



# Iris

No. 65 • April 2011

The Alberta Native Plant Council Newsletter

## Golden Bean Found in Jasper National Park

By Barb Zimmer

*For the past nine years, I have been involved in the compilation and identification of plants for Flower Count weekend in Jasper National Park.*

Flower Count, which is always on the last full weekend in May, is an exciting time every year as volunteers search all over the park to locate any plants that are in bloom. This year, to my great surprise, one of our most faithful volunteers, Jill Seaton, arrived at our weekend wrap-up evening with digital photographs of a plant no one had ever seen in Jasper Park before. It was golden bean (*Thermopsis rhombifolia*) in full flower.

In Packer's revision of *Flora of Alberta* (Moss 1983), the distribution map for golden bean shows its range to be much farther south in Alberta. In *Illustrated Flora of British Columbia* (Douglas 1999), the range given is from southeastern

British Columbia through the southern part of Alberta to southern Manitoba, and south all the way to Colorado, Nebraska, and California. There is no record that this plant has ever been seen in Jasper National Park, and it is missing from the plant inventory list for Jasper, although it is listed as present in Banff, Kootenay, and Yoho national parks (Achuff 2006).

A few days after Flower Count weekend, Jill Seaton took me out to the site where she had found the plants, and I was able to take photographs of the several dozen golden bean in full bloom. They were growing in dry grassland amongst some fallen trees from an old burn, not far from the Snaring Ponds and about 14 km east of the Jasper



**Golden bean (*Thermopsis rhombifolia*) in Jasper National Park**  
Photo Barbara Zimmer

townsite (53 00' 05'' N, 118 04' 17'' W) at an elevation of approximately 1040 m. There was no question about the identity of the plants, as golden bean is quite unmistakable with its bright, golden-yellow flowers and its digitate, 3-foliolate leaves. Dr. Derek Johnson (taxonomist and author, Canadian Forest Service, Edmonton, AB) and Dr. George Scotter (author, *Wildflowers of the Rocky Mountains*) have since looked at the photographs and confirmed this identification.

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**Golden bean  
(*Thermopsis  
rhombifolia*)  
in Jasper  
National Park**  
Photo Barbara  
Zimmer

The genus name, *Thermopsis*, is taken from the Greek words *thermos*, which means lupine, and *Leab*, which means resemblance, because the plant looks so much like a lupine, but with bright yellow flowers. Its other common name, buffalo bean, comes from the Blackfoot Indian belief that when this plant was in bloom, the buffalo bulls were in their prime and ready to be hunted. The buffalo, however, did not eat this plant, because of the poisonous alkaloids that it contains.

Finding golden bean in Jasper Park for the first time was certainly the highlight of our Flower Count weekend for 2009. We have to ask if it has been there all along, just undiscovered in its somewhat unfrequented location, or if it is a new introduction to the park, perhaps having travelled along the highway or railway corridors that are about a half kilometre away. In either case, this discovery shows us that we are still learning about what is growing out there in our province.

**Literature Cited**

Achuff, P.L. 2006. Vascular plants of Banff, Jasper, Kootenay, Mount Revelstoke-Glacier, and Yoho National Parks of Canada. Parks Canada database, Waterton Lakes National Park of Canada, Waterton Lakes, Alberta. 40 pp.  
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**Acknowledgments**

Thanks to Jill Seaton for her many years of flower counting and her endless enthusiasm for finding new plants. Also, thanks to Derek Johnson and George Scotter for confirming the identification of our plants. ♦

**New Weed Control  
Act Proclaimed**

In June 2010, a new Alberta Weed Control Act was proclaimed. The new Act and associated Regulations can be found on our website home page at [www.anpc.ab.ca](http://www.anpc.ab.ca). ♦

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# Board praises Brazeau County for treatment of native plants

April 7, 2010

Brazeau County, Reeve and Councillors  
Drayton Valley, Alberta

While travelling along Highway #39 between Drayton Valley and Alsike Corner in July of 2009, I noticed that the ditches had been mowed. With hope in my heart and faith in the adage that assures one that right will triumph, I approached the west end of a familiar patch of *Lilium philadelphicum* (western wood lily). There in the south ditch, just west of Saskatoon Road, beginning at N. 53 11 18.4 and W. 114 36 24.1, stood the glorious western wood lily!

The path of the mower dipped down towards the very bottom of the ditch and all the way to the east end of the population at N. 53 11 14.6 and W. 114 36 15, but the mower had left this garden unscathed. I parked my car and went into the ditch to revel in the sight of 159 individual plants: 8 individuals bore 2 blooms per stem; 3 bore 3 blooms each; 1 displayed a grouping of 4 blooms; 147 stems bore a single bloom each with 1 bud still to open.

I checked these numbers against my records for 2008. Then I had counted 162 individuals, many with multiple blooms – 2008 had been an exceptional year for multiple blooms. The Alberta Native Plant Council would like to recognize and thank you for the respect you afford our natural heritage. May this sight be preserved for many generations.

Closer to Alsike Corner and again in the south ditch, was a huge patch of the invasive ornamental *Hieracium aurantiacum* (orange hawkweed). On Highway #20 south towards Winfield, another patch of orange hawkweed, and also great clumps of our beautiful old rose-coloured *Castilleja miniata* (Indian paintbrush). On checking your website I see where you have listed orange hawkweed as a noxious weed. Thank you for distinguishing between beauty and a potential invasive problem. The Alberta Native Plant Council “promotes knowledge and conservation of the native plants and vegetation of Alberta” and would like to commend you for setting an example of conservation and for responsible action against invasive species. We all look forward to the coming summer for the annual display of our beautiful native wildflowers.

Sincerely,

Eileen Ford  
Past Director ♦

**Painted lady butterfly feeding on a western wood lily**  
Photo Marsha Hayward



**Western wood lily**  
*(Lilium philadelphicum)*  
Photo Marsha Hayward



**Six-headed western wood lily**  
Photo Eileen Ford

# Botany Alberta 2011

## June 17 – 19, 2011

### Cold Lake

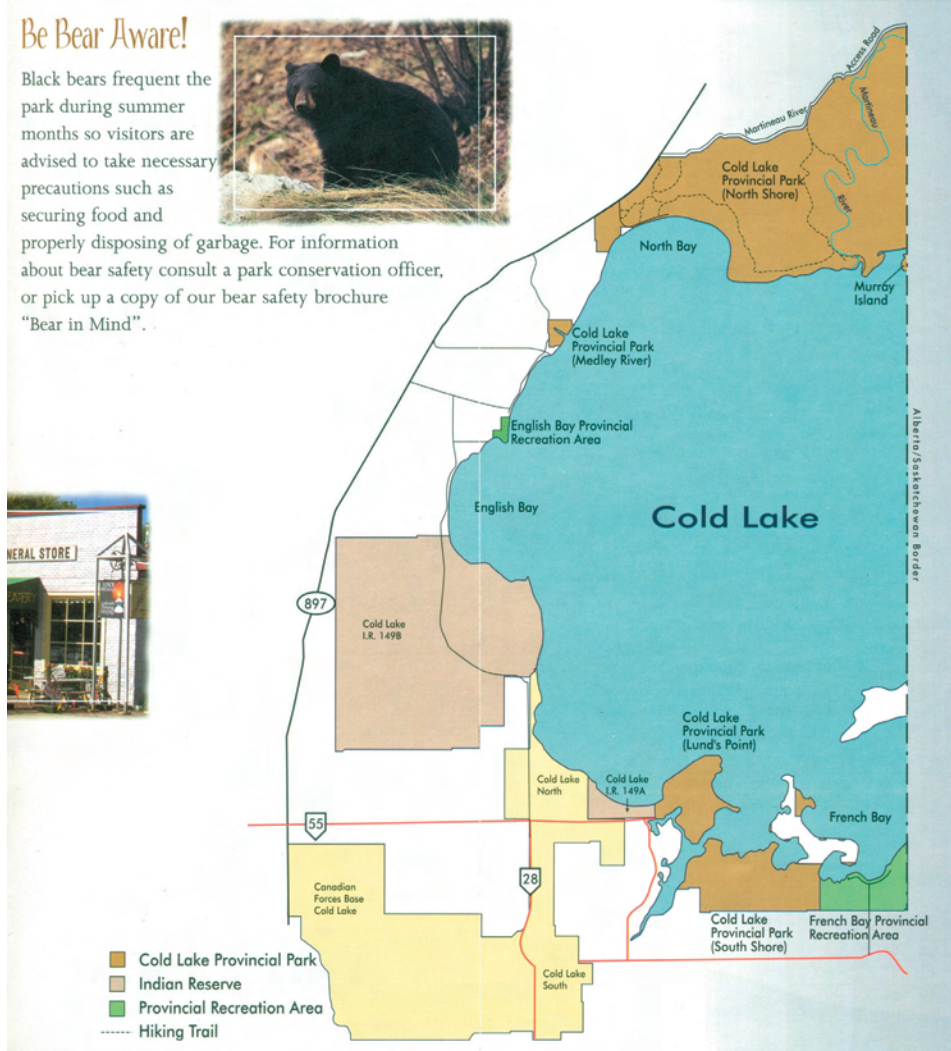
Botany Alberta 2011 offers a refreshing opportunity for anyone who would love to learn about the ecology and the flora and fauna of the beautiful Boreal Lakeland region of northeastern Alberta. June is the most prolific month of the year, where many species bloom, hatch, or are born. The deep glacial lakes, amazing beaches, lush green vegetation, and long sunsets make a visit to what locals call “Alberta’s best kept secret,” a rewarding botanical learning experience.

During this year’s Botany Alberta weekend, you are invited to stay in the Cold Lake Provincial Park Group Use Area from Friday evening, June 17<sup>th</sup> to Sunday afternoon, June 19<sup>th</sup> (check-out time is 2:00 p.m.). The Group Use Area is located on Lund’s Point at the southwest corner of Cold Lake (see map). For camping after 2:00 p.m. on Sunday, contact Cold Lake Provincial Park (phone 780-639-3341 or online at [www.cd.gov.ab.ca/gateway](http://www.cd.gov.ab.ca/gateway)) to reserve a site in the main campground. Cold Lake Provincial Park has nice tenting in addition to power hook-up sites.

**Campsites are normally fully booked in June, so reserve a campsite well in advance if you wish to stay past Sunday afternoon.**

The Group Use Area has an enclosed picnic shelter, and coin-operated showers are available nearby in the main park campground. Free firewood is not provided by the Provincial Park; however, organizers may be able to supply some for a nominal fee.

Cold Lake is situated approximately three hours northeast of Edmonton. From the south, take Highway #28 north from Edmonton, or head north



Map of the western shore of Cold Lake

on Highway #36 then east on Highway #28 to bypass the city of Edmonton. From Athabasca take Highway #16 west to Highway #55, from Lac La Biche drive east on Highway #55. If coming from Saskatchewan, drive west on Highway #55 along the Northern Woods and Water Route.

Botany Alberta 2011 involves field trips exploring the forest ecology of Cold Lake Provincial Park, including walks to mineral springs, peat bogs, orchid

fens, boreal eskers, and intact balsam fir (*Abies balsamea*) forests. **There are many bugs and bears in the area, so please come prepared!** The town of Cold Lake has lots of shopping and many other amenities if you need to purchase food or other items for the weekend. There are medical facilities, as well, in the event of emergencies. The lake has good opportunities for canoeing and kayaking along the

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shorelines of Long Bay and French Bay. However, large power boats are recommended for deeper water, as Cold Lake is well known for its severity of storms. There is excellent fishing in the area, as well.

For questions, comments, or to register for Botany Alberta 2011 please contact us online at [info@anpc.ab.ca](mailto:info@anpc.ab.ca).

## Field Outings

### Friday June 17 (evening)

Set up camp in the Group Use Area (located on the eastern side of Cold Lake Provincial Park–Lund’s Point). Included on the first night is an **evening walk (7:00 p.m.)** followed by a campfire gathering to relax after the long drive. The evening stroll will be through the thick, mature Central



**Cold Lake's north shore**  
Photo Marsha Hayward

Mixedwood forests along 11 km of groomed park trails. Interesting viewpoints along this trail include Long Bay and Willow Point. On the shoreline of Long Bay is an extensive reed bed, with large areas of yellow pond-lily (*Nuphar variegatum*), where participants may view nesting western grebes, black terns, and turkey vultures through spotting scopes. Willow Point is the location of a late-1800s fur trading post and historic blacksmith shop, where interesting shoreline habitat can be seen, including a population of broad-leaved arrowhead (*Sagittaria latifolia*).

### Saturday June 18

#### Departure will be at 8:30 a.m.

Remember to pack a lunch, sun hat, bug juice, water, and your camera. The day will start with a 35-minute drive northwest to the northeastern creek flowing down into Tucker Lake, an area surrounded by sandy soil and dry, mature, jack pine (*Pinus banksiana*) forests. Here, participants may view the unique and diverse geological formations of calcium carbonate springs; tufa mounds covered with prairie sedge (*Carex prairea*) and two-stamened sedge (*Carex diandra*); marl deposits; and rare plants including round-leaved orchid (*Amerorchis rotundifolia*), spotted coralroot (*Corallorhiza maculata*), pale coralroot (*Corallorhiza trifida*) and northern twayblade (*Listera borealis*), in addition to philonotis moss (*Philonotis fontana*). Other species that may be seen include hoary willow (*Salix candida*) and an unusual buttercup (*Ranunculus* sp.). The

twisted, dwarfed white spruce (*Picea glauca*) are a telltale sign of mineral-

rich water due to the strong mineral deposits. Many unusual iron-eating bacteria can be seen here, as well as fast-flowing mineral springs that burst from the ground.

Other interesting features along this hike are a boreal sand esker, a large marsh, beaver ponds (with deep pools where American white pelicans fly in to fish), a delta habitat, a peaty transitional habitat, treed fens, mature Dry and Central Mixedwood forest habitat, and glacial hummocky terrain. This area is being reclaimed by Husky Energy and we may be given an explanation of their approach to restoring boreal wetland and forested habitat after steam-assisted gravity drainage (SAGD) and conventional oil operations have been undertaken. You will see how this company conducts restoration adjacent to a boreal water source, including a drainage creek and a gravel weir.

Next will be a rest stop and time for lunch, after which the group will take a short drive to the Medley River. Here, along the granite-laden riverbed, participants will walk through understory of young balsam fir, alder (*Alnus* sp.), and huge, mature white spruce. An old bridge and sawmill being swallowed up by the forest are still visible in this area. In the adjacent peat bogs are small orchids such as white adder’s-mouth (*Malaxis monophylla*), heart-leaved twayblade (*Listera cordata*), and lesser rattlesnake plantain (*Goodyera repens*). The area also supports a large population of ostrich fern (*Matteucia struthiopteris*), small clumps of oak fern (*Gymnocarpium dryopteris*), fragile bladder fern (*Cystopteris fragilis*), and some unusual floating ribbon grasses (which have yet to be identified). Flycatchers, kingfishers, and other boreal birds may be seen, as well as crustaceans and otters in the river. Waterside feather moss (*Brachythecium rivulare*)

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## Cold Lake, from page 5

and *Cratoneuron filicinum* grow on large granite boulders, and small clumps of snakeskin liverwort (*Conocephalum conicum*) can be found in some of the peat bogs or under the shaded banks of the small river. Participants can expect to see other liverworts such as *Marchantia polymorpha* and *Lophozia ventricosa*, as well as vascular species including small enchanter's nightshade (*Circaea alpina*) and bishop's-cap (*Mitella nuda*).

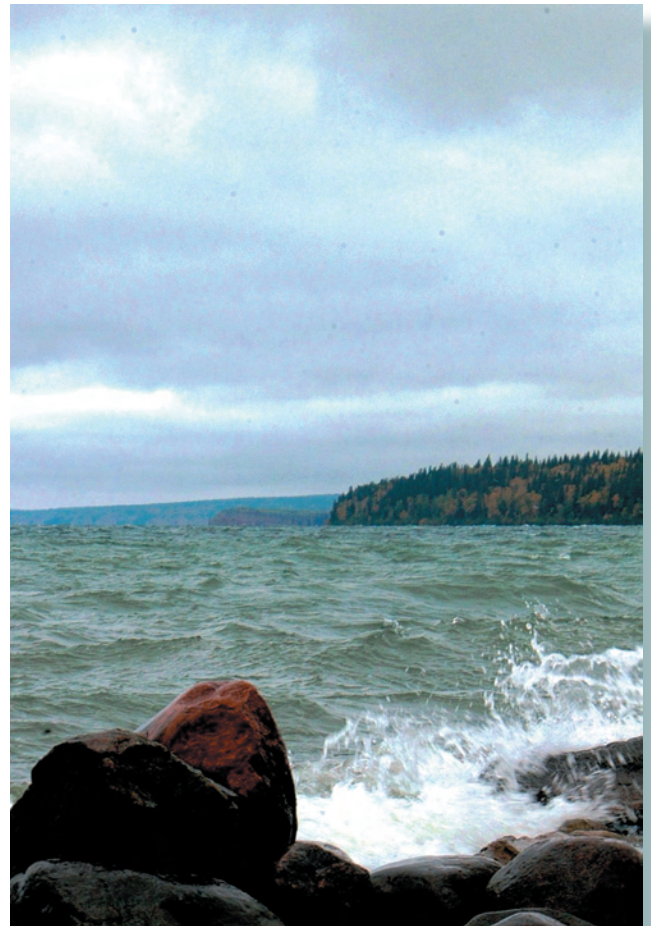
The group will then return to the parking area and beach on Cold Lake. Participants will have time to relax on the beach, take an early afternoon walk along the sand, swim in the lake, or just wade and cool their toes. The mouth of the Medley River has healthy populations of broad-leaved arrowhead, as well as a natural (and drinkable) spring. There will then be a 25-minute drive back to Cold Lake North for a walk along the boardwalk at the marina, where participants can see sailboats and enjoy delicious hard ice cream (a local tradition). If there is enough interest, organizers may book several tables at Clark's Eatery (a well known watering hole on the lakeshore drive) for dinner. Participants will need to notify organizers in the morning if they are interested.

## Sunday June 18

**Departure will be at 9:00 a.m.** The day starts with a drive (taking Hwy. #55 west then Hwy. #897 north) to North Bay at the northwestern corner of Cold Lake, where the group will walk along the sand beach to look for damselflies and butterflies, such as boreal bluets and tiger swallowtails. Common loons, grebes, many species of ducks, cormorants, and bald eagles can be seen swimming or flying over Cold Lake. A beaver dam and spillway into the lake are located here, as well as native beach grasses. Participants may observe

upland species, such as moschatel (*Adoxa moschatellina*), golden corydalis (*Corydalis aurea*), and spotted touch-me-not (*Impatiens capensis*), in addition to aquatic vegetation, such as thread-leaved pondweed (*Potamogeton filiformis*) and white-stem pondweed (*Potamogeton praelongus*), which have drifted in from the river deltas along the shallow water of the lake. Fleabane (*Erigeron* sp.), tufted loosestrife (*Lysimachia thyrsoiflora*), and golden corydalis attract butterflies and damselflies along the lakeshore.

At the mineral spring (which is actually a seep), clumps of prairie sedge and two-stamened sedge, marsh marigold (*Caltha palustris*), golden saxifrage (*Chryso-splenium iowense*), American brooklime (*Veronica americana*), and various asters (*Aster* sp.) grow. In the spring area itself, unique slime molds, iron-eating bacteria, and wet mosses (such as felt round moss (*Rhizomnium pseudopunctatum*) and *Cinclidium stygium*) occur, as well as several species of horsetail (*Equisetum* sp.). There are also healthy populations of currants, gooseberries, and dogwoods (*Cornus* sp.) along the rocky shorelines of Cold Lake. After the shoreline walk, participants are encouraged to stay and eat a brown bag lunch under old pine plantings at a 1920s homestead site in order to watch the shoreline for Kinosoo (the legendary indigenous monster fish). Alternatively, stop at one of the many restaurants and fast food outlets in the Cold Lake area before leaving town.



**A stormy day on Cold Lake**  
Photo Marsha Hayward

## About the Cold Lake Region

Cold Lake sits in the Central Mixedwood region of Alberta's Boreal Forest, with the western half of its water body in Alberta and the eastern half in Saskatchewan. One of the few glacial oligotrophic lakes in Alberta, Cold Lake drops to more than 100.6 m in depth with an extended shoreline of 105.9 km. Aptly named Cold Lake, the mean water temperature is +4°C. Areas rich in submerged plant vegetation, river deltas, and bays or inlets are confined to specific areas and are limited on Cold Lake. The cold, deep water of the lake is subject to high

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# Organisms Underfoot!

## The Importance of Biological Soil Crusts

By Varina Crisfield

When hiking in the mountains, have you ever thought about what organisms might be underfoot? While wildflowers capture our attention with their bright colours, there are smaller, less eye-catching organisms that form communities on the soil surface known as biological soil crusts. Though unremarkable at first glance, soil crusts are vital to the health of the alpine meadows we hike through.

### What are biological soil crusts?

In certain ecosystems, especially deserts and tundra, soil surfaces are often coated with a soil crust. Also known as cryptogamic, microbiotic, or cryptobiotic crusts, these soil crusts are made up of a number of different types of living organisms, including mosses, lichens, fungi, bacteria, and algae. Soil crusts have a number of important ecological functions. First, the blue-green algae (cyanobacteria) that are often present in these crusts fix nitrogen, which enriches the underlying soil. Second, soil crusts increase soil infiltration capacity, allowing more water to reach plant roots. They can

also moderate soil temperatures, either increasing or decreasing the temperature of the soil surface depending on the colour of the crust (light-coloured crusts cool the soil surface, while dark crusts warm it). Finally, soil crusts anchor the underlying soil and help to prevent erosion.

### What do biological soil crusts look like?

At a glance, soil crusts look much like dirt: they are often dull-coloured and have a slightly lumpy, nondescript appearance. Though, if you remove a small bit of crust, you'll notice that, unlike soil, the crust is actually quite filamentous. These filaments help to hold the crust together and anchor it to the soil (and, as a result, help to anchor the soil against erosion).

### Human impact on biological soil crusts

Despite their ecological importance, there is very little awareness of our impact on biological soil crusts in the Canadian Rockies. Soil crusts in deserts in the American Southwest have been

found to be very sensitive to trampling (by hikers or by livestock, for example). As a result, many conservation campaigns have been undertaken to encourage tourists to remain on established

trails in order to protect these fragile ecosystems and to avoid

the loss of soil through widespread crust degradation and soil erosion. These campaigns have been quite successful. Unfortunately, there appears to be little awareness of soil crusts by recreational users in the Canadian Rockies, and because soil crusts are nondescript and can easily be mistaken for mineral soil, education campaigns are likely necessary to increase hiker awareness of soil crusts in the Rocky Mountains.

### How can you help?

Increasing public awareness about soil biological crusts is an important part of ensuring the sustainability of recreational activities, such as hiking, in the Canadian Rockies. You can help by educating yourself, as well as your friends and families, about these unique communities. Staying on the trail in alpine areas will help to conserve trailside soil crust, which in turn can help to prevent trail soil erosion and trail widening. If you do wander off-trail with others, walking abreast rather than single file is recommended as it spreads out and dilutes the impact of trampling. When in protected alpine areas, be sure to respect the regulations that park managers have set out for public use: stay on the trail where requested, don't take short cuts, and ensure the activities you are engaging in are allowed at the site you are visiting.

For further information regarding the biology and ecological importance of soil crusts, visit the Biological Soil Crust Website at [www.soilcrust.org](http://www.soilcrust.org). This website contains both a basic overview of biological soil crusts (click on the "crust 101" link) as well as more in-depth information about their ecology and management (click on the "advanced" link). ♦



**Soil crust on alpine tundra at Cavell Meadows, Jasper National Park**  
Photo Varina Crisfield

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# Board thanks Ellis Bird Farm for work with wildflower mixes



Wildflower mixes grown out in pots at Ellis Bird Farm  
Photo Eileen Ford

March 19, 2010

Ellis Bird Farm  
Lacombe, Alberta

The Alberta Native Plant Council would like to acknowledge and thank you for continuing to educate the public regarding wildflower seed packages.

We are aware of the ongoing efforts you have been making to show the public that they are wasting their time and money, and they may be contributing to the invasive ornamental problems that already plague us. The grow-outs that you continue to do each year speak louder than words. They are attractive, so they draw one to have a closer look. Then the explanatory board explains the reality.

With the numbers of visitors the Ellis Bird Farm receives every year, the message to avoid these wildflower seed packets has to be getting the attention of many gardeners. You truly are “promoting knowledge and conservation of the native plants and vegetation of Alberta.”

Sincerely,

Eileen Ford  
Past Director ♦



## Digital Newsletter Coming Soon

ANPC will be offering a new digital copy of *Iris* to its members. You will have the option to select hard copy or digital copy of the newsletter on your 2011 membership renewal notice.

We feel this is an eco-friendly way to inform you about all of the news, opportunities, and events that ANPC and its members are involved in. Digital copies will provide a cost savings to ANPC, and the paperless copy will be in colour. ♦



## Cold Lake, from page 6

winds making it a desirable destination for sailors; however, fierce storms make boating a challenging sport when less than ideal conditions prevail.

The surrounding hilly terrain supports ridged moraine, as well as glacio-fluvial deposits in lower areas. Several water source inlets from the Medley River and Martineau River flow in from the north and west. There are 22 species of fish that inhabit Cold Lake. One of Alberta's largest fish hatcheries operates on the northeastern side of the lake and provides spawning fish populations to many lakes in Alberta. A connecting surface wetland flows directly from Ethel (Little Bear) Lake with a proven continuous 10,000 year archaeological history of indigenous people having lived in this region.

Large, beautiful, white quartz sand beaches with telltale garnet deposits and granite boulders adorn the varied shorelines. These beaches support many sand-loving plants, as well as a healthy population of damselflies and butterflies. Another water outlet flows directly east out of Cold Lake into Pierce Lake and Meadow Lake Provincial Park in Saskatchewan, which borders and helps further protect the eastern side of Cold Lake. An intact canopy habitat within the Boreal Central Mixedwood and Dry Mixedwood forest surrounds the more than 50 lakes in this area of Alberta. This supports a very healthy breeding songbird population (wood warblers and vireos), as well as many water birds (including one of Alberta's largest western grebe colonial nesting populations, American white pelicans, bald eagles, and many ducks and geese).

Cold Lake Provincial Park has three sections to the south, the northwestern shoreline, as well as the North Bay and Medley/Martineau River areas. There is a large island (Murray Island) adjacent

to the mouth of the Martineau River inlet. The large park area provides a continuous mid- to old-growth forest cover and unique ecology protected from ever-encroaching development in northeastern Alberta. Interconnected glacial lakes, rivers, and small streams along with intact boreal forests make this region rich in biodiversity. A nearly continuous band of glacial lakes and connecting watershed attributes stretches from Lac La Biche until approximately 200 km east of Cold Lake in Saskatchewan, making this perhaps the most water-rich area of the province. This region is very beautiful with great opportunities for bird watching, botanizing, fishing, camping, boating, and hiking during the summer months.

Long Bay stretches for ten miles southward off Cold Lake. It supports large intact reed beds with many kilometres of submerged aquatics, a population of yellow pond-lily (*Nuphar lutea*), nesting habitat for western grebes and black terns, turkey vultures, two populations of broad-leaved arrowhead, tall manna grass (*Glyceria elata*), yellow-headed blackbird populations, many common loons, and osprey. Access to the edge of the bay is available from Cold Lake Provincial Park and also by boat (canoe or kayak ONLY in the vicinity of the reed beds).

West of Cold Lake along the southern base of a dissolution edge area lies a series of glacial lakes. Crane Lake, Tucker Lake, Wolf Lake, and the higher elevation Touchwood and Pinehurst lakes support rich biota, as well as unique geological formations, including calcium carbonate springs and tufa mounds with their telltale marl deposits. These geological formations are considered rare in Alberta with few others located north of Ft. McMurray and in the Big Hill Springs area north of Calgary. These spring areas support many rare plants and contain glacial

valleys with microclimatic conditions of their own. Other spring areas lie along the northern shoreline of Cold Lake in the North Bay vicinity.

*Thank you to Marsha Hayward for preparing this background information for Botany Alberta 2011. ♦*



*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.

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Submission deadline for the next issue:

**September 30, 2011**

A subscription to *Iris* is included with membership in the ANPC. To join, contact the secretary, or check our website, [www.anpc.ab.ca](http://www.anpc.ab.ca).

**Alberta Native Plant Council (ANPC)**  
24<sup>th</sup> Workshop and Annual General Meeting

## **Fragments of the Rocky Mountains**

**Saturday, April 30, 2011**

Lady Macdonald Community Hall  
Canmore Recreation Centre, Canmore, Alberta



After the workshop, the ANPC will hold its Annual General Meeting. Everyone is invited to attend. Learn about ANPC activities, consider a position on the Executive and/or volunteer for committee work.

For information on the workshop and registration please contact:

**Laurie Hamilton**

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What's the current state of Alberta's Rocky Mountains? Please join us in Canmore to explore this amazing and botanically diverse portion of the Alberta landscape. Potential topics include:

- Rocky Mountain ecology and geomorphology
- Land uses, such as
  - Off-road vehicles
  - Forestry
  - Pipelines
  - Rural development
- Weed issues in the Rocky Mountains
- Potential rare plants and ecological communities in the Rocky Mountain Natural Region
- Parks in the Rocky Mountains

The workshop program is currently being developed.  
**Please visit [www.anpc.ab.ca](http://www.anpc.ab.ca) for regular updates.**

Workshop registration includes the one-day workshop, program handout, buffet lunch and coffee breaks. A banquet and speaker is also planned after the AGM. Please indicate on the registration form if you will be attending the dinner banquet.



The daytime workshop and annual general meeting will take place at:  
Lady Macdonald Community Hall,  
Canmore Recreation Centre.

8:00 am – Check-in and registration  
8:30 am – Workshop presentations begin  
4:30 pm – Annual General Meeting  
6:15 pm – Dinner banquet

**Registration:**

Fill out the following registration form and mail it to:

**2011 ANPC Conference**  
**c/o Mryka Hall-Beyer**  
**3023 Cochrane Rd NW**  
**Calgary, AB T2M 4J4**

**Deadline:**

Early registration is up to and including **April 1, 2011**.  
After that a late registration fee will be applied.

**Registration Form**

Name \_\_\_\_\_  
Affiliation \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Province \_\_\_\_\_  
Postal Code \_\_\_\_\_  
Phone \_\_\_\_\_  
E-mail \_\_\_\_\_

Early Registration (tick one as applicable, enter amount on line below)

- Member (new or current) ..... \$60.00
- Non-Member ..... \$70.00
- Student ..... \$30.00

Late Registration **after April 1<sup>st</sup>, 2011**

- Member (new or current) ..... \$65.00
- Non-Member ..... \$75.00
- Student ..... \$35.00

Dinner Banquet ..... \$45.00

Workshop Registration Total ..... \$ \_\_\_\_\_

**My diet is restricted** (please describe below):  
\_\_\_\_\_

**New Membership or Membership Renewal enclosed:**

- Individual.... \$15.00       Family..... \$25.00
- Senior ..... \$10.00       Student..... \$10.00
- Corporate.... \$50.00       Life..... \$500.00

Tax deductible donation.....\$ \_\_\_\_\_

where needed    conservation action    educational programs

**Total Enclosed** ..... \$ \_\_\_\_\_

**ANPC is going digital with their newsletter IRIS.**

If you prefer to receive your newsletter by e-mail, ensure that your e-mail address is correct, above, and check the following:       Digital Newsletter

Include a cheque or money order payable to:  
**Alberta Native Plant Council**

We cannot accept other forms of payment.

**Accommodations:**

Please note that due to the location of this year's workshop, we have not secured a block of hotel rooms for the delegates. There are many hotel options in Canmore, Cochrane and Calgary. We leave it up to you to secure your own accommodations.

**Venue:**

**Canmore Recreation Centre**  
**1900 - 8th Ave.**  
**Canmore, AB**



# ANPC Publications Now Available

The Alberta Native Plant Council has published these important documents:

- *Recommended Documents for Botanical Surveys in Areas of Proposed Disturbance* is designed to assist land managers/planners, industry representatives, regulators and consultants in properly identifying the scope of work required to assess sensitive botanical resources in an area of proposed development.
- *ANPC Guidelines on Plant Rescues* identifies considerations when planning plant rescues, such as adverse effects and ethical decisions.

Please visit our website at [www.anpc.ab.ca](http://www.anpc.ab.ca).

Go to the Publications webpage and look under the Guidelines and Products heading.

## Southern Alberta Rare Plant Study Group

**WHO:** Adopt-A-Plant (APA) volunteers;  
anyone interested in botany &  
rare plants



**WHERE:** University of Calgary herbarium (basement,  
Biological Sciences Building)

**WHEN:** First Saturday of every month from  
noon to 4:00 p.m. (except summer months)

**FORMAT:** These will be informal events allowing people  
to come and go.

Each month's topic/agenda will be announced on the APA  
website at [www.ab.adoptaplant.ca](http://www.ab.adoptaplant.ca). Experienced botanists  
will be in attendance at each meeting.



Past issues of *Iris*  
are now available  
online at  
[www.anpc.ab.ca](http://www.anpc.ab.ca)

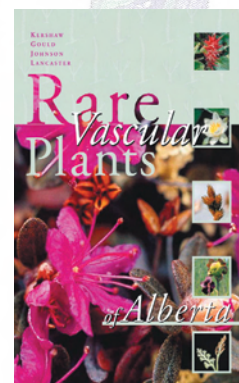
## ANPC Objectives

The Alberta Native Plant Council strives to

- Promote knowledge of Alberta's native plants
- Conserve Alberta's native plant species and their habitats
- Preserve plant species and habitat for the enjoyment of present and future generations

The Council's specific objectives are these:

- To educate individuals, industry, and government about native plants
- To promote awareness of native plant issues through a newsletter, an annual workshop, and in the media
- To co-ordinate information and activities concerning Alberta's native plants
  - To develop briefs or position papers for special projects
  - To organize field trips, plant studies and May Species Counts
  - To update lists of current research and conservation projects
- To preserve natural habitats and plant communities
  - To support legislation that protects native plants
  - To take action to establish, preserve and manage protected areas
  - To undertake Alberta projects jointly with like-minded groups
- To encourage appropriate use of Alberta's native plants
  - To produce information on the use of native plants in land reclamation
- To develop and distribute collection, salvage and management guidelines
  - To update a list of native seed sources and suppliers for horticulture and reclamation ♦



**Addenda  
for the  
Rare  
Vascular  
Plants of  
Alberta  
are now  
available!**

For information, drawings, and range maps of rare vascular plant species of Alberta not found in the *Rare Vascular Plants of Alberta* (Kershaw et al. 2001) please visit the Alberta Native Plant Council's website at [www.anpc.ab.ca](http://www.anpc.ab.ca) under Publications. This is an ongoing project with plant species added as the pages are completed.