

Newsletter of the Native Plant Society of Saskatchewan



ROOTS

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Summer 2019



Gaillardia aristata

Gaillardia

Photo credit: Candace Neufeld

Native Plant Society of Saskatchewan

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Roots is a quarterly publication of the Native Plant Society of Saskatchewan (NPSS) and is one of the benefits of membership. Members are invited to submit articles, news, views, photographs and comments. Views expressed by the authors are not necessarily those of the NPSS.

Deadlines: Submission Publication

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Fall Issue: August 1 September 15

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Please contact the NPSS office for information about the lifetime membership instalment payment option.

Get your photo on the cover of... **ROOTS!**

Submit your Saskatchewan native plant photos for future cover consideration to: info@npss.sk.ca

NPSS Welcomes New Project Coordinator

Chet Neufeld

For the past few years, the NPSS has had a Project Coordinator to help accomplish our project objectives. Some of you may remember Natasha MacKintosh, who previously filled the position, but recently took a job in Alberta. Hilary Pinchbeck is her replacement and will primarily be in charge of running our Rare Plants and Ranchers Program, as it is our largest project in budget, geographic area and time. Hilary comes with a wealth of knowledge and experience, and we welcome her to the team!

Chet Neufeld



Above: Hilary Pinchbeck, photo provided.

Greetings from Hilary:

I grew up just outside of Birds Hill Provincial Park in Manitoba and this is where my love for the outdoors started. There was no surprise when I chose a career path in environmental biology. I graduated from the University of Winnipeg with a B.Sc in Biology, and am incredibly grateful for the various jobs in Manitoba and Alberta I have had working as a vegetation technician. I believe it is important to form relationships with the environment around us and to share our knowledge with one another to keep our native prairies historically intact. I am incredibly excited to explore (and identify!) the various areas and species Saskatchewan has to offer.

Rare Plants and Ranchers

2019 Summer Update

Hilary Pinchbeck, NPSS Project Coordinator

The 2019 Rare Plants and Ranchers field season began during the last week of May. I spent a few days on native mixed-grass prairie on private property in Outlook, SK, looking for the rare Slender Mouse-ear Cress (*Transberingia bursifolia* ssp. *virgata*; S1). However, if you live in southern Saskatchewan you may have noticed how dry it was at the beginning of the season, and many of the plants were a few weeks behind schedule. Unfortunately, this meant that I did not come across this biennial species on any of the properties I surveyed this season.

After Outlook, I continued the search for Slender Mouse-ear Cress and other provincially rare species including Prickly Milk-vetch (*Astragalus kentrophyta* var. *kentrophyta*; S2) and Plains Grape-fern (*Botrychium campestre*; S2) on a couple of private properties near Cabri, SK. The areas here were beautiful pieces of intact native sandy prairie containing active sand dunes, which are few and far between in this province. Even though I did not come across any rare plants, I was lucky enough to hear plenty of Sprague's Pipits (*Lithobates pipiens*) while hiking around these beautiful sections of land.



Above: Dwarf Woolly-heads (*Psilocarphus brevissimus* var. *brevissimus*).
Photo: Hilary Pinchbeck

Upcoming Events

Agricultural Drainage and the Environment Conference

November 6, 2019

Regina, SK

For more information, go to <https://www.sierraclub.ca/en/civicism/event/info?reset=1&id=37>

Grassland Restoration Forum Annual Fall Information Session

November 14, 2019

Claresholm, AB

For more information, go to: <https://grasslandrestorationforum.ca/news-and-events/>

7th Native Prairie Restoration/Reclamation Workshop & 5th Transboundary Grasslands Partnership Workshop

February 25-27, 2020

Regina, SK

For more information, go to: <https://www.pcap-sk.org/upcoming-events/native-prairie-restorationreclamation-workshop-2020>

To submit your native plant related event to our events list, send your information (including date, contact, phone number and location) to info@npss.sk.ca.

Before I started surveying the next piece of private property there were a few weeks of rain in the southern portion of the province and it definitely helped the flowering season catch up. This meant many native plants were now fully in bloom in July which made the identification process much easier! I started surveying again near Consul, SK looking for the federally listed Dwarf Woolly-heads (*Psilocarphus brevissimus* var. *brevissimus*; S1). Dwarf Woolly-heads are normally found in ephemeral wetlands and their numbers vary year to year based on the amount of rainfall and flooding. This species is typically only found in this portion of the province. While surveying for Dwarf Woolly-heads I came across many other rare plants in Saskatchewan such as, Small Navarretia (*Navarretia saximontana*; S3; see next page), One-spiked Oat-grass (*Danthonia unispicata*; S2), Carolina Foxtail (*Alopecurus carolinianus*; S1), and Woolly Plantain (*Plantago patagonica* var. *spinulosa*; S2).

I am excited for what the rest of Saskatchewan's prairies have to offer - stay tuned!



Left: Small Navarretia
(*Navarretia saximontana*)
Rare Plants and Ranchers
Report. Photo: Hilary
Pinchbeck

NatureCity Festival Shows Its Wild Side

Chet Neufeld

Now in its seventh year, Wild About Saskatoon's annual NatureCity Festival once again brought people together to celebrate nature. This year's theme, "I spy with my wild eye..." focused on the importance of citizen science and highlighted the many ways that everyone can contribute to local conservation efforts. From May 21-26, 2019, over 3,500 people attended the festival's 70+ events, which included storytelling, geocaching, birding, and art workshops, among others. A number of bioblitzes were conducted, in part to collect more information about local natural areas, but also to teach people how much they can actually do for nature with no more than a cell phone and a curious mind. Once again, a school program was hosted which include 400 students taking part in 11 field trips.

As always, a keynote presentation anchored the week's events. This year, Dr. Maureen Murray from the Urban Wildlife Institute, Lincoln Park Zoo (Chicago) gave her presentation "Saskatoon: Where the Wild Things Are" at the Broadway Theatre. Her talk focused on an international project she has been involved with called the Urban Wildlife Information Network, and how it has helped collect vast amounts of information that has enabled cities to better

coexist with and manage natural areas and their wild residents. Dr. Murray also graciously led a workshop for local stakeholders on how to implement the network in Saskatoon. The result is that Saskatoon has now become only the second city in Canada, and one of the few in the world, to join this network. Saskatoon has begun to implement its plan as part of the network and will continue to do so in the coming years.

For our part, the NPSS once again sat on the Steering Committee and hosted a spring wildflower walk at Beaver Creek Conservation area. The cold, dry spring resulted in fewer wildflowers blooming during our walk, but we still managed to find about two dozen different plant species in bloom as well as some great vistas as we walked along the edge of the South Saskatchewan River and through the stabilized sand dunes of the 3.2 km Living Sky Trail loop. It was a beautiful day and a well-attended field trip, with approximately 40 people participating; a great start to our summer field tour schedule!

Planning has already begun for the 2020 NatureCity Festival, so keep your calendar open for the end of May and stay tuned for updates on our website, social media feeds and ROOTS.

Lodgepoles under Living Skies is one for the Record Books

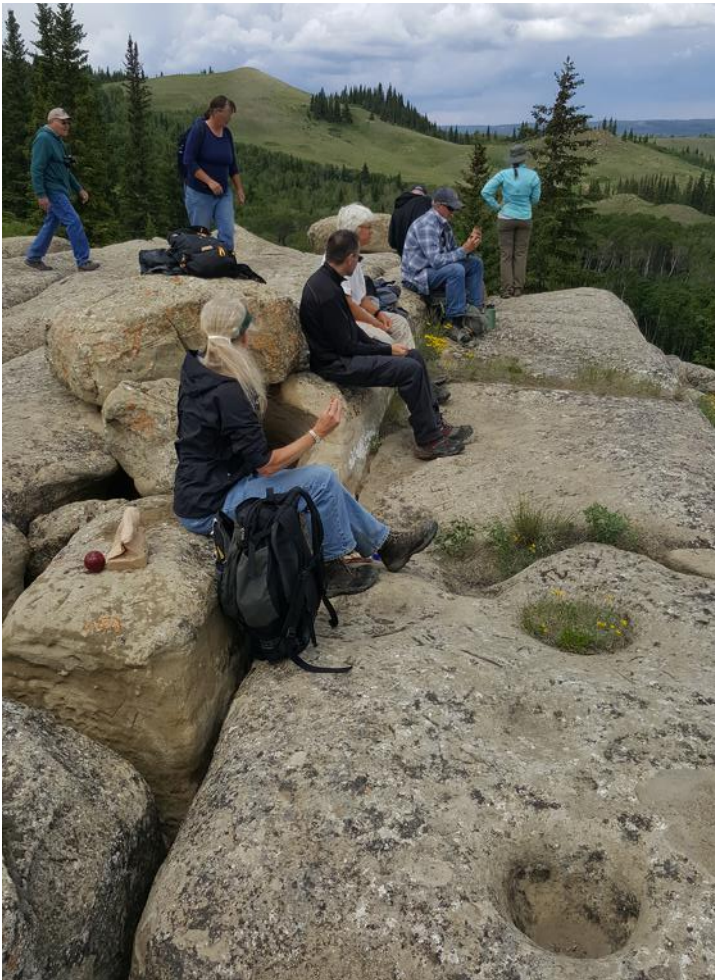
Chet Neufeld

The Lodgepoles under Living Skies summer field tour to Cypress Hills Interprovincial Park on June 21-23, 2019 was an event with many record-setting aspects for the NPSS. It was the first international field tour, as our friends from the Montana Native Plant Society (MNPS) co-hosted. It was also the best-attended summer field tour in the NPSS' history, drawing over 100 people with most coming from Montana, followed by Saskatchewan and then Alberta. There were even people from as far away as British Columbia, Utah and Idaho! Now for the record we didn't want to break: it was the worst weather we've ever experienced for a summer field tour in the 25 year history of the NPSS. We had it all – near freezing temperatures at night, torrential downpours of over 3 inches of rain throughout the weekend, and a hailstorm during the last few hours of the last day to top it all off. The rain was so bad that by the second day, field tours had to be re-routed due to impassable roads.

Despite this, and to everyone's credit, not a single

complaint was uttered about the weather (although they were certainly entitled to it!). Everyone took the weather in stride and were rewarded with some amazing tours and botanical finds. In the Centre Block, participants enjoyed vistas at the Lookout Point and Bald Butte before hiking the native prairie trail, while others found rare treasures ranging from the showy orchids of the Whispering Pines Trail to the diminutive Moonworts (*Botrychium* sp.) in the meadows.

Others explored further afield, traveling to the West Block to visit the Conglomerate Cliffs, War Bonnet Hill and the Mystery Rocks. The Conglomerate Cliffs arguably hold the most provincially rare plants of any place in Saskatchewan, especially for its relative size, and participants were treated to a number of rarities such as Mountain Wild Parsnip (*Lomatium dissectum*) (S1). War Bonnet Hill and the Mystery Rocks held their own treasures in addition to beautiful overlooks of the surrounding landscape. New



Above: Having lunch at the Mystery Rocks. Photo: Candace Neufeld



Above: Lance-leaved Spring Beauty (*Claytonia lanceolata*). Photo: Chet Neufeld.

occurrences of provincially rare plants were discovered at both locations; Oregon Woodsia (*Woodsia oregana* ssp. *cathcatiana*) (S3) was found at War Bonnet Hill while a new population of Small-leaved Alumroot (*Heuchera parvifolia* var. *dissecta*) (S1) was located near the Mystery Rocks.

Giving respite from the rain, botanical illustration workshops were also held (with one featuring our very talented board member Heather Peat Hamm), as was a driving tour to Eastend that included a tour of the T-Rex Discovery Centre.



Left: Round-leaved Orchid (*Amerorchis rotundifolia*). Photo: Candace Neufeld.



Below: Lance-leaved Stonecrop (*Sedum lanceolatum*) amid Common Juniper (*Juniperus communis*). Photo: Chet Neufeld.

Friday night included a banquet, ice-breaker game and plant identification challenge, and presentations on the history, geology and botany of the Cypress Hills. Reciprocal greetings on behalf of Montana's Governor and Saskatchewan's Premier were also exchanged, and the NPSS was formally invited by the MNPS to visit Montana and participate in a future field tour.

It was wonderful to meet new people and have enriching, cross-cultural discussions with like-minded people. Many thanks to all of the NPSS and MNPS members who helped to plan and lead events, provincial park staff for delivering presentations and helping with park logistics, private landowners for granting access, and all who attended for making the whole weekend so special. Special thanks to my Montana counterparts Bob Person and Patrick Plantenberg for doing much of the heavy lifting and making a year's worth of planning enjoyable.

Photos of the trip can be found on our Facebook page.

Author's note: The drive home was sunny and warm. Of course it was.

Botanizing the Badlands a Blast

Chet Neufeld

On July 6, 2019, the NPSS traveled to a really special, but little-known, area known as the Avonlea Badlands. Approximately 50 people showed up to explore this unique habitat and help compile a plant species list that the Avonlea Heritage Museum could use for their education and outreach materials. Located only a few kilometers from Avonlea, the badlands are completely hidden from the road and only accessible via the museum. In addition to assisting the museum, the NPSS was able to accomplish some of our own objectives: visit an area we've never been to before, collect data in an area that is lacking information and submit rare species occurrences to the Saskatchewan Conservation Data Centre.

In the morning, participants were treated to an interpretive tour of the area by museum staff and volunteers, where history and geology were discussed in detail. The approach to the badlands belies what awaits, as blooming prairie stretches out around you and a lush creek valley meanders to the west. Once you drop down into the badlands, you are surrounded by a stark landscape where only the toughest can survive.



Above: Clock Tower hoodoo. Photo: Candace Neufeld

The harsh conditions have created some unique species, which have adapted to the rugged landscape and now exist only in these types of habitats. Some of these species are also rare, and as we looped through the bottom of the badlands, we discovered many interesting plants. Our visit was perfectly timed to witness the height of many Milk-vetch's (*Astragalus* sp.) blooming, and the bright purple flowers and silver foliage

of Missouri Milk-vetch (*Astragalus missouriensis* var. *missouriensis*) stood out like neon lights against the eroded slopes and hoodoos. Approximately six other Milk-vetch species were found, including Racemose Milk-vetch (*Astragalus racemosus* var. *racemosus*), a provincially rare plant (S2) that specializes in growing in habitats such as badlands.



Top: Racemose Milk-vetch (*Astragalus racemosus* var. *racemosus*) (S2). **Bottom:** Missouri Milk-vetch (*Astragalus missouriensis* var. *missouriensis*). Photos: Candace Neufeld



SNC • LAVALIN

Vegetation Ecologist/Botanist
(Saskatoon, Regina, or Winnipeg)

Job Posting

SNC-Lavalin is a rapidly growing full service consulting firm that is dedicated to responding to the changing needs of our clients. We are seeking a junior Vegetation Ecologist/Botanist, based in Saskatoon, Regina, or Winnipeg to assist with environmental baseline studies, impact assessments, and construction environmental management on a variety of projects within western Canada.

QUALIFICATIONS

- University degree in biology/ecology or related studies
- A minimum of one years' field experience in conducting vegetation surveys
- Basic knowledge of plant taxonomy, including the ability to identify species using taxonomic keys
- Proven ability to identify plants to the species level in a field setting
- Working knowledge of the Saskatchewan rare plant detection survey protocols is an asset
- Experience conducting rare plant surveys is preferred
- Able to classify wetlands in a field setting using the Stewart and Kantrud Wetland Classification System and the Canadian Wetland Classification System is an asset

JOB DUTIES

- Conduct vegetation surveys and assessments in accordance with applicable protocols
- Classify and delineate wetlands in a field setting
- Assist in the preparation of technical reports

Please note that some work for this position may be in remote locations for extended periods of time and may require overtime, weekends and variable hours.

Please submit applications at:
<http://www.snclavalin.com/en/careers/>

We returned to Avonlea for a barbeque lunch put on by the Avonlea Heritage Museum and were given a tour of the many historical buildings that housed the museum's collections. After lunch, we returned to the badlands for a more focused botanical exploration. We scoured the floor and slopes of the badland basin that we had visited in the morning, then were lead to another badland area to the north that is not normally visited by the public. Here we encountered new species that grew in a remnant prairie patch down in the badland basin, including an unexpected occurrence of provincially rare Heart-leaved Buttercup (*Ranunculus cardiophyllus*) (S2).

Overall it was a great day, and we were able to introduce a lot of people to the beauty of the badlands. To see photos of the trip, visit our Facebook page. A plant species list we compiled for the Avonlea Badlands is also on our website at <https://www.npss.sk.ca/info-resources/plant-checklists>

Thanks to the staff and volunteers of the Avonlea Heritage Museum, especially Cathy Geisler.

This issue's COVER PLANT– *Gaillardia aristata*

Gaillardia, also known as Blanketflower, is a common wildflower across the prairies and spotting one flowering is a sure sign that summer is in full swing. An extremely hardy but short-lived perennial, it requires full sun and can be found on a variety of soil types from the direst prairies of the southwest to meadows of the aspen parkland. In North America, their range extends from Yukon all the way south to New Mexico and east to west across most of Canada and the northern United States. Their flowers are typically yellow with a rusty center, but can have some orange or red toward the base of the ray florets. Exploiting this colour variation, horticulturists have developed varieties with only red or even brown ray florets, though we still like the wild type best! *Gaillardia* is incredibly easy to grow from seed and may even bloom the first year. It makes up for its short life by easily reseeding, though not to the point of being weedy. In addition to being beautiful, it is very popular with pollinators, as the butterfly on the cover photo can attest. Incorporating *Gaillardia* into your landscape will add diversity, beauty and will benefit local pollinators. Several native plant and seed retailers provide *Gaillardia*; refer to our list of sources on our website for more information.

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P.O. Box 21099 Saskatoon, SK S7H 5N9

TO:

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