration plot, north-side of the driveway, 2021-06-11. Photo C. Dodd

April 19th, 2023

Liz and I went out yesterday to check the conditions. Work sessions always depend on the weather, especially this early in the season. The snow is completely gone and it is dry enough to walk and dig. The pond is low, but not too bad. It was teaming with water life, both below the surface and on the surface, and there was a pair of Canada geese and a pair of ducks.

The biggest surprise was the stand of common tall sunflowers. The northern pocket gophers, who moved in last year, have finally discovered them and several plants were just sticks without any roots. Several others were uprooted but had enough root left to carry on growing. We planted a few of these in the mud by the pond and I brought home two small ones to pot up.

April 30th

It was a wonderful blue-sky day at Bunchberry last Monday and we had many sandhill cranes passing overhead or circling on the thermals. Just beautiful!

We cut down the old sunflower stalks in preparation for giving some plants away, and discovered a lot more northern pocket gopher damage - some of it new. They are eating the roots and the plants are dying. So, there might not be many plants to give away. In fact, the gophers might eat all the sunflowers before moving on.

The sunflowers in the tall grass around the pond seem to be okay, and I would like to plant more at other wetlands. They attract flocks of goldfinches in the fall, and feed all types of bees in the summer. Even if the sunflowers disappear from the plot, there will be new plants sprouting from seeds, so all is not lost.

Nature is continually changing the landscape. The plots look great, so I am keeping my fingers crossed for this year. I am going to be doing lots of planting.

May 23rd

The air is better, we have had a good rain, so it is finally time to have a work bee at Bunchberry. I will not bring any plants to put in because there is no more rain in the forecast. I prefer to wait for rainier weather. We should start our rainy season in two to three weeks so I am keeping my fingers crossed.

We will be mostly weeding and checking out all the changes that have happened. I especially want to identify the sweetgrass and if I have a positive identification people can take some home. There will probably be more early blue violets to take home also because they are growing in the paths. These violets were one of the few native species already present on the prairie side when I first saw the plot and they are spreading nicely.

May 28th

The sunflowers are looking great. Although we dug out a huge amount there are still lots of clumps of plants left and lots to give away to people who want them. The ones that Sue transplanted closer to the shoreline two years ago are well-established, large clumps that are doing well. We should have our usual flock of goldfinches raiding the plants at seed time.

I couldn't see any fresh signs of pocket gophers on the wetland side, so maybe they have moved on. I will keep my fingers crossed!

In other news, our one surviving saline shootingstar



Saline shootingstar (*Primula pauciflora*), 2023-05-23. Photo S. Panteluk

plant is in full flower and looks wonderful. Sue transplanted it closer to the shoreline a couple of weeks ago so it gets more moisture. Also on the wetland side are Philadelphia fleabanes that were already growing by the water when I was first given this area to look after. The population is healthy and growing. They were in bud and should be flowering this week. The ones I planted at the top of the bank should also be in flower.

Also flowering this week will be slender blue

beardtongue, field chickweed, long-stalked chickweed, three-flowered avens, false dandelion, all the sedges, and probably a bunch of other species. We will be surprised as usual.

May 30th

It was a case of "Wildlife of the Week" at Bunchberry. Sue managed to photograph a garter snake, a specimen about half the size of the two that we spotted last year in the same spot. They seem to really like being under the



False dandelion (*Agoseris glauca*), 2023-06-02. Photo S. Panteluk

tarps that are in place on either side of the wetland plot to keep the grass from encroaching.

We worked on the wetland side. I put in a few plants but it was so dry! Fortunately, Bunchberry got a good storm yesterday as we were leaving and more rain overnight.

I must find a way to capture the water as it flows down the steep slope. I am thinking that I should dig holes everywhere to catch the rain as it goes downhill. I think I will try that! I will also start bringing mulch every time I come out just for the wetland side. The ground really needs a ground cover to stop the top inch of soil from drying and repelling water. The soil is too peaty and can't absorb water once it dries out. Maybe we should put the weeds that don't have seeds right on the ground around the plants as mulch? I will also plant some pussytoes and native chickweed as ground cover. I am also going to add more logs to the slope to slow down the flow of water.

Juliette came out and she put in a new log barrier at the top of the bank by the sweetgrass. I think I have finally figured out how to tell the sweetgrass from the invasive grass, so Juliette also took out the invasive grass at that spot, and moved a large clump of sunflowers that were tangled in the grass. The sunflowers are now close to the pond.

Plants in flower - the blue columbine is beautiful! Also stunning was our first meadow (leafy) arnica flower. One gaillardia is in bud already and the false dandelions are covered in buds this year.

June 7th

This week the whole site was covered in poplar fluff. It even covered the surface of the pond.

Sue posted some buttercup pictures on Facebook and there was a discussion about which species they were.

The water level in the pond is really low and new plants are popping up on the newly exposed shores. On the east side, on new bare ground, there is a patch of what looks like celery-leaved buttercup. I think these are the buttercups that Sue saw. I also saw one healthy plant of Macoun's buttercup.

Planting: I brought out a few plants for the wetland side but ended up only putting in two plants, right in the mud. It was too dry to plant anything else.

There were some very large footprints from a moose in the exposed mud below our bed and some yellow evening primroses had been chomped off. The yellow evening primroses are everywhere and we have too many of them. However, I must remember not to weed them out as they are deer and moose food.

The non-native thistles are starting to grow between our bed and the pond and David did a great job of removing them. They are not as thick as last year so I think we are winning the battle. There are very few weeds in either bed, which is lovely to see.

In other news, the shootingstar has a small seed head developing! I was thinking that Wagner Natural Area would be a good place to collect shooting star seeds. Our local Edmonton population at Shooting Star Hill has shrunk to about four plants and I would like to add plants to the Bunchberry population next year. On the west side, a little further than the shootingstar, there were two blue-eyed grasses and three very nice-looking small sedges, as well as one huge Raymond's sedge that planted itself. I must plant more there!

At the top of the bank where the pink corydalis were last year there is one healthy plant about to bloom! Last year there were at least 30 plants of this beautiful annual, so I figured we would get a good number self-seeding this year. As usual I was wrong - only one seedling emerged this spring. Mother nature has again reminded me that she is in charge, not me.

The prairie edge, under the fence line on the prairie side, was so dry that the plants were wilting and I watered quite a bit there. The mature, well-rooted plants will wait out the drought and spring back to life after a few days of rain. However, the new transplants are not yet resilient.

June 19th

Things have been tough this year - a heatwave in May, and a prolonged drought so severe that plants were wilting and the pond was at the lowest level I have ever seen. I had over 100 plants to put in, but wanted to wait for the rainy season, so they would be watered. The ideal would be: a few showers to wet the ground, then plant, a few more showers, more planting, etc. However, mother nature had other plans. We fell overnight into constant rain, sometimes heavy every day.

Finally, last Saturday, Liz and I went out to Bunchberry and met Sue there. It was supposed to rain but we took a chance. I had a couple of trays of purple prairie-clover to plant. They were getting waterlogged sitting in my garden and I didn't want to lose them.

Once there, we divided them up into three: some for Liz's plot by the parking lot, some for Judith's original plot, that Sue is now looking after, and some for both sides of the driveway. We got about half planted before we had to plant the rest in the rain. We got soaked but it was worth it!

Both sides of the driveway are looking great after a week of rain. There is a huge patch of gaillardia in

bloom on the hillside and a corresponding patch in bloom on the wetland side. The lilacflowered beardtongue patch was in full flower and looked great.



Lilac-flowered beardtongue (*Penstemon gracilis*), 2023-06-13. Photo S. Panteluk The pond was back to normal levels and aoldfinches were already checking out the sunflowers looking for seeds. On the prairie side the white evening-primrose was in bloom and looking fabulous. It took three years for three small seedlings to settle in, but now it has taken off, spreading up the hillside and also down into the upper path. The rhombicleaved sunflowers are finally spreading and so is the golden bean.

It feels as though the plants are finally

settling in and getting used to the unpredictable conditions. Ground coverage is a lot better this year and I am looking forward to more exciting developments.

June 22nd

Bunchberry was amazing today. The gaillardias by our lunch spot on the wetland side are in full bloom and covered in butterflies. There were several different species and it was wonderful to see them all cruising around. I have never thought of gaillardia as being irresistible to butterflies, but I guess they are.

The pond is back to normal levels finally and there is a new species in bloom by the water's edge. I have to get it identified.

Several tree swallows were flying over the pond looking for insects - no mosquitoes yet thanks to them.

June 25th

We got a lot planted, David did a great job on the thistles and other weeds, and Adrian brought three sedges (Raymond's, golden and fox sedges), which we put in close to the water.

Liz R. arrived with another donation of a large clump of blue-eyed grass. Thanks Liz! She donated all the blue-eved grass that is planted along the fence line on the wetland side and it is doing well. We will have lots of seeds.

We also found a lovely caterpillar on a tiny cow parsnip plant. The caterpillar is destined to become one of the swallowtails. I must remember to make sure we have several cow parsnip plants each year. Usually, they self-seed but maybe it was too dry this year. I am going to see if I have any seedlings in my garden that I can transplant.

Also, David spotted a garter snake and a small rodent by the bottom of the tarp. He hoped they didn't spot each other!

More news - the pond is above the high-water mark - so nice to see, and I saw the first duckweed. Probably one of the ducks brought it in. That is how it usually spreads. The more diversity the better.

June 29th

Sue lives locally, so she is out at Bunchberry nearly every day. We don't have a water supply so Sue trucks in water from her large collection of rain barrels. She waters the new transplants, and plants that are struggling, and she has saved so many plants over the years.

Mature plants can usually survive a dry spell by regrowing from their root system, but transplants haven't had the chance to develop a good system and are vulnerable.

Sue says about her latest visit:

"Lots of yellow blooms everywhere now. The sunflowers are beginning to open. The monarda is in full bloom in Judith's area and on the pond side. It's funny, all along your path, Cherry, are all sorts of things - a tiny gaillardia in bloom, a

meadow blazingstar in bud, lots of small eveningprimrose plants - self-seeded in straight sand. Amazing.

Liz - your sedges and grasses are lovely, with golden-asters, and gaillardia throughout. I walked to the boardwalk yesterday and was happy to see veronica [American brooklime] on both sides of the walkway. Lots of [marsh] skullcap, tufted loosestrife and sedges in bloom."

So next time I am out at Bunchberry we will take a trip to the

boardwalk.

Sue also said on Facebook that the Drummond's thistles are in flower! So. we will go and see them too.



Drummond's thistle (Cirsium

drummondii), 2023-06-25.

The adventure continues!

Cherry wishes to

Photo S. Panteluk thank her great team of volunteers for all their work. If you would like to volunteer at Cherry's native plant plots at Bunchberry Meadows, please send an email to volunteer@enps.ca. Work bees are

Editor's Note: Bunchberry Meadows Conservation Area is about a 20-minute drive from the west end of Edmonton, down Fleming Road. It has an extensive system of trails, dry toilet facilities, and picnic tables on site. Located in the Devon Sand Dune system, it is worth visiting at any time of the year. https://www.ealt.ca/bunchberry-meadows

usually 12 noon to 3 pm on Mondays (even during

park closures, but not during winter).

PLEASE NOTE: Bunchberry Meadows is expected to be closed to the general public during parts of September and October, 2023. Guided tours will be available, during this time, through the Nature Conservancy of Canada.

Plant Profile: Jewelweeds - Jewels of the Later Summer

by Patsy Cotterill

Most people encounter the balsam family, Balsaminaceae, through busy lizzie, *Impatiens walleriana*, the common annual of municipal garden beds. However, we have three wild-growing *Impatiens* species in Alberta: the native *Impatiens noli-tangere*, *I. capensis* and the non-native *I. glandulifera*. All are tall (to 150 cm in the natives), often branched, annual herbs with succulent, somewhat translucent, reddish stems, simple, ovate-lanceolate to lanceolate, hairless, shallowly toothed leaves and large, attractive flowers. They are found in wet habitats such as moist woods, swamps and shady ravines.



Western jewelweed (*Impatiens noli-tangere*), garden specimen, 2023-06-28. Photo M. Parseyan

Impatiens noli-tangere, western jewelweed or yellow touch-me-not (among other common names) seems somewhat more common locally than *I. capensis*, spotted jewelweed or orange touch-me-not. Its large (to 3 cm) yellow flowers are produced in July through September in the axils of the leaves on branched, filiform stalks that arise mostly below the leaves (although some are above them) and dangle horizontally like suspended slippers. Of the three sepals, two are small, white and paired, but one forms a yellow, funnel-like pouch or sac which ends in a narrow, recurved spur. The spur in particular is spotted with dark red or purple dots; it produces nectar attractive to hummingbirds, bees and a variety of other insects. The petals appear as two large lateral lobes forming a lip that functions as a landing pad for insects. A small upper petal forms a cap above the tight cluster of stamens surrounding a thin, green pistil which will become a narrow, green seed capsule or pod. This pod splits

explosively when it is ripe, ejecting the seeds a considerable distance, sometimes to the surprise of an approaching visitor. This phenomenon is also the reason for the species' Latin epithet, *noli*-

tangere, which means "be unwilling to touch." Many of the pods, however, are not produced by the large, showy yellow flowers (called chasmogamous) but by small, inconspicuous flowers that are fertilized without opening (called cleistogamous).

Impatiens capensis, spotted jewelweed, is very similar, and may sometimes be found growing with western jewelweed. The two are distinguished on flower colour and shape, and the angle of recurvature of the spur, as follows:



Spotted jewelweed (*Impatiens capensis*), Lake Wabamun, 2014-09-02. Photo P. Cotterill



Western jewelweed (*Impatiens noli-tangere*), garden specimen, 2023-08-21. Photo M. Parseyan



Spotted jewelweed (*Impatiens capensis*), Coyote Lake Natural Area, 2023-08-03. Photo M. Parseyan

Impatiens noli-tangere: flowers pale yellow, red-dotted, occasionally unspotted; sac approximately 20 mm long, about half as broad as

long (making for a more slender flower), with the spur curled under at a loose angle;

Impatiens capensis: flowers orange to reddish, spotted with red or purple; sac shorter (15-18 mm) and about two-thirds as broad as long (making for a shorter, chunkier flower), and a spur that is abruptly curled back (a bit like a pig's curly tail).

Western jewelweed is a circumpolar species that occurs in western Canada (west of Ontario), and also in Europe and Asia. Spotted jewelweed is exclusively North American and is native across Canada, except for B.C. where it has been introduced.

Himalayan or Indian balsam, or purple

jewelweed, Impatiens glandulifera, our third Albertan Impatiens, by contrast is a native of the Himalayan mountains, as its name suggests.

It has been introduced into northern temperate countries for its beauty, and other qualities, with disastrous results. Its large flowers are pale to deep pink, 3-4 cm long, with a short spur and the upper petal now forming a hood such that the flower resembles a policeman's helmet (the English name for the species). The deep-green, glossy, lanceolate leaves arise in groups of three at the nodes of the red, succulent stems. The specific name *glandulifera* derives from the nectar-producing glands at the base of the leaf stalks.

More restricted to riparian habitats than our native jewelweeds, Himalayan balsam creates dense stands



Close up of flower of Himalayan balsam (*Impatiens glandulifera*), Grandview Beach, Pigeon Lake, 2009-07-19. Photo P. Cotterill



Himalayan balsam stand at Itaska Beach, Pigeon Lake, 2009-08-22. Photo P. Cotterill

along river shores in its adopted countries, replacing native perennial vegetation and leading to bank erosion when these shallow-rooted annuals die down in the fall. It has been introduced across most of Canada, but is rare in Alberta. It has occurred in Edmonton's river valley and at Pigeon Lake. In Alberta it is a prohibited noxious weed under the Weed Control Act, illegal to buy, sell, transport or possess, as it is in the European Union. Stands can be readily removed by pulling, however, or by cutting off the flowers to prevent seed production. Interestingly, it is not listed as present in Moss's *Flora of Alberta* published in 1983. (See en.wikipedia.org/wiki/Impatiens_glandulifera for an account of its fascinating history in Europe, and an illustration of ecological repercussions when Man meddles.)

So why are the jewelweeds called jewelweeds? Some literature suggests that it may be because the leaves are water-repellent and rainwater falling on their surface forms beads of water droplets (this is indeed the case) which shine in the sun. My own theory is that the delicate yellow flowers shine like jewels amid the deep glom of a summer swamp! They have even been mistaken for orchids!

An interesting afterthought: plants that have a wide distributional range often vary greatly in abundance across that range. The literature suggests that *Impatiens noli-tangere* may be scarce and/or under threat in Europe. Hence, is it possible that maintaining the species in Canadian

habitats, where it is abundant, is a hedge against extinction of the species?



Seedlings of western jewelweed, Elk Island National Park, 2018-05-26. In moist springs the characteristic pale green seedlings of jewelweed, forming a quadrat shape with paired seed leaves and true leaves at the centre, can carpet the ground forming an almost continuous cover. This is often the case in a swamp in Elk Island National Park, which we visit every year at the end of May. This year, however, under drought conditions, the ground was covered with Canada violets instead! Photo M. Parseyan



Seed pod of western jewelweed, garden specimen, 2023-08-01. Photo M. Parseyan



Exploded pod of western jewelweed, garden specimen, 2023-08-21. Photo M. Parseyan



Exploded pod and ejected seeds, garden specimen, 2023-08-21. Photo M. Parseyan

Front Yards in Bloom 2023

The interest in planting native plants in Edmonton has been growing steadily over the years, thanks in part to the inclusion of the Natural Spaces category in this city-wide garden recognition program. Here are the three winners this year in the Natural Spaces category.





1st Place (tie), Natural Spaces Category, Bonnie Doon (9524 86 Ave NW)



3rd Place, Natural Spaces Category, Delton (12304 92 St NW) 1st Place (tie), Natural Spaces Category, Highlands (5332 111 Ave NW)

FYIB has been running for over 20 years, making it the longest-running and largest civic recognition of its kind in Canada.

The Awards ceremony is taking place on Saturday September 9, 2-4 pm, at City Hall. Everyone is welcome to attend.

For a complete list of all the Award winners go to:

https://www.edmonton.ca/ programs_services/ landscaping_gardening/2023-frontyards-bloom-winners

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