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The Alberta Native Plant Council Newsletter



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ALBERTA
Native Plant
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Cover photo: Janine Lemire
Pitcher plants (*Sarracenia purpurea*) in a boreal wetland.

Botany Alberta 2016: A Rainy Visit to Dry Mixedwood Boreal Sites

Kristen Andersen & Wendy Daley

Botany Alberta took place in the Central Mixedwood and Dry Mixedwood natural subregions of the boreal forest, about a 2-hour drive northeast of our capital city. The weekend of June 24 to June 26 was much like every weekend in the summer of 2016, as it was either raining or about to rain. The event was kicked off by a walk in the Holmes Crossing Sandhills Ecological Reserve, followed by a Saturday tour of the Fort Assiniboine Sandhills Wildland Provincial Park, and finished off in the Clyde Fen Candidate Natural Area.

Friday afternoon, the group met at Holmes Crossing just south of the Athabasca River Bridge from Fort Assiniboine. This place is home to traverse dunes stabilized by the jack pine lichen forest, which includes a series of small lakes. The tour guide wasn't able to make it, so he sent a couple of avid hikers who knew the area. He had told them that they would be hiking with a group of botanists. Surely this was an oxymoron they were not familiar with. After following the nine of us for about half an hour and 100 m (stop, start, look, take pictures, start – whoa stop, what's that?), they decided to take off. Fortunately for us the signage and paths were good, and some people were familiar with the

area. We climbed up a bit of a hill to an expanse where there were large patches of wild sarsaparilla (*Aralia nudicaulis*) between the alders and spruce. The bunchberry (*Cornus canadensis*) was in full bloom, and the blueberries were profuse but not yet mature. At another point, the group treaded down into a low-lying area filled with birch, willow, pine and spruce. The grass-of-parnassus (*Parnassia* sp.) was just in bud, but the common pink wintergreen (*Pyrola asarifolia*) was in full bloom, its pink



Wendy Daley

Jack pine forest with wild sarsaparilla carpet at Holmes Crossing.

flowers poking up through the shrubs and grasses. Another turn took us into a large wetland full of small bottle sedge (*Carex utriculata*). It rained a little bit during the hike then it came down hard

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just before we finished the loop. I don't remember the last time I was that wet. I think the term is "soaked to the bone."

Saturday's trip included the Fort Assiniboine Sandhills Wildland Provincial Park, which is along the north shore of the Athabasca River. The group started out at the Central Staging Area, where the Moose Trail carried us into a majestic stand of jack



Wendy Daley

Holmes Crossing wetlands have significant biodiversity.

slope where wetter habitats, including fens, were observed. Around each corner, the species diversity of the Fort Assiniboine Sandhills became more evident. With over 435 species recorded in the park, it was no surprise for the group to continue discovering more of them including spotted coralroot (*Corallorhiza maculata*), green saxifrage (*Chrysosplenium tetandrum*), blunt-leaved sandwort (*Moehringia lateriflora*), yellow avens (*Geum aleppicum*), and golden sedge (*Carex aurea*), to name a few. Thanks to the efforts of the group, a specimen collection including 62 species was made for accession at the University of Alberta herbarium. This will create an irreplaceable record and resource for education, research and knowledge of the Alberta flora. After a hot day we made our way back to camp before the next thunderstorm rolled in.



Kristen Andersen

Spotted coral root (*Corallorhiza maculata*) at Fort Assiniboine Provincial Park.

On Sunday morning, the group met at the Clyde Fen. The candidate natural area was established in 1990, and the ANPC has been a steward of the site since 1992. ANPC's long-time steward, Derek Johnson, and co-steward Joelyn Kozar, accompanied by a group of nine more, put on their rubber boots and



Kristen Andersen

Pitcher plant (*Sarracenia purpurea*) at Clyde Fen.

started their way in. Clyde Fen is home to Alberta's southern-most population of pitcher plants (*Sarracenia purpurea*), one of seven insectivorous plant species found here, which were a common sight as the group meandered through the fen. Two rare plants were found and documented: the flat-stem spikerush (*Eleocharis compressa*) and Loesel's twayblade (*Liparis loeselii*), which is among Alberta's rarest orchids. Some of the group present during the field trip were common visitors to Clyde Fen, while others explored it for the first time. One thing that everyone would likely agree upon, is that the Clyde Fen is certainly a wetland worth visiting and to continue watching over, given its unique and important habitat. ♦



Kristen Andersen

Long-time steward of Clyde Fen called *Scorpidium scorpioides* "spaghetti moss," an indicator of a rich fen.



Kristen Andersen

***Cladonia* lichens cover the ground at Fort Assiniboine Sandhills Provincial Park.**

pine (*Pinus banksiana*) with the forest floor covered by *Cladonia* lichens. Black spruce (*Picea mariana*), white spruce (*Picea glauca*), green alder (*Alnus viridis*), aspen (*Populus tremuloides*), and common blueberry (*Vaccinium myrtilloides*) were also common here, as well as a smattering of forbs and grasses including lyre-leaved rockcress (*Arabidopsis lyrata*) and hay sedge (*Carex siccata*). As the group wound up the trail, we found a hilltop perfect for a picnic, with a beautiful view surrounded by wood lilies in full bloom. After lunch, a patch of low milkweed (*Asclepias ovalifolia*) grabbed our attention. After many photos and a specimen collection, we started down a



Kristen Andersen

Moose Trail at Fort Assiniboine Sandhills Provincial Park.

Bittercress (*Cardamine*) Species in Alberta

Lorna Allen (with excerpts from Graham Griffiths)

Cardamine pratensis (meadow bittercress), previously listed as rare in the province, is now split into 11 different species, mostly of European distribution. Two species of the complex (*C. dentata* and *C. nymanii*) do occur in Alberta according to both VASCAN (Brouillet et al. 2016) and BONAP (Kartesz 2015). *Cardamine pratensis* remains an accepted taxon, but it has not yet been found in Alberta (and if it is here, it is an exotic species). The taxon in the Flora of Alberta that keys out to *Cardamine pratensis* is most likely *C. nymanii* (according to Dr. Griffiths – see below). The key in Flora of North America (FNA) Volume 7 (FNA 2010) will lead you to either *C. pratensis* or *C. nymanii*, but does not separate out *C. dentata*.

Dr. Graham C.D. Griffiths published one of the few keys to help the plant enthusiast distinguish between *Cardamine* species that are found in Alberta but are not included in either the Flora of Alberta (Moss and Packer 1983) or FNA Vol 7. Dr. Griffiths passed away in 2009, but his dedication and contributions to the knowledge of Alberta's biodiversity have not been forgotten.

The following is a modified excerpt from his publication in Dr. A. Ceska's Botanical Electronic News (BEN) (Griffiths 2007a) and is being republished now to help the plant enthusiast understand some of the complexities of the *Cardamine pratensis* complex, and to assist in distinguishing between *Cardamine* species that are not included in either the Flora of Alberta or FNA Vol 7.

Cardamine dentata Recently Discovered in Alberta

(an excerpt from Griffiths 2007)

The ranks of taxa constituting the *Cardamine pratensis* complex are interpreted differently in different publications. North American authors have generally treated the whole complex as a single species, within which subspecies or varieties are recognized. But in recent special European literature (e.g., Marhold et al. 2004), the complex is divided into 11 species.

Cardamine nymanii Gandoger

Dr. Griffiths suggested that all collections of the *Cardamine pratensis* complex in Alberta prior to 2005 belong to *C. nymanii* Gandoger [syn. *C. pratensis* L. var. *angustifolia* Hook.] as described in the Flora of North America (FNA 2010). The plants flower from the end of May through June. The leaflets are thick with embedded veins. On basal leaves the terminal leaflet is not much larger than the lateral leaflets; leaflets on the upper stem leaves are narrowly wedge-shaped, not borne on petiolules. In Alberta populations, the plants flower profusely; but an increased reliance on vegetative reproduction is reported in the Arctic, towards the northern range limits of this taxon.

Cardamine dentata Schult.

The occurrence of a second member of the *Cardamine pratensis* complex in northeastern Alberta first came to light in 2005 and the identification was confirmed in 2006, when the first flowering stem was found. This well shows the diagnostic feature used in published keys (e.g., Flora Europaea 1: 287), that the leaflets of all leaves (including upper stem leaves) are stalked (borne on petiolules).

Most plants grow as emergents in water-filled depressions, with only the tips of their basal leaves rising above water level. In Alberta populations, the plants reproduce mainly by means of "adventitious shoots" arising from their leaflet blades; flowering stems are very rarely produced. The leaflets are relatively thin (veins not embedded). On basal leaves the terminal leaflet is often much larger than the lateral leaflets; leaflets on all leaves (including those on flowering stems, if present) are borne on petiolules.

Dr. Griffiths' observations of plants grown indoors indicate that leaflets bearing adventitious shoots may fall off and give rise to separate new plants; or, if the leaf is prostrate (lying on the ground), the new plant may remain attached to the parent plant. In the latter case, plants may appear to be connected by stolons, but the apparent stolons originated as the petioles and rachises of basal leaves. True stolons (horizontal stems producing new plants) are not known in any North American members of the *Cardamine pratensis* complex.

See *Cardamine*, page 4

The following key couplet was developed by Dr. Griffiths and is intended to distinguish the two native members of the *Cardamine pratensis* complex now known to occur in Alberta:

- 1a. Leaflets thick, with embedded veins; terminal leaflet of basal leaves normally not much larger than lateral leaflets; leaflets on upper stem leaves narrowly wedge-shaped, not borne on petiolules (petiolules evident at most on basal and lower stem leaves). Alberta populations flowering readily. *C. nymanii* Gandoger [= *C. pratensis* L. var. *angustifolia* Hook.]
- 1b. Leaflets thinner (veins not embedded); terminal leaflet of basal leaves often much larger than lateral leaflets; all leaflets borne on petiolules (including those on upper stem leaves). Alberta populations reproducing mainly by adventitious shoots arising from leaflets, rarely flowering. *C. dentata* Schult. [= *C. pratensis* L. subsp. *paludosa* (Knaf) Celak.]

By Graham C.D. Griffiths

In 2015, the Alberta Conservation Information System (ACIMS) reviewed most of the species in the database along with their ranks, resulting in many taxonomic updates and adding to the database many new species now confirmed for Alberta. A spreadsheet of the vascular plant species for Alberta can be downloaded from <http://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/download-data/>

Changes to the taxonomy of *Cardamine* have resulted in two species confirmed in Alberta that are not in the Flora of Alberta – *C. dentata* and *C. nymanii*. A table of all bittercress species confirmed in Alberta as of 2016 follows.

Cardamine Species Confirmed as Occurring in Alberta (2016)

ACIMS Scientific Name	Select Synonyms	Common Name	*Global Rank	Canadian Rank	Alberta Rank
<i>Cardamine bellidifolia</i>		alpine bittercress	G5	NNR	S3
<i>Cardamine dentata</i>	<i>Cardamine pratensis</i> var. (or ssp.) <i>palustris</i> , or <i>C. pratensis</i> ssp. <i>paludosa</i>	toothed bittercress; white cuckoo bitter-cress	GNR	NNR	S2
<i>Cardamine nymanii</i>	<i>Cardamine pratensis</i> var. (or ssp.) <i>angustifolia</i>	northern field bittercress; cuckoo-flower	G5T5	N4N5	S3
<i>Cardamine parviflora</i>	<i>Cardamine arenicola</i>	small bittercress; small-flowered bittercress	G5	N5	S2
<i>Cardamine pensylvanica</i>		Pennsylvania bittercress	G5	NNR	S5
<i>Cardamine umbellata</i>	<i>Cardamine oligosperma</i> var. <i>kamtschatica</i>	mountain cress	G5T3T5	NNR	S3

* for a review of the NatureServe ranks, see <http://explorer.natureserve.org/granks.htm>

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Cardamine, from page 4

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2017 Junior Forest Wardens National Camp

ANPC is seeking a volunteer to give a presentation at this youth outdoor education program held from July 1 to 8 at the Blood Indian Park in Bigstone, AB. Education activities range from 1.5 hours to full day sessions. Contact info@anpc.ab.ca (Subject: ANPC Volunteers) for more details by April 1, 2017.

ANPC Outreach

ANPC attends community events, conferences and more to provide information about native plants. Please contact info@anpc.com or mjredburn@hotmail.com (Subject: ANPC Volunteers) if you would like to be on our call-out list when events are scheduled and volunteers are needed.

ACIMS App

Want a little help navigating the Alberta Conservation and Information Management Systems (ACIMS) database? Download this free app: <https://play.google.com/store/apps/details?id=com.ionicframework.acimsapp774258&hl=en> Currently it's only available on the Android platform. Thanks to Cam Johnston for building the app.

ANPC Board Positions Up For Re-election in 2017

The following ANPC Board Positions are up for re-election:

- President
- Vice-President
- Secretary
- Southern Director
- Northern Director

We are now accepting nominations.

If you are interested in joining the ANPC Board, please send an e-mail to Sandy McAndrews, ANPC Secretary, at s.mcandrews@shaw.ca or phone at (403) 874-3171. Please include the position that you are interested in and your contact information.

The following lists the current slate of possible nominees for Board positions up for re-election:

- President – Leslie Monteleone (incumbent)
- Vice-President – unconfirmed
- Secretary – vacant
- Southern Director – Christina Metke (incumbent)
- Northern Director – Marsha Hayward (incumbent)

Voting will take place at the Annual General Meeting, which is being held in conjunction with the ANPC's Annual Workshop on April 29, 2017, in Ponoka, AB. Visit the website (www.anpc.ab.ca) for workshop program updates and registration details.



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Clones and Seedlings, Floods and Droughts: Cottonwood Regeneration

C. Dana Bush

Riparian forests are the only native tree and shrub communities in most of the prairies, and they are critical habitat for many prairie animals. Without cottonwood forests, we could lose up to 75% of our prairie birds. The extensive cottonwood forests on the Oldman River between Pincher Creek and Lethbridge are significant to the biodiversity of the prairies, and are internationally recognized.

Lethbridge has three species of cottonwood, all of which are at the edges of their ranges. Narrow-leaved cottonwood (*Populus angustifolia*) is a western species that just enters Alberta in the southwest corner, balsam poplar (*Populus balsamifera*) is a northern species, while plains cottonwood (*Populus deltoides*) is a southern and eastern species. Southeastern Alberta is the one place all three species occur together, and they produce a swarm of hybrids making identification difficult.

Cottonwoods regenerate from a combination of clonal shoots from roots and branches, and seeds. Either way, occasional floods are necessary for them to establish.



C. Dana Bush

Clonal shoots

Cottonwoods produce clonal shoots from beaver-felled stumps and flood-topped trees. Sometimes it is hard to tell if a young forest began by seeds or clones without digging up the roots, but cottonwoods with multiple trunks often originated as clonal shoots.



C. Dana Bush

Flooding

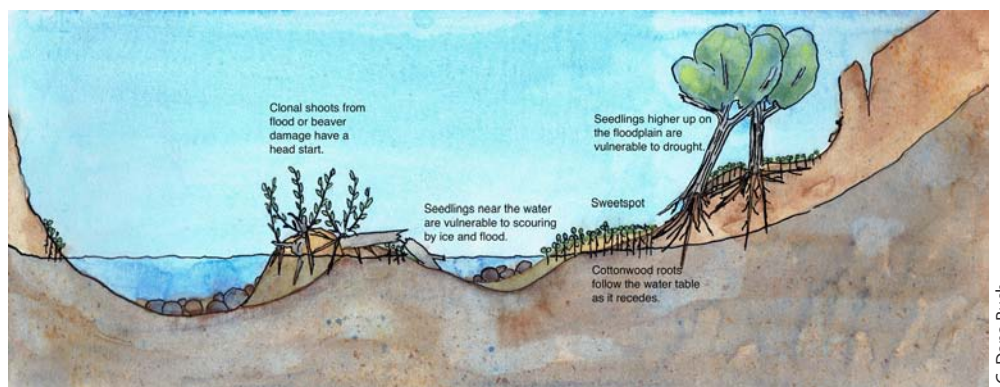
Floods restructure the floodplain, scouring the bottom of the river, breaking and rebuilding riverbanks and islands, and depositing fresh silt.



C. Dana Bush

Seeding

Cottonwood seeds are released in mid-June to mid-July, just in time to land on the fresh silt deposited by spring floods. Once moistened, a cottonwood seed germinates within 24 hours.



C. Dana Bush

Shoots and Seedlings

The seedling roots immediately grow at 0.5 to 1 cm/day, reaching a length of about 60 cm after the first growing season, as they follow the water table downward. If the water table drops too quickly (below a dam, for instance) the seeds lose contact with the water table, and they will perish.

Cottonwoods typically germinate in a fringe or band no more than 1 metre above the late summer river stage. Above 1 metre, the seedlings are susceptible to drought. Below that band, the seedlings may be scoured by ice or later floodwaters.

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Cottonwoods, from page 6



C. Dana Bush

Cottonwood bands

The bands range from 7 cm seedlings from the previous year, to 3-metre-high saplings from previous floods. If you walk along a healthy floodplain, you will see even-aged stands in arcuate bands, illustrating the history of the river.

Cottonwood recruitment naturally occurs at irregular intervals. High flow events occur, on average, one in six years. Lethbridge experienced three events in 1902, two of which were major floods, but there were 20 years between the 1975 flood and the 1995 flood. Recent floods occurred in 2010, 2013 and 2014. Young seedlings can be scoured away by subsequent flooding, as in 1902, or perish from lack of water during drought years, as in 2006 and 2007 after good germination in 2005.

Dams alter the flow of water and can help or hinder cottonwood recruitment. Past water management in the Oldman, Waterton, and St. Mary's Rivers deprived cottonwood seedlings of much needed water during the summer drawdown and subsequent years, so recruitment was low. Research by Stewart Rood at the University of Lethbridge, John Mahoney with Alberta Environment, and the operators of the St. Mary's, Waterton and Oldman Dams showed that the seedlings required a gradual recession of 4-5 cm/day after a flood, and 2-3 years of consecutive flows to support the recruitment

event. Now the dam operators manage the water to encourage cottonwood survival, providing the weather cooperates. As a result, there are thick stands of different aged saplings re-establishing along the Oldman River.

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SHARING KNOWLEDGE Alberta Vascular Plant Species Keys

Linda Kershaw and Lorna Allen are graciously making plant keys available for several of Alberta's vascular plant families on ANPC's website.

Available families include **Polygonaceae, Primulaceae, Salicaceae, Saxifragaceae, Violaceae, Caryophyllaceae, Ericaceae, Grossulariaceae, Ranunculaceae** and **Rosaceae** as well as illustrated and revised editions of **Amaranthaceae, Asteraceae** and **Brassicaceae**.

See Publications > Keys to Alberta Vascular Plants on the ANPC website. http://anpc.ab.ca/?page_id=3089.

Please share the keys with anyone who might find them useful.

Linda and Lorna ask that you try the keys and then let Linda know if there are ways the draft keys can be improved.

Please pass on your comments to Linda at linda.kershaw1@gmail.com.

Botany Foray in the Oldman River Valley in Lethbridge

C. Dana Bush

The Oldman River runs through the heart of Lethbridge. It is a broad valley with steep eroding slopes, which the city has protected in a vast parks system. Botanists (and others) can access the coulees, cottonwood forests and riverbanks from both the top and bottom of the escarpment, giving us a wonderful array of plant communities to explore. Seven of us explored the valley last spring, in early June.

We began in Alexander Wilderness Park at the north edge of the city, and hiked the coulees and hills, exploring the plants growing on the dry ridges and those in the narrow coulee bottoms. On a protected east-facing slope, we found a large patch of dense chokecherry (*Prunus virginiana*), with buckbrush (*Symphoricarpos occidentalis*) and gooseberries (*Ribes oxycanthoides*) growing in the shady understory. We poked around at the edges until we found a game trail leading into a bedding area, and sure enough we found waterpod (*Ellisia nyctelea*). This S3-ranked species on the watch list (ACIMS October 2015) has specific habitat requirements. This little annual needs the bare and moist ground found under shady moist woods and stream-banks. I've seen it on shrubby slopes where animals hang out and trample the ground, eliminating the perennial competitors. To my delight, we also found American pellitory (*Parietaria pensylvanica*), another uncommon annual (also S3 on the watch list), far west of where I have seen it before, and the first record for Lethbridge. American pellitory has a similar habitat as waterpod, although it seems to tolerate somewhat drier conditions.

Hiking back down a coulee draw, we found a stiff pinnate-leaved rosette with no flowers, growing in a tiny eroding seepage area. Stumped, we mulled this

over, flipping through picture books and memories, considering composites and evening primroses, until we came upon evening star or sand-lily (*Mentzelia decapetala*), a member of the Loasaceae family. This S3-ranked species is a biennial — we had found the first year growth. This summer it could reach a metre tall with large white flowers that open in the evening. Hmmm, I sense another road trip.

We spent the afternoon along the banks of the Oldman River looking at cottonwood seedlings. Lethbridge is the only place in the world where all three cottonwoods coexist: the plains cottonwood (*Populus deltoides*) (S3), lance-leaved or narrow-leaved cottonwood (*Populus angustifolium*) (S3), and balsam poplar (*Populus balsamifera*) (common). We found several cohorts of seedlings and suckers, the most recent from 2015 and many from the floods in 2014 and earlier.

The final morning, we explored a steep coulee slope along Country Club Road near the Mountain View Cemetery. We hoped to re-find several rare species that had been documented there, but instead we found significant populations of red three-awn (*Aristida purpurea* var. *longiseta*). Red three-awn is S3 and tracked, and the community is an S1, occurring at the far north edge of its range. Red three-awn grassland is usually found on steep (30-40 degrees) south-facing slopes (Allen 2014), which described this site perfectly. Unfortunately, the gale-force winds prevented us from doing more than marking the locations of the significant patches, as we were in peril of being blown down the steep slopes. Here is another site begging to be resurveyed. Is anyone interested?

Alberta Conservation Information Management System (ACIMS)

Definitions:

S1 elements are known from five or fewer occurrences or especially vulnerable to extirpation because of other factor(s).

S2 elements are known from twenty or fewer occurrences or vulnerable to extirpation because of other factors.

S3 elements are known from 100 or fewer occurrences, or somewhat vulnerable due to other factors, such as restricted range, relatively small population sizes, or other factors.

Tracking List — ACIMS compiles data from S1, S2, and some S3 species in a database, which is available to researchers and botanists.

Watch List — ACIMS holds data for some species for which there is some uncertainty about whether or not they should be on the tracking list.

Dana Bush (P.Biol., M.Sc., B.F.A.) is a plant geek who works as a consulting botanist specializing in rare plants and wetlands. She also works as an artist, making three-dimensional objects (of painted silk) that portray ecological systems and relationships.

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Susan Glover

Searching for red three-awn (*Aristida purpurea* var. *longiseta*) above Country Club Road.



Susan Glover

New cottonwood seedlings growing at the edge of the Oldman River.



C. Dana Bush



Rich Zollinger

Waterpod (*Ellisia nyctelea*) is a small annual that thrives in shady, damp, disturbed conditions.

American pellitory (*Parietaria pennsylvanica*) is a small weedy annual closely related to stinging nettle (*Urtica dioica*).



C. Dana Bush



C. Dana Bush



C. Dana Bush

Evening star (*Mentzelia decapetala*) is a biennial that blooms in the second year. ♦

Iris is published three times a year by ANPC. The Council aims to increase knowledge of Alberta's wild flora and to preserve this diverse resource for the enjoyment of present and future generations.

If you have an announcement, article or other item, you are invited to submit it to the editor for publication. Items concerning native plants will be given highest priority.

The editors reserve the right to edit submissions, but will review changes with the authors whenever possible. Disputes will be resolved in favour of the audience.

Copyright remains with the authors except where noted. Permission to reprint is generally granted, but please contact the editors for details.

Submission deadline for the next issue:
October 15, 2017

A subscription to *Iris* is included with membership in the ANPC. To join, contact the secretary, or check our website, www.anpc.ab.ca.

News and Events

ANPC Workshop, AGM & PlantWatch Book Exchange 2017

Date: April 29, 2017

Location: Ponoka Community Centre, Ponoka, AB

Topic: Biodiversity in Alberta's Changing Landscape

Program specifics will be posted at www.anpc.ab.ca and in the ANPC info-emails. Register online or use the mail-in registration form at the back of this newsletter.

PlantWatch Book Exchange: PlantWatch is hosting a botany book exchange again this year at ANPC's workshop. If you have botany books (plant ID books, field guides, wildflower gardening books, medicinal and edible uses of plants (ethnobotany), botany text books) that you'd like to trade or to donate for PlantWatch to sell, please contact Elisabeth at e.beaubien@ualberta.ca before mid-April. The funds will be used to support Alberta PlantWatch (e.g., paying for spring mailing to observers).

Field Trip: Sunday, April 30 at J.J. Collett Provincial Natural Area.

Please plan to join us!

Botany Alberta 2017

Date: June 2–4, 2017

Location: Big Sagebrush Natural Area

Join us for a weekend of botanizing at Big Sagebrush NA, part of the newly designated Castle area complex of provincial parks and one of ANPC's stewardship sites. ANPC and Castle Crown Wilderness Coalition are teaming up to provide a weekend of botanical delights. Check www.anpc.ab.ca for more details.

Native Plant Colouring Book Project

The ANPC is developing a colouring book for use at youth events. Volunteers are needed to create drawings that can be used in the book. Contact info@anpc.ab.ca (Subject: ANPC Volunteers) for more details.

Plant Happenings

Plant Happenings newsletter informs readers of a wide range of topics related to botany — meetings, conferences, activities, publications and more.

Plant Happenings is available on ANPC's website http://anpc.ab.ca/?page_id=2795.

If you have submissions for Plant Happenings or want to subscribe via email, please contact Anna at amozolik@gmail.com.

You don't have to be an ANPC member to receive this publication — all you have to do is ask. But we hope you'll consider becoming an ANPC member.



ALBERTA
Native Plant
COUNCIL

Mixed Grasses Forum 2017

Theme: Restoring the Native Prairie

Date: April 6, 2017

Location: Medicine Hat College

Contact clinowski@mhc.ab.ca for more information.

ANPC Native Plant Source List

ANPC is currently updating our native plant source list. If you have approximately 20 hours to spare over the next month and have good organizational skills & experience with Excel AND are looking to support a short-term project such as this, please contact us at info@anpc.ab.ca.

If you are a vendor and would like to be included in the list you can send your contact information to info@anpc.ab.ca. The 2017 update is anticipated to be released in March.

Rare Plant Study Groups

There are several rare plant ecology study groups associated with ANPC. Some meet throughout the year. One is a summer-only field study group. And new groups are just beginning in the Peace Region.

Group participants nurture their interest in and expand their knowledge of Alberta's native plants and communities and local ecology. **Please contact facilitators for details and to confirm attendance.**

Peace Region Native Plant Study Group (Peace River)

Location: NAIT Boreal Research Institute, 8102 - 99 Avenue, Peace River (beside Northern Lakes College). **Date:** First Wednesday of the month; March & April 2017. **Time:** 6:30 to 8:30 p.m. **Facilitator:** Melanie Bird (mbird@nait.ca).

Central Alberta Rare Plant Study Group (Edmonton)

Location: University of Alberta Herbarium, B-613 (botany wing), Biological Sciences Building (east end), Saskatchewan Drive, Edmonton. **Date:** Last Wednesday of the month; October to April inclusive. **Time:** 6:30 to 8:30 p.m. **Facilitator:** Varina Crisfield (vcrisfield@gmail.com).

Southern Alberta Rare Plant Study Group (Calgary)

Location: University of Calgary Herbarium, Biological Sciences Basement. **Date:** First Saturday of the month; October to April inclusive (NO April meeting in 2017). **Time:** noon to 4:00 p.m. **Facilitator:** Leslie Monteleone (lesliemonteleone@hotmail.com).

Medicine Hat Rare Plant Study Group

Location: Medicine Hat College Herbarium (L155). **Date:** Fourth Saturday of the month, except December & February (LAST Sat. in March 2017) from noon to 3:00 p.m. **Facilitator:** Cathy Linowski (clinowski@memlane.com).

Northern Plant and Ecology Study Group (NPESG)

This is a field-based study group, active through the growing season and into early autumn. Contact Marsha Hayward for more information (wildloonart@telus.net).

PROGRAM TIMES:

Check - in and Registration: 8:00 am - 8:30 am

Workshop Presentations: 8:30 am - 4:15 pm

Annual General Meeting: 4:30 pm - 6:00 pm

“Mix and Mingle” Banquet: 6:15 pm

Everyone is invited to attend the AGM.

Learn about ANPC activities.

An informal botanizing foray will visit the JJ Collett Provincial Natural Area on Sunday, April 30, 2017, weather permitting.

More details will be available on our website.



Photo: C.Bradley

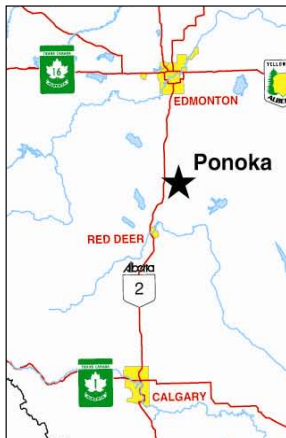
Alberta Native Plant Council 30th Workshop and Annual General Meeting “Biodiversity in Alberta’s Changing Landscape”

Saturday, April 29, 2017

**Kinsmen Community Centre,
5009 – 46 Avenue, Ponoka, Alberta**

You may register online for the workshop here:

www.anpc.ab.ca/2017 Workshop



Town of Ponoka

Kinsmen Centre

Please watch our ANPC website for all the details about this year’s workshop:

www.anpc.ab.ca



**30th Workshop and Annual
General Meeting
"Biodiversity in Alberta's Changing
Landscape"**

**Saturday, April 29, 2017
Kinsmen Community Centre
5009—46 Avenue, Ponoka, Alberta**

For WORKSHOP & REGISTRATION INFORMATION

Contact: 403-485-1144 or ANPCworkshop@gmail.com

To REGISTER by MAIL:

Mail registration form and cheque or money order to:

2016 ANPC Workshop
Box 1530 Vulcan, AB T0L 2B0

*Please make payment to Alberta Native Plant Council

To REGISTER ONLINE (with PayPal or credit card) please see our website page: www.anpc.ab.ca/2017Workshop

REGISTRATION FORM: (Please print)

NAME:
AFFILIATION:
ADDRESS:
CITY:
PROVINCE:
POSTAL CODE:
PHONE NUMBER:
EMAIL ADDRESS:

WORKSHOP FEES:

<input checked="" type="checkbox"/> Applicable Box	Early Bird Rate until Friday, April 7, 2016	Regular Rate after Friday, April 7, 2016
ANPC members	<input type="checkbox"/> \$75	<input type="checkbox"/> \$90
Non-members	<input type="checkbox"/> \$90	<input type="checkbox"/> \$105
Students	<input type="checkbox"/> \$35	<input type="checkbox"/> \$45
Seniors	<input type="checkbox"/> \$35	<input type="checkbox"/> \$45

Dinner Banquet \$35

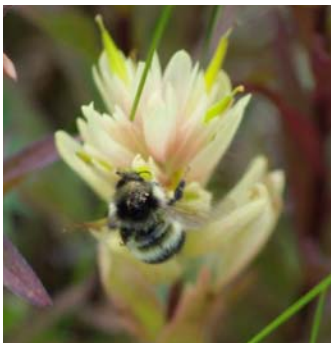
My diet is restricted (please describe):

ANPC MEMBERSHIP FEES:

<input checked="" type="checkbox"/> Applicable Box	
Individual	<input type="checkbox"/> \$25
Family	<input type="checkbox"/> \$45
Senior	<input type="checkbox"/> \$10
Student	<input type="checkbox"/> \$10
Corporate	<input type="checkbox"/> \$100
Lifetime	<input type="checkbox"/> \$500

Total Enclosed

\$ _____



*Registration **cancellation** will be accepted until April 14, 2017 and will be subject to a \$20 processing fee.