Edmonton Native Plant Society

WILDFLOWER NEWS

'Growing Nature's Garden'

APRIL 2020

Prairie crocus, *Pulsatilla patens*, formerly *Anemone patens*.

From your editor:

Welcome to the Wildflower News for April. Spring seems to me to be a long time coming, but have faith. It should eventually arrive!

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Native Plants in Local Gardens

Events
- All cancelled for the foreseeable future thanks to COVID19!

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Please note:

All events, seed and plant sales, talks, everything, at which ENPS would have been an active participant, are cancelled. Our March board meeting was conducted via email, and further monthly meetings will be held via teleconferencing until this pandemic is over.

We expect board members, and really hope all our volunteers, adhere to the recommended actions to protect ourselves, our families and friends, and all others, and prevent the spread of novel coronavirus.

If you'd like information on protocols: Recommended actions by the Alberta Government.

Native Plants in Local Gardens

Brighten this time of physical distancing and/or self-isolation, by keeping an eye out in your garden, or on your nature rambles, for the first signs of spring among our native plants. Pussy willows, aspen, beaked hazelnut flowers? Crocus, coltsfoot pushing up? Three-flowered avens showing new spring leaves? Tell us when and where you saw them, and send your photos to engedmonton@gmail.com and we will post them on Facebook, and our website!

To start you off, here's one by Manna Parseyan of an emerging *Salix* sp. catkin.

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

A request from Nature Canada:

"While we all do our part to flatten the curve during COVID-19, Albertans should not have to worry about the future of our parks. Yet, shockingly, the provincial government's 2020-21 budget withdraws their responsibility for managing 175 sites, compromising public access and affecting 35% of Alberta's beloved parks network—while throwing into question the province's role in the future of land management and environmental protections for our wilderness. For a complete list of full and partial closures, and total removal from the Alberta Parks system, click here.

Nature helps us maintain our health and wellbeing—as Albertans grapple with the isolation of social distancing, wild spaces give us the chance to get outside, exercise, and put our minds at ease. For wildlife, nature is indispensable.

We need to move forward to protect our treasured wilderness, not backwards. This is essential for our health and the health of Nature. Municipal leaders, businesses, and conservation groups have been leading the charge for weeks to let Albertans know what is at stake. And they've had to, because there was no public consultation on this harmful decision.

It's time to make the government hear us—speak up today by sending a letter telling Premier Kenney and Minister Nixon not to sell off or close Alberta's precious public parks!"

For more information from Nature Canada and to send a message: click here

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Spring is coming…by Liz Deleeuw

Spring is coming despite the negative temperatures, sheltering in place, economic turmoil, and general uncertainty. These guys are up and ready to find a forever home. Some were destined for the Seedy events which were cancelled. That just means more established seedlings will be available for the time when we can gather again and have sales. Stay warm and keep it all in perspective.

In Liz's front room - an assortment of native seedlings, including gaillardia (R).

Belgravia Arts Park Native Plant Planting Bed - by Kathy Goble, photos by author.

A unique landscape within the Belgravia community, the Belgravia Arts Park (115th street and 74 Ave.) is an eclectic mix of art and nature. Created by a great community effort, the park has been a multi-purpose space used for yoga, weddings, walking, games, and picnics, to name a few.

We are pleased to have re-created a bit of the "wild" here in the Belgravia Arts Park Native Plant Planting Bed. Most of the species grown here are authentic Edmonton native species that were either saved or seed collected in the Edmonton area. With the assistance of the Edmonton Native Plant Group (now Society since 2018), Belgravia community members had created this planting in 2006 and have been caring for it since that time.

A community volunteer team meets every second week from May to September to maintain the planting bed. Each year presents new challenges and lovely surprises.

Last year three bee hotels were added and were well used very quickly.

The bed is a Partners in Parks site maintained by a group of volunteers.

Some of the species that you will see here are: Prairie Crocus, Prairie Buttercup, Buffalo Bean, Blanketflower, Showy Aster, Canada Anemone, Meadow Blazingstar, Giant Hyssop, Bearded Wheatgrass, Canada Wild Rye, and many, many more.

These photos were taken mid-August, 2019, and give a few different views of the bed:

What's in a Name? The Importance of Plant Identification by Patsy Cotterill

You don't need to know a plant's name to appreciate its virtues, or to take a good photograph of it. With an image of the plant in your mind you can recognize it in different locations and develop an understanding of its habitat requirements and distribution. However, knowing the identity of a plant has the same advantages as knowing the noun representing an object or an idea: it's for communication. As for the process of finding out a plant's name, well, that is a bit like doing detective work to uncover a crime: when you discover the identity of the victim or the perpetrator then you can find out a whole lot more about him or her and possibly solve the mystery. With a plant, knowing its name may be the only answer you are looking for, but once you have that name you can access whole dossiers of information about it to enrich your botanical experience. You can find what its family connections are, where it lives, what it may be useful or bad for, and so on. With a name, you can communicate with the botanists who went before you to collect and describe and publish that plant. The information is available in plant manuals and guide books, scientific texts and, increasingly, online. Wikipedia never ceases to amaze me how long is now its inventory of global plant life!

Getting started

So, how does one get going with plant identification? Most of us start with pictures. I cut my botanical teeth as a

youngster in Britain with “The Observer’s Book of Wild Flowers”, whose pages I thumbed so thoroughly that when I went out into the countryside I could recognize plants instantly from memory. (Many birders do the same.) There were, however, limitations to this pocket-sized tome which covered some 200 species with drawings and descriptions. For instance, the Observer’s book features only two species of violet, sweet violet (*Viola odorata*) and wild pansy (*V. tricolor*), yet in fact there are 14 species of violet in the U.K. (for comparison, 13 in Alberta; 42 in Canada). So, although I was able to get an image of what the genus, *Viola*, looked like, I had little idea of the diversity of species within that genus until years later.

Understanding the extent of the diversity within a family or genus is helpful in making correct identifications. Many people get confused when their specimen resembles the picture or description of the species in the book but doesn’t quite match it completely. Browsing illustrated flower manuals for your region or district are helpful in giving you an idea of the possible options you have. The smaller the geographic region and the fewer the species covered the easier it is to identify your plant to species level, especially if you are using a key (but more on keys later). Unfortunately, publishing a manual (also known as a Flora) for a restricted geographic area often isn’t economic because of the limited market for it. This limitation may eventually be overcome by apps. I still use picture books to browse and get an idea of what I’ll be seeing when I am travelling to places where I don’t know the plants.

Tools for identification

Another way to learn plants’ names is of course to ask people who already know them or, online, to browse identified photographs. Joining botanists on field trips is a good way to start. Spring is on the horizon if not the doorstep and soon requests for help with identification will be appearing on the Edmonton Native Plant Society’s Facebook page. Plenty of people are eager to weigh in, and usually their suggestions are correct, but answering queries does take up quite a bit of our time. Besides, simply to be told a name is to quickly forget it, unless one religiously labels one’s photos. The ideal situation is having the tools to identify plants yourself. What does the Chinese proverb say about giving a fish, versus teaching someone to fish…?

We are lucky in having a number of popular plant guides, several in the Lone Pine series, that cover Alberta. The one I always recommend is “Plants of the Western Forest: Alberta, Saskatchewan and Manitoba Boreal and Aspen Parkland”[1] which has as its two lead authors our local botanists Derek Johnson and Linda Kershaw. This provides near-comprehensive cover of our area as well as further north and further south (although not the southern Prairies). Linda’s “Plants of the Rocky Mountains,” also published by Lone Pine, serves visitors to the mountains.

Photo illustrations have improved tremendously over the years but if you find the pictures too small you can always Google the species (use the Latin name to get straight to the technical information) where you will usually find an array of images and various websites. Like many other guides, the aspen parkland book provides an introductory section in which flowers are arranged according to colour, but within the book the plants are arranged according to family. Plant classification and naming is all about relationships, and this system makes it easier to see the similarities and differences between related species, and to get an idea of the common features of plants within the same family. I recommend reading and coming to grips with the family descriptions, as well as practicing with some of the simple keys provided. Being able to recognize what family a plant belongs to gives you an immediate leg-up on identification. This is why we stressed family characteristics when we ran our plant course in 2018.

Using keys

Using field guides, with appropriate online backup, and putting in a bit of time, should at least give you a good grasp of our local flora. Biological consultants doing surveys, academic researchers, land managers and perfectionists, however, may need greater certainty with respect to their identifications.

This is where keys come in. These involve careful observation of the plant while moving through a series of opposing choices regarding the plant’s characteristics (e.g., flowers white versus flowers yellow). The more technical manuals provide keys to families, the genera (singular, genus) within them, and species within genera. (It can be difficult to key out plant families using a key, which is why it is important to have prior recognition of families if possible.) The floras covering larger areas, such as *Flora of North America*, provide keys to subspecific populations, that is subspecies and varieties, where they exist. The more species that are involved the more difficult it is to use the keys, and keys need to be used to, well, get used to them.

For the more serious botanist, however, using a key is well worth the effort; there is the satisfaction of solving a mystery when you key out a plant and know with the thrill of certainty that you have got the right result! And the more plants you know the easier it becomes to use a key, as you can quickly rule out the choices that would lead to the wrong species. (“OK, I know it isn’t that!”) I would, however, recommend getting magnification; not only does this reveal a whole new world of plant beauty and intricacy but also it makes keying so much more enjoyable when you can see the tiny features you are looking for. A x10 hand lens is pretty much essential; a dissecting scope (purchasable for about a grand) is ideal.

Local botanists Linda Kershaw and Lorna Allen have produced a series of updated keys, by family, to the vascular plants of Alberta. They are available online on the Alberta Native Plant Council's website: https://anpc.ab.ca/?page_id=4721 This will soon be available in book form (stay tuned!).

Getting familiar with the local flora

Keys, of course, require being able to examine the specimen, and having a specimen in hand can be problematic these days, when many plants are confined to nature reserves and collecting is not allowed. Keying in situ may be the answer but is not always very practical. Taking photographs of the appropriate parts in important. However, if you are identifying in the area where you live you can always return to the plants when you know what characteristics you need to check for. In fact, I absolutely recommend following a species through its seasonal life cycle. This gives you access to the variety of characters you may need to use, including flowers and fruits. For some groups, such as willows and sedges, access to fruits is just about essential for identification.

Check the details

When you have got an identification, or even if you are still browsing through a picture book, read the description and pay attention to the species' habitat and distribution. If your plant is growing in the wrong habitat or location according to the guide, be suspicious that your identification is in error. People often don't show much interest in plant distributions but plant geography is a fascinating subject in itself. Further, if you travel and see a plant that is similar to one you know at home, it helps to know the extent of your local plant's distribution: is it the same or a different species or variety?

Latin name changes

A complication for identification is the number of changes to Latin names that has occurred in recent years. There are several reasons for this, including upholding the strict International Rules of Botanical Nomenclature (so that around the world scientists can communicate and know they are dealing with the same taxonomic entity) and advances in the science of taxonomy which adjust a plant's place in the evolutionary classification scheme. Hence some names in the older manuals may not correspond with modern scientific usage.

When a new name is adopted the old name (or synonym) is usually included in the literature and is searchable as such. Check out the database Canadensys Vascan to see examples of this: https://data.canadensys.net/vascan/search For example, if you enter *Anemone patens* in the Search box you will be informed that this is a synonym of *Pulsatilla nuttalliana*, the new and accepted name. You will also see that two subspecies have previously been recognized, subsp. (var.) *multifida* and subsp. *nuttalliana*, but are no longer considered distinct from the species as a whole, signaling to you that in your identification you do not need to identify below the species level. Clicking on the new name will bring you to a page that also shows the species' common name or names, its position in the taxonomic hierarchy and its distribution in Canada.

Online resources

As previously mentioned, nowadays online resources can be extremely useful. These consist of such things as databases, websites, e-floras, information retrieved using browsers, such as Wikipedia, online keys and species lists. These, I believe, are the resources of the future, as they are cheap to produce (at least compared to print publishing) and flexible in accommodating changes, both taxonomic and nomenclatural. But, people protest, how can I look something up online when I don't know its name? You can't, so this is where your prior homework comes in, so that when you start searching you may know a family and are already a class 2 botanist!

See you in the field!

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1 This has proved so popular that it is in short supply and the current price is over $100! The first edition, which is essentially the same, *Plants of the Western Boreal Forest and Aspen Parkland,* sells for half the price, although still much more than the original printings.

A Simple Key to Seven Locally Occurring Violets (adapted from the *Flora of Alberta*)

1a. Plants with flower stalks and leaves arising directly and separately from the base of the plant ….2

1b. Plant with leafy stems, flowers in the axils of leaves……6

2a. Leaves deeply divided into narrow segments……*Viola pedatifida* (prairie or crowfoot violet)

2b. Leaves simple, not divided……3

3a. Plants with stolons (above-ground runners)…… *Viola palustris* (marsh violet)

3b. Plants without stolons ……4

4a. Flowers white; leaves round……*Viola renifolia* (kidney-leaved violet)

4b. Flowers violet-purple; leaves more or less kidney-shaped……..……..……5

5a. Leaves with some erect hairs on the upper surface; flower spur > 4 mm long……..*Viola selkirkii* (long-spurred violet)

5b. Leaves hairless above; spur 4 mm long or less……*V. nephrophylla* (bog violet)

6a. Flowers violet or purple; tufted……*Viola adunca* (early blue violet)

6b. Flowers white or pale violet; with stolons……*Viola canadensis* (Canada violet)

As you can see, some of these characters, such as stolon presence or absence, require a careful look at the plant. Alternative keys using different characters are, of course, possible. In fact, all our local violets are distinct from each other and readily separable on the basis of leaf shape, which could be easily illustrated in a database but is more difficult to describe in a text key. Our violets also occupy rather distinct habitats, easy to discern once you can recognize the plants. An annotated species list for the area in which you are identifying would be an additional tool to use with the key.

L. Viola selkirkii, long-spurred violet, Wagner Natural Area 2015

R. Viola nephrophylla, bog violet, Jones' Pond 2013

Photos by Patsy Cotterill.

Recommended Reading:
A few suggestions to help you through this time of social isolation. The following are available though the Edmonton Public Library as a downloadable audiobook, and/or ebook. The descriptions for each book are from the EPL website.

Last Child in the Woods, Saving Our Children From Nature-deficit Disorder by Richard Louv, 2008
As children's connections to nature diminish and the social, psychological, and spiritual implications become apparent, new research shows that nature can offer powerful therapy for such maladies as depression, obesity, and attention deficit disorder. Environment-based education dramatically improves standardized test scores and grade-point averages and develops skills in problem solving, critical thinking, and decision making. Anecdotal evidence strongly suggests that childhood experiences in nature stimulate creativity.

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John Muir, *The Scotsman Who Saved America's Wild Places* by Mary Colwell.
John Muir is regarded as the 'father of America's national parks' and is a towering figure in the history of that country's involvement with ecology. Despite the difficulty of his formative years Muir grew up to be a man of great joy - first an inventor and then an explorer, he found his haven in the mountains of Sierra Nevada. He was a fascinating character: on the one hand a recluse, who sought solitude, and on the other a passionate activist, determined to save the places he loved. A strong believer in both God and the essential goodness of humanity, he was the founder and first president of the Sierra Club. This wonderful memoir pays tribute to a giant of ecology and is essential reading for lovers of natural history.

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I first read the following two books back in the early ’70’s and fall back on them every 5-10 years when I’ve nothing else to read! (Like now. The libraries are closed!) They continue to inspire me. - Judith Golub

Sand County Almanac By Aldo Leopold
First published in 1949 and praised in the New York Times Book Review as "full of beauty and vigour and bite," *Sand County Almanac* combines some of the finest nature writing since Thoreau with an outspoken and highly ethical regard for America's relationship to the land. This classic work remains as relevant today as it was seventy years ago.

Desert Solitaire, *A Season in the Wilderness* by Edward Abbey
An account of the author's experiences, observations, and reflections as a seasonal park ranger in southeast Utah.
The following is a reader’s comment from the EPL site:
“To say this book had a tremendous impact on me and my relationship to the natural world would be a tremendous understatement. Abbey's work is a personal, provocative, poetic, and passionate ode to desert wilderness which rings as true today as it did then (the book was originally published in 1968).
Some of Abbey's assumptions, however, have not aged well and I find his perspective to be coloured by the unexamined white male privilege of his time. His views regarding other cultures and of women in general are cringe-worthy and frustrating. That being said, I still find that most of his larger ideas and philosophies are still relatable and deeply relevant in today's world.“

Lifetime ENPS Membership
You can now become an Edmonton Native Plant Society member for life. Memberships are $20 and can be purchased by emailing EdmontonNPSociety@gmail.com or by visiting one of our booths at future plant events in your area.

Aims of the Edmonton Native Plant Society:

Promote knowledge of the Edmonton area native plants.
Conserve our native plant species and their habitats.
Preserve native plant species and habitat for the enjoyment of present and future generations.
Educate individuals, business and local governments about native plants.

Please send compliments, concerns and complaints to engedmonton@gmail.com.
To unsubscribe, or subscribe, email engedmonton@gmail.com

Cherry Dodd, editor
Judith Golub, publisher
www.edmontonnativeplantgroup.org

Coming soon…prairie crocus, *Pulsatilla nuttalliana*; three-flowered avens, *Geum triflorum*; prairie buttercup, *Ranunculus rhomboideus.*