

Native Plant News

Vol. 19, No. 5

[f /npss.sk](https://www.facebook.com/nrss.sk)www.npss.sk.ca[@NPSS_SK](https://twitter.com/NPSS_SK)

Spring 2015

Introducing Fire to our Urban Natural Landscapes

By GARY PEDERSEN

Recently a new tool was officially added to the City of Saskatoon Parks Division's Naturalized Areas management; Prescribed Fire. Prescribed fire is defined as the deliberate use of fire to manipulate landscapes toward a set objective.

Fire has long been recognized as an agent of change and a force for renewal in nature. Our prairie landscapes are no exception and are particularly well adapted to fire. Many of our native plants have such a close association with fire that they can be considered dependent on fire for their survival. This is particularly true of our native grasses as they respond well to fire with both renewed growth and vigour. One good example is blue grama grass or "prairie wool" which will tiller (send up new shoots) prolifically after a fire.

Fire also benefits native trees such as trembling aspen and plays a pivotal role in aspen forest regeneration. By tree standards individual aspen above ground are short lived; on average roughly 75 years.

Historic fire cycles on the prairies were frequent which kept aspen stands vigorous and healthy. Few aspen died of old age. Even though the above ground portions of an aspen can die back after a fire, the roots are still very

In contrast to these positive effects, the absence of fire can have negative effects on native plants. One good example is a plant disease known as Black Knot. Black Knot is a fungal disease that is specific to members of the cherry family and is widespread in chokecherry along our riverbank. If nature had been allowed to take its course, fire would have periodically destroyed the top growth of chokecherry allowing the roots to send up new



PHOTO BY CHET NEUFELD

When the conditions are right, fire can be used to effectively regenerate a natural landscape.

much alive and respond by sending up new plants called suckers from below ground.

disease- free shoots. Black Knot would then be far less prevalent and

Continued on Page 2

**3 Spring
Wildflower Walk**

4 Wacky Plants

**6 Remembering
Maxine Morrison**

**7 SaskEnergy/
Trans-Gas in
Prairie Habitats**

**President:**

Shelly Heidinger 306-634-9771

Vice-President:

John Hauer 306-463-5507

Treasurer:

Cheri Sykes 306-924-8028

Secretary:

Jacey Bell 306-652-4432

Directors:

Nadia Mori 306-946-3219

Dale Gross 306-347-0447

Andrew Stewart 306-227-0640

Wade Sumners 306-250-6659

Joanne Marchand 306-960-9313

Executive Director:

Chet Neufeld 306-668-3940

NPSS Address:

Native Plant Society of Saskatchewan

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

Phone: (306) 668-3940 Fax: (306) 668-3940

E-mail: info@npss.sk.ca Website: www.npss.sk.caTwitter: @NPSS_SK www.facebook.com/npss.sk

Native Plant News 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 30)

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

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

Continued from Page 1

conspicuous than it is today within our city. Co-incidentally, chokecherry seed germination is also improved with heat treatment, suggesting scarification by fire is an important adaptation; the disruption of the seed coat to make it permeable to air and water.

After considering all of the effects of fire, it was therefore only proper that the decision was made to reintroduce fire into the landscape. The application of prescribed fire is only resurrecting a natural process of change which dovetails so perfectly with the Naturalized Area objectives of self-sustaining landscapes and biodiversity.

Prescribed fire in an urban setting is not a new innovation and has already been used within the City of Winnipeg and also within our own city limits. In the recent past, the Meewasin Valley Authority has used fire in the Saskatoon Natural Grasslands and the North East Swale. Indeed, it was because the MVA had already performed prescribed fires within the city and demonstrated that it could be done safely which helped pave the way for the Parks Division to initiate our own program. Now that Parks staff have obtained training from Parks Canada and prescribed fire field experience with the MVA earlier this year, we are now confident in our ability to conduct safe burns.

Nonetheless, performing a burn within an urban area has plenty of challenges and a small margin for error. Both ground and weather conditions have to be just right in order to minimize the risks, especially with respect to managing smoke. However, the Parks Division fully intends to push ahead with a carefully managed burn program despite the challenges and has targeted Gabriel Dumont Park; one of the city's first naturalized parks as the site to initiate the program. And since we share many of the same burn objectives as the MVA, we intend to co-operate in the future with them so that in pooling our resources, we can both achieve our common objective of maintaining healthy and biodiverse natural areas.

Note: This article originally appeared in a "Nature Notes" column in the Saskatoon Express. *

New Rare Prairie Plant Survey Protocols

The Saskatchewan Ministry of Environment's new Species Detection Survey Protocol for Rare Prairie Plants has been posted. You can find it here:

<http://www.environment.gov.sk.ca/adx/asp/adxGetMedia.aspx?DocID=a5cfe741-baec-488b-be54-c0c71330e0e2>

For other survey protocols and data loadforms, please visit the Ministry of Environment website at:

<http://www.environment.gov.sk.ca/Default.aspx?DN=a7d1b343-5099-4578-9083-ecc975e5902e> *

Advertising In Native Plant News

Rates: \$50 for 1 issue, \$175 for 4 issues

Contact the NPSS for more details.

Ph: (306) 668-3940 E-mail: info@npss.sk.ca



Spring Wildflower Walk Closes Out NatureCity Festival

On May 29, the NPSS had its first field tour of the season with a visit to Saskatoon's Northeast Swale. The Northeast Swale is a fescue prairie area with rolling knob and kettle topography, meaning that it has dry ridges and low hilltops studded with small wetlands. This allows it to be an incredibly diverse area, with over a hundred native plant species (including some provincially rare plants), and dozens of species of wildlife including species at risk. The

Northeast Swale was created during the recession of the last ice age when glacial melt water carved out this area, leaving a channel that runs 26 km from Peterson's Ravine on the South Saskatchewan River to Clark's Crossing, also on the South Saskatchewan River.

On the day of the tour the sun was shining and the mosquitoes and ticks were non-existent - a perfect day for exploration. The weather also helped us have a good turnout of participants eager to see what they could find. It didn't take long before we began to spot a number of spring wildflowers: Mouse-ear Chickweed (*Cerastium arvense* ssp. *strictum*), Three-flowered Avens (*Geum triflorum*), Moss Phlox (*Phlox hoodii*), Prairie Onion (*Allium textile*), Reflexed Rock Cress (*Boechera retrofracta*), Narrow-leaved Puccoon (*Lithospermum incisum*), and Early Yellow Locoweed (*Oxytropis sericea*). We also saw shrubs in bloom such as Saskatoon (*Amelanchier alnifolia*) and

Wolf Willow (*Elaeagnus commutata*). Perhaps the highlight of the evening though, was finding a provincially-rare Crowfoot Violet (*Viola pedatifida*)



PHOTO BY CHET NEUFELD

Participants exploring the Northeast Swale during the spring wildflower walk.

in bloom. The Northeast Swale is home to many Crowfoot Violets and other rare species, so it is all the more important to help protect this fragile and significant ecosystem, particularly with the new city neighbourhood developing around it. As a side note, the NPSS is working with all relevant stakeholders through a coalition called the Northeast Swalewatchers to help mitigate urban development impacts on the Northeast Swale.

The NPSS Spring Wildflower Walk was not only our first field tour of the season, but it was also a NatureCity Festival event (one of the last of a week of activities, actually). The NatureCity Festival, now in its third year, is organized by a group called Wild About Saskatoon, of which the NPSS is a member of and handles the finances for. This year, the festival ran from May 23-29, 2015 and featured over 70 contributing organizations hosting nearly 50 events over the course

Upcoming Events

2015

Forages in the Field Workshop
"Where Reclamation and Agronomy Meet"

June 24, 2015

Brock, SK

For more info or to register, please go to:
<http://www.saskforage.ca/joomla/>

Botany Alberta

June 19-21, 2015

Waterton National Park, AB

For more info or to register, please go to:
<http://anpc.ab.ca/>

NCC Conservation Volunteer Event -
Stark Coulee Bioblitz

July 12, 2015

Moose Jaw, SK

For more info or to register, please go to:
<http://www.natureconservancy.ca/en/what-you-can-do/conservation-volunteers/events/#sk>

Summer Pasture Tour

August 6, 2015

Earl Grey, SK

For more info or to register, please go to:
<http://www.saskforage.ca/joomla/>

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.

of the week. The keynote event was particularly successful, drawing 186 people to listen to our two keynote speakers, children's health expert, nature advocate and celebrated author Dr. Shimi Kang and Cam Collyer, Program Director for the Evergreen Foundation's outdoor youth programs. The festival was once again an overwhelming success, so watch for it next year near the end of May. A big thank-you goes out to all of our financial sponsors: EcoFriendly Sask, Evergreen/Wal-Mart, Ducks Unlimited Canada/RBC Blue Water Project, Nature Saskatchewan, Saskatchewan Prairie Conservation Action Plan, and SaskEnergy. 🌱

Wacky Plants

By CHET NEUFELD
Executive Director - NPSS

As part of my job is to respond to public questions and comments, I get a variety of topics sent my way. Occasionally, I'll get a photo of a plant that someone can't identify, and sometimes it's because the plant doesn't look like it should. For whatever reason, these plants don't develop like a typical individual of their species. Flower colour is the most common abnormality.



White Crocus.

Here are just a few of the interesting finds that I've received in recent years:

Gene Kessler from the Pangman, SK area contacted me with photos of yellow Crocuses (*Anemone patens*). Gene writes: "For the past fifteen years or so yellow Crocuses have been re-occurring on our farm in the Pangman Area. The plants are spreading although (recently) there was a limited amount



Yellow Blue Flag Iris.

PHOTO BY JOAN WILSON

of them. As they mature they wash out and look white but when young there is a definite light yellow hue." I had to write back to him telling him in the most carefully worded scientific terms that I had no idea why this was happening. Renny Grilz of the Meewasin Valley Authority also found some white crocuses in the Saskatoon area this spring.

Not to be outdone, Joan Wilson from Saltcoats, SK sent me a photo of what she thought was a native yellow Iris. Before I had seen the photo, I worried that it might be the invasive horticultural Yellow Iris (*Iris pseudacorus*) which has not yet been seen in Saskatchewan. However, upon seeing the photo, I am convinced that it is a yellow form of our native Blue Flag Iris (*Iris versicolor*). According to Joan, this iris is quite close to a known patch of typical-looking Blue Flag Iris. Only time will tell if they will come up yellow year after year, but I'm sure Joan and a few other keen observers will be on the lookout.

While these first two wildflowers are oddities, the Western Red Lily (*Lilium philadelphicum* var. *andinum*) that Margaret Put found near Kisbey, SK is truly a rare beauty. While conducting some environmental monitoring, Margaret found a rare form of our provincial flower. The lily is not only yellow in colour, but lacks the characteristic spots on its tepals. Because of this, the species is referred to as *Lilium philadelphicum* var. *andinum* forma *immaculatum*. According to the Flora of Saskatchewan's *Lilies, Irises and Orchids of Saskatchewan*, plants such as these "occur rarely and sporadically within populations of Western Red Lily".



PHOTO BY MARGARET PUT

Yellow Western Red Lily found near Kisby.

While we're at it, I'll add my own odd wildflower. This one was not hard to spot, as it is growing in my yard. A number of years back, my wife and I had planted many native wildflowers in our yard, including patches of Black-eyed Susan (*Rudbeckia hirta*). Included in the many normal-looking flowers



PHOTO BY CHET NEUFELD

Black-eyed Susan mutant with normal ones in the background.

were two that had large, deformed flowers atop ribbon-like stalks. Although I've seen this before in a few places in Saskatchewan, I've never before seen it in my yard. I wonder if I'll get deformed Black-eyed Susans if I plant seeds from the deformed flowers?

If anyone else spots an unusual native plant this summer, send me your story and photos and we'll get it in the fall issue. *

Saskatchewan Adopts New Environmental Code

Environment Minister Scott Moe announced today the province of Saskatchewan is adopting a new environmental code that will continue to protect our environment for future generations, while helping to meet the challenges of economic growth. The code is the first of its kind in Canada and the cornerstone of the province's new results-based approach to environmental regulation.

The supporting regulations that make up the first edition of the new Saskatchewan Environmental Code have been introduced upon proclamation of *The Environmental Management and Protection Act 2010* and *The Forest Resources Management Amendment Act 2010*. The code addresses diverse areas such as air quality, environmentally impacted sites, water management and natural resources protection.

"The Saskatchewan Environmental Code is based on a new regulatory approach that has environmental protection at its foundation," Moe said. "This streamlined regulatory process enables municipalities and industry to keep pace with growth, while ensuring Saskatchewan's environment remains healthy."

Using a results-based approach, the code clearly defines required environmental outcomes, empowering operators and organizations to determine how those results will be achieved or surpassed. This focus on results rather than process will provide the flexibility needed to apply innovative solutions, and allow the Ministry of Environment to focus on activities of greatest environmental risk.

The process to develop the code was inclusive and transparent, with stakeholders involved at every level. More than 200 experts and industry leaders from all sectors contributed to the development of the content of the code. As well, a 19-member Code Development Committee brought together diverse expertise and provided advice and guidance as the code was developed.

In 2012, a draft version of the code was made available for public review. More than 1,300 people responded by attending meetings or providing written submissions. At the conclusion of the public review period, a summary of feedback was made available on the Ministry of Environment's website at www.environment.gov.sk.ca/Code.

"I want to thank all those involved for contributing their time and talents to create a better regulatory system," Moe said. "The result speaks for itself – a made-in-Saskatchewan code that's innovative,

forward-looking, and good for our environment and our province."

"The code has turned the traditional method of regulation development on its head," Code Development Committee Chair and President of Clifton and Associates Ltd. Wayne Clifton said. "By starting at the working level, technical groups developed the regulation by consensus, with oversight from a group that included a wide variety of perspectives. The process took time but it produced excellent results of which we should all be very proud."

"One significant advantage of the code is that it

may be updated without the need for new regulations," partner at MacPherson Leslie & Tyerman and a member of the Code Development Committee Len Andrychuk said. "It can operate as a living document that can be continuously improved and updated to keep up with the changing economy and developments in environmental protection, which is in itself a fundamental change."

"The sections of the environmental code announced today will provide an opportunity to test the viability of this approach to regulation," Research Advisor with the Saskatchewan Environmental Society and member of the Code Development Committee Ann Coxworth

said. "It is my hope that the code will be an effective tool for environmental protection, provided the necessary commitment and goodwill is shown on all sides."

The environmental code will come into force in stages in the new year to allow affected industries to prepare for the change. Chapters dealing with forest management will come into force January 5, 2015, with the remaining chapters in effect on June 1, 2015. Activities not included in the first edition of the code will continue to be regulated as before.



PHOTO SUPPLIED

The Honourable Scott Moe.

For more information, contact:

Val Nicholson

Environment

Prince Albert

Phone: 306-953-2459

Email: val.nicholson@gov.sk.ca *

Remembering Maxine Morrison

By CHET NEUFELD
Executive Director - NPSS

On April 18, 2015, the Native Plant Society of Saskatchewan and the province as a whole

lost a true enthusiast and advocate for nature with the passing of Maxine Morrison. Throughout my years as Executive Director of the NPSS, it has been my pleasure to get to know Maxine. She is anything but one-dimensional; throughout her life she has been a nurse throughout Canada, assisted in air and land search and rescue, earned her pilot's licence and became a flying instructor (she wanted to be a flying nurse for remote northern communities), and worked on a Norwegian freight ship that took her around the world. She was also very involved in many different causes, from politics and foreign affairs to nature and conservation issues. She was also a lifelong learner, taking senior's classes at the University of Saskatchewan, botany workshops through the NPSS, and becoming an accomplished pianist and classical guitar player. She had a great personality as well: she was friendly, energetic, pragmatic, and her combination of knowledge, strong will and outspokenness made her a force to be reckoned with! She was a very active member of the NPSS, attending events such as our annual general meetings, workshops, and taking in many of our field tours. Even in her seventies, she would keep up with or outpace the rest of the group on long hikes. She also volunteered on many NPSS projects. Such was her energy that even her first bout of cancer didn't slow her down much, as she attended our annual general meeting in 2014, saying that "if she was cooped up for one more minute in her house it would drive her crazy". She was still receiving treatment for her cancer when she attended our 2014 field tour to Grasslands National Park. Although there was a lot of hiking, she endured, saying that the fresh air was doing her good. During that trip, we had supper together and she shared many of her life stories with me, including her flying days and her time aboard the Norwegian freighter. I asked how her cancer was doing and she said that things were holding for the time being, but if it came back she wasn't going to prolong it any more. True to her word, when the cancer did return, she met it head on with dignity and refused treatment. Being the practical and straightforward type that she was, she even called me one day a few months before her passing to ensure that her NPSS membership would be cancelled so that "no one had to be bothered with that kind of stuff when I'm gone". She even requested that no funeral be held. Maxine was one-of-a-kind, and she will be dearly missed by everyone at the NPSS. ✱



PHOTO BY CHET NEUFELD

Maxine Morrison (at left) on the 2014 Hudson Bay field tour.

A New Partnership to Conserve Saskatchewan Grasslands: Community Pasture Teams Up with Nature Conservancy of Canada

The Nature Conservancy of Canada (NCC) in Saskatchewan and Lone Tree Community Pasture shareholders signed a pilot partnership agreement to work together to develop a guide for future management and long term conservation of community pastures. After more than 75 years of conservation management by Canada's federal community pasture system, Agriculture and Agri-Food Canada is transferring these pastures to Saskatchewan.

Under this agreement, NCC staff in Saskatchewan will work with Lone Tree's community pasture manager and shareholders to develop best practices for pasture management and long term land conservation. In efforts to balance livestock production with long term conservation, it is hoped this partnership will help foster rapport with other community pasture shareholders and NCC staff.

NCC will include the advice and best practices of Lone Tree's management of the 33,697 acres (13,637 ha) of community pasture along with NCC conservation practices and techniques, and financially assist with the management of the pasture during 2015. This work may also help NCC guide the future conservation of other southern Saskatchewan community pastures and grasslands.

Best practices for pasture management will build on the knowledge that Lone Tree pasture managers and shareholders have gained over many years. Conservation actions and techniques that help sustain the diversity of plant, animal, bird and amphibian species, as well as the economic wellbeing of livestock producers and pasture management groups alike, will be included. The guide will help others conserve and sustain pasture grasslands similar to the Lone Tree pasture.

A management plan will be developed through face-to-face meetings with NCC staff, the Lone Tree pasture manager, and the Lone Tree shareholders prior to the 2015 grazing season. These best practices will be recorded, reviewed, revised and developed into a guide that can be shared with community pastures from Mankota to Midale, Valjean to Nokomis, McCraney to Good Spirit, and beyond. ✱

The Role of SaskEnergy-TransGas in Prairie Habitats

By DANIEL DIETRICH
Environmental Advisor - SaskEnergy/TransGas



PHOTO BY SASKENERGY-TRANSGAS

TransGas/SaskEnergy pipeline ROW crossing a short section of native prairie. Topsoil stripped and stockpiled to the left. Proper soil management is fundamental to reclamation success.

Building pipelines in Saskatchewan is our job at SaskEnergy/TransGas, and we take it very seriously. Just as excavating the trench and lowering the pipeline into the ground is part of construction, so is the reclamation of those pipeline rights-of-way (RsOW). As a Crown Corporation we have a unique situation; our landowners are not just stakeholders, they are also our customers; so it goes without saying we strive to keep those folks happy.

Through our corporate Environmental Management System, as part of a Unified Management System, a program has been developed to address landowner concerns and legacy reclamation issues on pipeline RsOW. These issues include things like:

- Responding to landowner concerns and inspection areas of reclamation concern
- Wind and water erosion of soil
- Compaction, admixing and pulverization of soil profile
- Slumpage, water management, and grading
- Invasive species management and control

- Revegetation of tame and native pasture lands
- Fencing for right-of-way protection from livestock
- Regulatory compliance and follow-up

The program is formally known as the Reclamation Inspection Program and is designed to specifically inspect areas of higher environmental risk, this would include areas of: native prairie, sandy landscapes, water crossings, and hilly terrain. These areas tend to exhibit reclamation issues more frequently than cultivated farm land. As part of the Reclamation Inspection Program these areas are inspected and repaired through an annual field inspection plan.

The reclamation of the pipeline ROW can take many years, especially on areas in southern Saskatchewan where a pipeline ROW may impact native prairie landscapes. Generally speaking, many of these sites will take upwards of 5 years to fully revegetate to a state that is representative of the surrounding native plant community. Historically SaskEnergy relied heavily on the landusers to inform us of reclamation

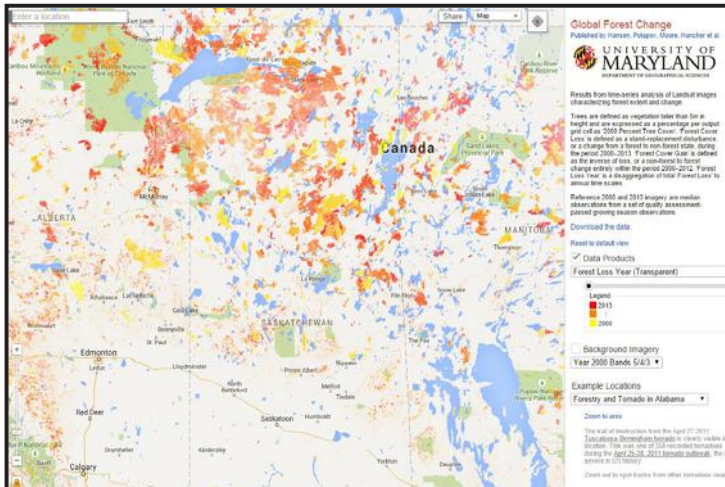
deficiencies. This program allows for a proactive approach to address concerns related to reclamation.

Repairs during the revegetation and reclamation process may include: spraying, mowing, tillage, wicking, reseeding, hydroseeding, and fencing. This process involves working with landowners to ensure our reclamation processes do not unnecessarily hinder their agricultural production. In addition SaskEnergy will work with non-profits and other municipal stakeholders on regional issues (i.e. leafy spurge) through funding, education, and partnerships.

As a user of the landscape, SaskEnergy recognizes the challenges of the competing landuse interests. By working with landowners in a proactive manner, rather than reactive, the Reclamation Inspection Program is leading the way to better relationships with our stakeholders and better reclamation outcomes. SaskEnergy is committed to improving our environmental score card through multiple strategies just like the Reclamation Inspection Program. 🌱

New Interactive Global Forest Map

Researchers at the University of Maryland have recently measured the change in global forest cover from 2000 to 2013, and have created an interactive, online map of the results. To create the map, the researchers conducted a time-series analysis of Landsat images characterizing forest extent and change. Users can zoom in to any place on the globe, and there are also examples that can be chosen from a drop-down list that highlight different causes of forest change, such as forestry, tornadoes, and palm oil plantations. In addition to the interactive map, the researchers have posted the data for downloading.



The interactive map can be found here:
<http://earthenginepartners.appspot.com/science-2013-global-forest> *

Corporate Members and Partners



Bearberry Creek Water Gardens

NATIVE & ORNAMENTAL WETLAND PLANTS

Bareroot • Plugs • Container

www.bbcreek.ca Sundre, AB

RETURN UNDELIVERABLE CANADIAN ADDRESSES TO:
 Native Plant Society of Saskatchewan Inc.
 P.O. Box 21099
 Saskatoon, SK S7H 5N9

TO:

Canada Publication Mail Agreement #40035909