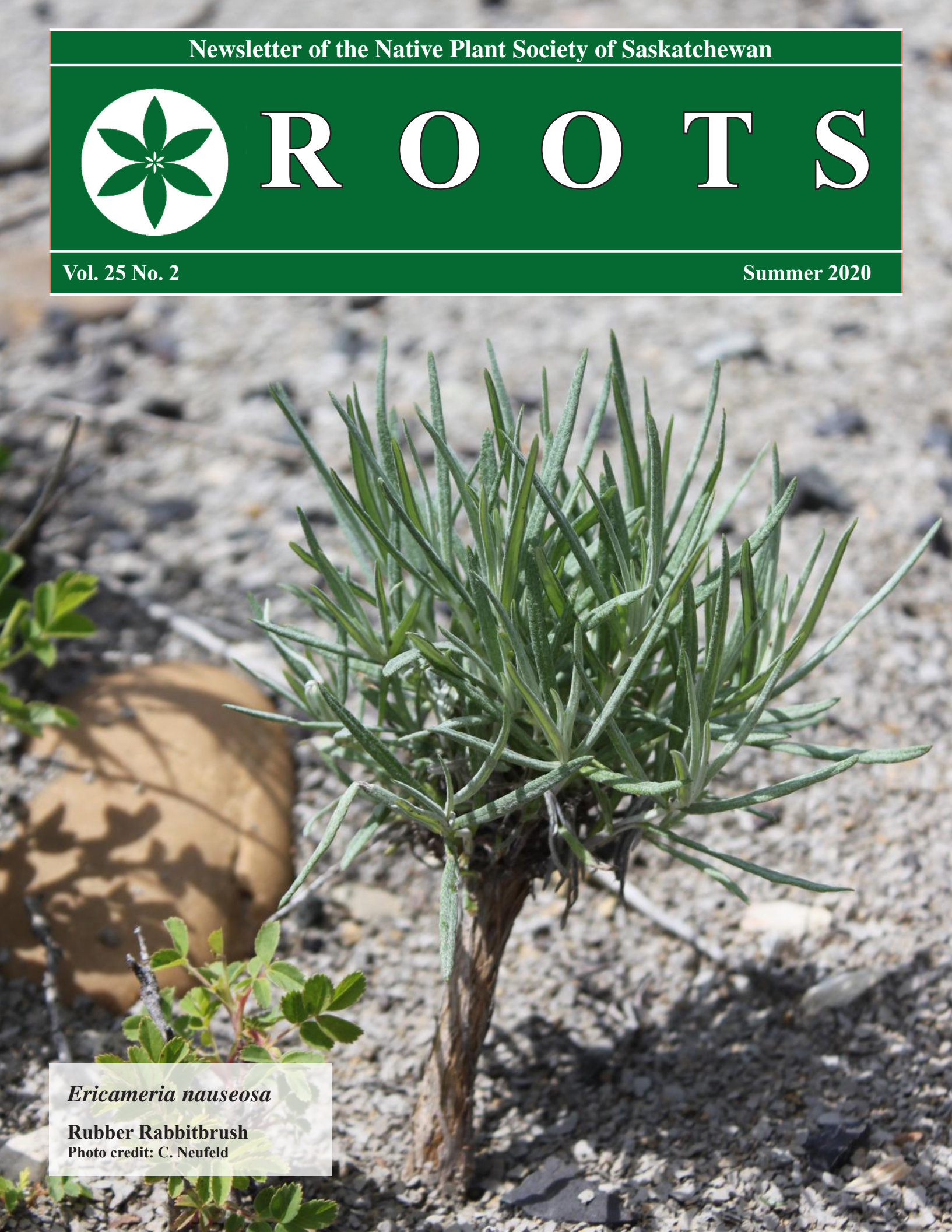
Newsletter of the Native Plant Society of Saskatchewan

ROOTS

Vol. 25 No. 2 Summer 2020



Ericameria nauseosa

Rubber Rabbitbrush
Photo credit: C. Neufeld

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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
Winter Issue: November 1 December 15
Spring Issue: February 1 March 15
Summer Issue: May 1 June 15
Fall Issue: August 1 September 15

Membership Dues (Year End November 30th)

Individual $30	Family $45
Student $15	Non-profit $100
Corporate $200	Life $500

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

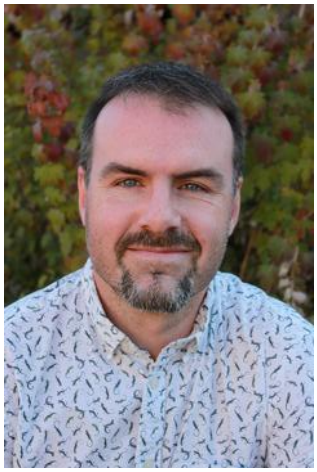
Behind the Scenes: Faces of the NPSS

Hello plant people. My name is Beckett Stark, and I am a new addition to the NPSS board. I am originally from Saskatoon and have a B.S.A (2019) from the University of Saskatchewan, College of Agriculture, majoring in Environmental Science. I am currently doing my M.Sc. in Land Reclamation and Remediation at the University of Alberta. My M.Sc. project is evaluating the efficacy of measures taken to mitigate impacts on rare plant populations in a pipeline right of way.

I am a big fan of rock climbing, cross country skiing, and backcountry camping. My favorite Saskatchewan native plant is Dotted Blazing Star (*Liatris punctata*) because it grows very well in dry conditions and provides food for hummingbirds. It is also common on a quarter section of mixed grass prairie that is owned by my family. My partner and I have dabbled in managing invasive species on this property, which has proved to be an enjoyable experience. I am looking forward to organizing some fun NPSS events and meeting more of the NPSS community.

This issue's COVER PLANT– *Ericameria nauseosa*

The tiny topiary on the cover is Rubber Rabbitbrush. This specimen was found in the West Block of Grasslands National Park and is unusual, as it is normally multi-stemmed and bushy, hugging the ground. It's unclear what made this particular plant the way it is, perhaps a combination of grazing and basal erosion, but it sure is photogenic! Rubber Rabbitbrush is an evergreen shrub from the Aster Family (*Asteraceae*), occurring in western North America from central Saskatchewan south to Mexico. It grows in arid habitats and can tolerate poor, coarse, and alkaline soils. In mid to late summer while other flowers are fading, it bursts with hundreds of tiny, yellow flowers, providing a splash of colour to a stark landscape and much needed nectar to pollinators. For these reasons, it would make a useful addition to any rock garden. Due to its ability to colonize disturbed sites, it has been used in reclamation and soil stabilization projects in the United States. It is of little forage value to livestock, though deer, pronghorn and rabbits will browse it in the fall and winter, hence its common name. It scientific name, nauseosa, refers to the volatile oils in the leaves which smell either like pineapple or foul and rubbery, depending on who you ask. Traditional uses of the plant included a yellow dye, medicinal tea and chewing gum, while modern research has looked at it for uses in antimalarial drugs, insect repellants, biofuels, and resins and rubber due to the latex in its leaves (the latex also gives rise to its common name).



Executive Director's Message

Chet Neufeld

I hope everyone was able to get out and enjoy summer despite the limitations that COVID-19 placed on us. For those of us living in the southern part of the province, we experienced one of the driest summers I can remember, while those in the north were inundated with rain. It's been another incredibly busy field season once again this year for the NPSS! Knowing that the pandemic would wreak havoc on our organization and all we had planned, I worked hard to secure funding from any and all possible sources. In fact, I did nothing but write proposals for about three months straight! All the hard work paid off. While we were off to a slow start due to funding delays thanks to COVID-19, we more than made up for it in the last half of the summer.

July saw a new project in the form of comprehensive surveys of Nashlyn Pasture for plant species at risk and range health assessments to aid in conservation management. You can read more about this in the article that our Program Coordinator Hilary Pinchbeck wrote in this newsletter, and it also ties in with the press release from Environment and Climate Change Canada appearing later in this newsletter. Another new project approved this summer was the South of the Divide Invasive Alien Species Strategy, a comprehensive project that will work at the local level with multiple stakeholders over the next three years. More on this project in the funding announcement included later in this newsletter. Another new development is that I recently submitted a proposal to the Agriculture Development Fund. After submitting a letter of intent, we were invited to submit a full proposal out of 303 applicants, so even getting to this stage is a milestone. We are awaiting their funding decision, but we have a strong proposal and are hopeful. One last new project involves the Ministry of Highways and Infrastructure. They are widening Highway 5 east of Saskatoon in the Strawberry Hills, and we are assisting them to establish a full acre of roadside wildflower habitat for pollinators. The area is nearby to other native habitats, so the wildflower area will improve connectivity. This part of the highway is also adjacent to several acreage communities so signage will help raise awareness of the importance of both pollinators and native plants. Topsoil reclamation is currently underway and seeding will proceed any day now.

As for ongoing programs, Rare Plants and Ranchers received renewed funding from Environment and Climate Change Canada and the Ministry of Environment. Because the federal funding was received late, we have had to modify our program for 2020 but will be following our regular schedule in the coming years. Another ongoing program that received continued funding is our Flowering Rush Removal program, which aims to contain, eradicate and monitor invasive Flowering Rush (*Botumus umbellatus*), an incredibly invasive and destructive weed and Prohibited species in Saskatchewan. Although ongoing funding from the Canadian Council on Invasive Species and new funding from the Ministry of Environment allowed us to proceed without delay, very high water levels persisted on the South Saskatchewan River, making it too dangerous to conduct our canoe-based surveys as we had in the past two years. However, our partners at the South Saskatchewan River Watershed Stewards were able to do some shoreline visits and also trialed drone surveying. Once again, we resurveyed the wetland near Watrous, SK and for the second year in a row, found no Flowering Rush. This is very encouraging and shows that the site is progressing in the right direction. Additionally, water levels were quite low in the wetland due to the dry summer in that area, which made surveyed easier. One last ongoing initiative that we are involved with is Wild About Saskatoon's NatureCity Festival. With in-person gatherings all but eliminated, we have used 2020 to connect people to nature through virtual platforms. Some other significant developments include a new Wild About Saskatoon website (www.wildaboutsaskatoon.org) and setting a date and theme for next year's festival, "Prairie People, Deep Roots" from May 18-23, 2021. Mark your calendars!

Governments of Canada and Saskatchewan join forces with ranchers to protect biodiversity in Saskatchewan

September 8, 2020 – Ottawa, Ontario

As Canadians, we are fortunate to have an abundance of nature in our backyards—a gift that comes with a tremendous amount of responsibility to protect it.

Today, the Minister of Environment and Climate Change, the Honourable Jonathan Wilkinson, along with Minister of Agriculture and Agri-Food, the Honourable Marie Claude Bibeau, and Saskatchewan Minister of Agriculture, the Honourable David Marit, announced a land exchange that will allow the federal and provincial governments to work with the ranching community to conserve prairie grasslands in southwestern Saskatchewan.

This land exchange helps Canada work toward its goal of conserving a quarter of its land and a quarter of its oceans by 2025.

Environment and Climate Change Canada (ECCC) will acquire Govenlock, Nashlyn and Battle Creek pastures from Saskatchewan, and manage them for the conservation of species at risk and migratory birds, while continuing sustainable cattle grazing. Livestock grazing mimics traditional disturbance by plains bison and maintains the health and quality of the grasslands.

In return, Saskatchewan will acquire federal lands and improvements, such as fencing, barns, and corrals, of equivalent value in 55 former federal community pastures that have transitioned to producer control. This land exchange will simplify and improve land management, enabling the efficient production of beef cattle, while supporting biodiversity.

Govenlock, Nashlyn and Battle Creek pastures cover an area of 800 km^2 and are an excellent example of how governments, ranchers, and conservation groups can work together to protect iconic Canadian species. Through collaboration, a strategy was developed to manage the pastures in an economically, socially and environmentally responsible way to support livestock production, wildlife habitat protection and local and Indigenous community interests.

"The Government of Canada is pleased to work with the Province of Saskatchewan, ranchers, and Indigenous leaders on this important land transfer in southwestern Saskatchewan. Together, we are protecting iconic Canadian biodiversity, including 10 species at risk, for generations to come. Congratulations to everyone who worked so hard over the years to make this transfer a reality."

– The Honourable Jonathan Wilkinson, Minister of Environment and Climate Change

Quick facts

- In 2017, the Government of Canada confirmed its desire to acquire and manage these pastures, covering an area of 800 km^2.
- As part of this agreement, Canada acquires land from Saskatchewan valued at 64 million dollars for conservation purposes, in exchange for transferring land valued at 64 million dollars to Saskatchewan for efficient operation of pastures as provincial leased lands.
- The area is recognized nationally and internationally for its significant concentration of migratory birds and grassland birds.
- ECCC, Agriculture and Agri-Food Canada and Saskatchewan engaged local ranchers, communities and Indigenous people regarding the transfer of lands and administration.
- First Nations, the Métis Nation of Saskatchewan and ECCC are working to co-develop an Indigenous Advisory Committee to ensure Indigenous Peoples are a core partner in the ongoing management of these lands.
- Patrons from the Govenlock, Nashlyn and Battle Creek pastures were actively involved in the development of the operational model that was used for the past two years and that will continue to be used in the future.
- This area supports habitat for 10 species at risk including Swift Fox, Sprague's Pipit, Chestnut-collared Longspur, McCown's Longspur, Greater Sage Grouse, Burrowing Owl, Ferruginous Hawk, Mountain Plover, Long-billed Curlew and Northern Leopard Frog.

Nashlyn Pasture.
Photo by Heather Peat-Hamm

NPSS Surveys Species at Risk in Nashlyn Pasture

Hilary Pinchbeck, NPSS Project Coordinator

The 2020 field season had to start a little late this year due to COVID-19 funding delays, but fortunately, I was still able to get out and find some rare plants! Starting in July and ending in September, I was stationed at the Nashlyn Pasture in the south-

Nashlyn Pasture.
Photo by Hilary Pinchbeck

west corner of Saskatchewan near Consul. This pasture and two neighbouring pastures are former Prairie Farm Rehabilitation Administration (PFRA) pastures, but their tenure was recently transferred to Environment and Climate Change Canada. If you're unfamiliar with this area the ecosystem is mainly upland

Rocky Mountain Pincushion Plant.
Photo by Hilary Pinchbeck

Opposite-leaf False-bahia.
Photo by Hilary Pinchbeck

prairie and sagebrush habitat, rugged valleys with steep cliffs, and many creeks throughout the area. However, this area receives very little rainfall throughout the summer months, so it is quite dry.

For the first 10 days I was there, I was accompanied by Heather Peat-Hamm where we completed upland and ephemeral wetland surveys to search for provincially and federally rare plant species. By mid-July the weather had heated up and the plants started to get crispy, so our plant identification skills were definitely put to the test as soon as we started. However, we came across many provincially rare plant species such as Rocky Mountain Pincushion Plant (*Navarretia saximontana*; S3), Opposite-leaf False-bahia (*Picradeniopsis oppositifolia*; S2), Common Squirreltail (*Elymus elymoides ssp. elymoides*; S3), Carolina Foxtail (*Alopecurus carolinianus*; S2), Few-flowered Oatgrass (*Danthonia unispicata*; S3), Runcinate-leaved Skeleton-weed (*Stephanomeria runcinata*; S1), Gumbo Evening Primrose (*Oenothera caespitosa ssp. caespitosa*; S3), Tumblegrass (*Schedonnardus paniculatus*; S3), Rocky Ground Sandwort (*Eremogone congesta* var. *lithophila*; S3), and one federal rare species, Dwarf Woollyheads (*Psilocarphus*

Dwarf Woollyheads.
Photo by Hilary Pinchbeck

brevissimus var. *brevissimus*; S1). Fortunately, we did not come across very many invasive species within this area; only one small patch of Japanese Brome (*Bromus japonicus*), Spotted Knapweed (*Centaurea maculosa*), and, of course, Crested Wheatgrass (*Agropyron cristatum*).

Along with many interesting plant species, I also came across several animal species at risk making use of this large area of native prairie such as American Badgers (*Taxidea taxus* subsp. *taxus*), Northern Leopard Frogs (*Lithobates pipiens*), Sprague's Pipits (*Anthus spragueii*) and many other bird species! I had heard that this area was excellent Swift Fox (*Vulpes velox*) habitat, but unfortunately, they eluded me this season.

After Heather had left, I spent the next month on my own continuing the search for rare plants as well as completing rangeland health assessments throughout the pastures. With the limited time we had to complete these surveys I would say we had an excellent season and I cannot wait to be back out again next summer!

NPSS Scores Major Funding Support for Species at Risk Conservation in Saskatchewan's Southwest

The Native Plant Society of Saskatchewan has secured a three-year funding agreement with Environment and Climate Change Canada to support our South of the Divide Invasive Alien Species Strategy. This collaborative project will assist Species at Risk recovery in the South of the Divide region through landscape-level invasive alien species mapping and management, achieved through a combination of field surveys, development of a management plan, targeted outreach and engagement, local consultation and financial support.

The South of the Divide region is incredibly large, encompassing the Saskatchewan portion of the Milk River drainage basin, a 1,415,732 ha (14,157 km^2) area (excluding Grasslands National Park) crossing 15 rural municipalities in the southwest corner of the province. The area is also very intact and diverse, with more than half of the landscape comprised of native prairie and hosting hundreds of plant and animal species, including dozens of provincially rare species and at least 13 Species at Risk.

"We're grateful to Environment and Climate Change Canada for their generous support and continued commitment to Species at Risk conservation in Saskatchewan" says Chet Neufeld, NPSS Executive Director. He went on to say that, "We're excited to work with existing partners in the region, as well as form new partnerships to ensure the best possible outcome for Species at Risk in the region".

The total funding for the project is valued at $569,525, with Environment and Climate Change Canada contributing $284,575. Work has already begun, and an update will follow in the next newsletter.

The Frenchman River Valley from atop Jones' Peak near Eastend, SK., part of the South of the Divide region.
Photo by Chet Neufeld

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :
Environment and Climate Change Canada | Environnement et Changement climatique Canada

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Introducing the Saskatchewan Mycological Working Group

Jacey Bell

The Saskatchewan Mycological Working Group (SMWG) is a collection of ecologists, mushroom enthusiasts, and citizen scientists interested in providing education on all things related to fungi (and learning more about it ourselves). One of our main goals is to document occurrences of the mycoflora of Saskatchewan to provide a better understanding of species range in the prairie provinces. We exist as a working group under the umbrella of the Native Plant Society of Saskatchewan.

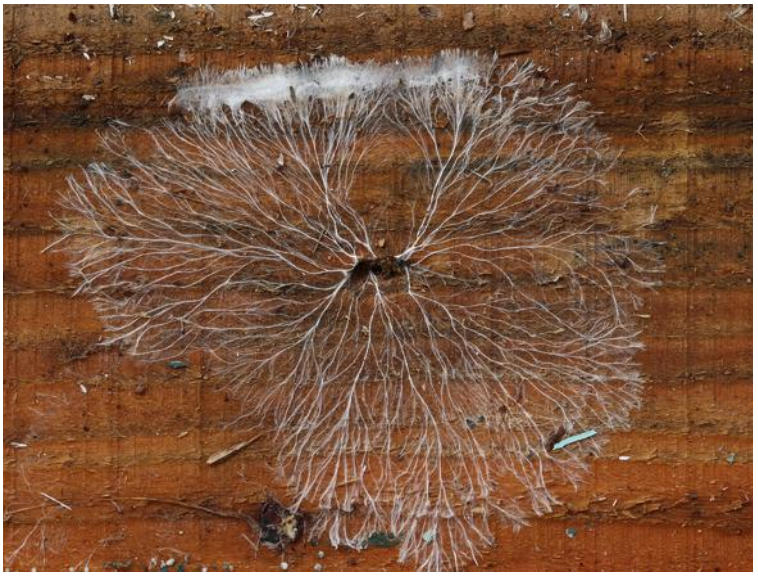
This summer, the group hosted a foray on one of our members' farms near Redberry Lake. Attendees found a wide variety of mushrooms and some fascinating slime moulds. The weather was not completely cooperative, with periodic rain showers all afternoon, but that didn't stop us. Perhaps some of us were even encouraged, as rainy weather promises the emergence of more mushrooms!

Although the pandemic reduced the number of in-person activities we had planned, the group still hosted a couple of Zoom meetings, a short webinar on Beginner Mushroom ID, and was featured in a Bridges article about common backyard slime moulds courtesy of the Saskatchewan Perennial Society. We have also seen a recent increase in members on our Facebook page, which is a place to share photos of mushrooms, lichens, and slime moulds and share all kinds of information on fungi. A follow up to the Beginner Mushroom ID webinar is currently in the works, a fall foray was held in the Nisbet Forest, and the group hopes to host many forays next season.

If you are interested in learning more about fungi or would like more information, you can check out our Facebook Group (Saskatchewan Mycological Working Group), Instagram (@sask_mycology), and email us at saskmycology@gmail.com to be added to the mailing list.

Happy foragers with a giant conk! Featuring Geo and Koa.
Photo by Jacey Bell

Leccinum sp. Scaber stalk.
Photo by Stephen Srayko



Mycelium growing on dead wood.
Photo by Sandy Jasieniuk

Grassland Protection Petition Launched

Preserving all of our grasslands is essential for the survival of many species. Nature Canada has created a petition to show support for some important portions of our remaining grasslands in Southwest Saskatchewan and Southern Alberta, and they encourage everyone to sign the petition.

Petition link:

https://naturecanada.ca/petition/protect-the-prairie-grasslands/

Petition text:

Grasslands are the most endangered, the most altered, and least protected ecosystem on the planet. Canada's prairie grasslands support over 60 different at-risk species, including the Burrowing Owl, the Swift Fox, and the Black-footed Ferret.

I am proud of Canada's commitment to double protections for nature by 2020. Canada's prairie grasslands –and the wildlife that call it home— are a unique part of our heritage and economy, and must be an urgent priority for long-term conservation.

I urge the Canadian government to work with ranchers, First Nations and Métis organizations, and local communities to protect Canada's vital prairie grasslands in Southwest Saskatchewan and Southern Alberta. The approach to conservation should respect Indigenous rights and provide local ranchers secure and long-term access for cattle grazing.

One of Saskatchewan's beautiful grasslands, of which only 8-13 percent remain..
Photo by Chet Neufeld

Corporate Members and Partners

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