



Adopt-a-Plant Alberta: First Year's Success Story

by Robert Rogers

Adopt-a-Plant Alberta (APA) is an exciting new conservation initiative for the province's rare plants and lichens. Participants adopt a rare plant of their choice, and experts give training on how to find and identify them, as well as gather data about their location and habitat. The program is open to both amateur and professional botanists throughout the province.

This valuable information can then be added to the conservation database of the Alberta Natural Heritage Information Centre (ANHIC).

The program is a co-operative effort among ANHIC, Alberta Native Plant Council, Devonian Botanic Garden (University of Alberta), and Alberta Fish and Wildlife Species at Risk Program.

A steering committee of hard working individuals secured funding from a number of private, provincial and federal departments to kick start this initiative. These include the Habitat Stewardship Program, Alberta Native Plant Council, Alberta Sport, Recreation, Parks and Wildlife Foundation, and Alberta Sustainable Resource Development, as well as private firms including AXYS Environmental Consulting and TERA Environmental Consulting. The Shell Environmental Fund and the TD Friends of the Environment Fund also generously contributed to this important program.

Two 2-day training sessions were held during May in



Searching for elusive lichen (*Psora himalayana*) and Porsild's whitlow-grass (*Draba porsildii*) but distracted by something prettier! photo: Jane Lancaster

Calgary and Edmonton, for 33 volunteers who traveled from Fort McMurray to Grande Prairie, to Turner Valley. Volunteers were shown how to identify their adopted species, collect samples where appropriate, and record locations with GPS units lent out for the season. Volunteers have been contributing a significant number amount of time to this program ranging individually from 15 hours to over 175 hours during the summer months.

A wrap-up meeting for volunteers in the Edmonton region was held on October 14 and in Calgary on November 5 for southern volunteers.

The APA program is currently

looking for a volunteer coordinator. For further information about joining the program or applying for the volunteer coordinator position, please contact:

Lisa Matthias
780-422-3412
Lisa.Matthias@gov.ab.ca

or

Rene J. Belland
780-987-3054
rene.belland@ualberta.ca ☘

In this Issue...

Limber Pine and Whitebark Pine:	
Call for Info	3
Riparian Forests of the Upper	
Missouri	4
Call for Nominations	4
Plant Happenings	5
ANPC AGM and Workshop	7,8

More photos on page 2...



Crested shieldfern (*Dryopteris cristata*). photo: Ksenija Vujnovic



Searching for smooth cliffbrake (*Pellaea glabella*). photo: Jane Lancaster



Volunteer searching for crested shieldfern. photo: Ksenija Vujnovic



Crested shieldfern (*Dryopteris cristata*) habitat. photo: Ksenija Vujnovic



Edmonton Adopt-a-Plant Alberta Volunteers. photo: C. Dana Bush



Edmonton APA workshop: Joyce Gould on the track of the elusive *Helianthus syntheticus*. Photo: C. Dana Bush

Limber Pine and Whitebark Pine Call for Information

Limber pine (*Pinus flexilis*) and whitebark pine (*Pinus albicaulis*) are both considered to be “May Be At Risk” in Alberta, which means that they may be at risk of extirpation from Alberta and are therefore candidates for detailed risk assessments. Provincial status reports are currently being prepared for each of these species to help carry out these assessments.

Limber pine inhabits exposed, dry, rocky slopes and hilltops up to subalpine elevations (E-flora of North America 2007, Moss 1983). Limber pine is provincially ranked as S2 (“Imperiled”) (Gould 2006), and is considered to be “May Be At Risk” (Matthias, L., pers. comm. 2007). It is nationally ranked as N3/N4 (range of uncertainty in rank between “Vulnerable” and “Apparently Secure”) and globally ranked as G5 (“Secure”) (NatureServe 2007). In British Columbia (BC), the only other Canadian province where limber pine is found (NatureServe 2007), limber pine is yellow listed (“Apparently Secure”) and ranked as S3/S4 (range of uncertainty in rank between “Special Concern” and “Apparently Secure”) (BC CDC 2007). In the United States, limber pine is found in Nebraska, North Dakota and South Dakota (ranked as S1, “Imperiled”), Oregon (ranked as S4, “Apparently Secure”), Wyoming (ranked as S5, “Secure”), and Arizona, California, Idaho, Montana, Nevada, New Mexico and Utah (not ranked) (NatureServe 2007).

Whitebark pine is found sparingly on thin, rocky, cold soils at or near timberline in montane forests (E-flora of North America 2007, Moss 1983). Whitebark pine is provincially ranked as S2 (“Imperiled”) (Gould 2006) and is considered to be “May Be At Risk” (Alberta Sustainable Resource Development 2005). It is nationally ranked as N4 (“Apparently Secure”) and globally ranked as G4 (“Apparently Secure”) (NatureServe 2007). In BC (the only other Canadian province where whitebark pine is found), whitebark pine is yellow listed (“Apparently Secure”) and ranked as S4 (“Apparently Secure”) (BC CDC 2007). In the United States, whitebark pine is found in Wyoming (ranked as S3, “Vulnerable”), Idaho, Montana and Oregon (ranked as S4, “Apparently Secure”), and California, Nevada and Washington (not ranked) (NatureServe 2007).

Alberta Fish and Wildlife Division and the Alberta Conservation Association (co-publishers of the status reports) request information from relevant data sources, such as the Alberta Natural Heritage Information Centre’s (ANHIC’s) species occurrence database to be included in the status report. In order to assist in the process of data collection, ANPC members are asked to submit any recent information on limber and whitebark pines, which has not already been submitted to ANHIC, to Nyree.Sharp@gov.ab.ca and Sue.Peters@gov.ab.ca (as well as directly to ANHIC). Information can include observations of limber and whitebark pines, as well as habitats that were surveyed and did not yield any observations (*i.e.*, null data). The most efficient way to submit this information is by using the Rare Native Plant and Lichen Survey Form found at: www.cd.gov.ab.ca/preserving/parks/anhic/plant_trk_wtch.asp. Any information on these species might be of help in the status process.

Once the status reports have been completed and presented to the Endangered Species Conservation Committee, the committee will make a status recommendation to the Minister of Alberta Sustainable Resource Development regarding the results of the status assessment and conservation actions needed for the recovery of the species. Please send any recent and relevant information to the above-mentioned contacts as soon as possible.

References

- British Columbia Conservation Data Centre (BC CDC). 2006. BC Species and Ecosystems Explorer. B.C. Ministry of Environment, Victoria, B.C. Available at: srmapps.gov.bc.ca/apps/eswp/jsp/results.jsp?pager.offset=390
- E-Flora of North America. 2006. FNA Vol. 2 Pages 1823 & 1863. Available at: www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=233500921
- Gould, J. 2006. Alberta Natural Heritage Information Centre Tracking and Watch Lists — Vascular Plants, Mosses, Liverworts and Hornworts. Alberta Community Development, Parks and Protected Areas Division, Edmonton, Alberta.
- Moss, E.H. (revised by J.G. Packer). 1983.

Flora of Alberta. University of Toronto Press. Toronto, Ontario.

Matthias, Lisa. Species at Risk Biologist, Alberta Fish and Wildlife Division. January 1, 2007. E-mail regarding Limber and Whitebark Pine status.

NatureServe. 2007. NatureServe Explorer. Available at: www.natureserve.org/explorer/servlet/NatureServe?init=Species



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 deadlines for upcoming issues:

Spring	May 15, 2007
Fall	Sept 15, 2007
Winter	January 30, 2008

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

Riparian Forests of The Upper Missouri Wild and Scenic River

by Greg Kudray, Senior Ecologist MTNHP

Reprinted with permission from Kelsey, the newsletter of the Montana Native Plant Society, Vol. 18, No. 2.

Montana Natural Heritage Program (MTNHP) ecologists and zoologists have just completed a two-year study on the Upper Missouri Wild and Scenic River. Unlike the rest of the Missouri and most other large western rivers, this 150-mile stretch is free from dams and retains a more natural hydrologic regime with the sizable floods so important to maintaining a riparian ecosystem. The gallery forests of plains cottonwood (*Populus deltoides*) along the river can only successfully establish when floods deposit sediments high enough above the river level to isolate cottonwood regeneration from the destruction of ice movement.

These riparian forests offer virtually the only forest environment in the prairie landscape and provide the richest wildlife habitat in the region. A high percentage of ani-

mal species in arid regions like central Montana need riparian habitats for part of their life cycle and riparian areas may comprise the only suitable habitat for some amphibians and invertebrates. The highest densities of nesting breeding birds found in North America have been reported in cottonwood riparian forests. Three amphibian species, two reptile species, and eight bird species on the Montana Animal Species of Concern list are closely associated with riparian habitats in prairie regions, and at least three additional reptile species, eleven bird species and ten mammal species on the Species of Concern list regularly use riparian cottonwood habitats.

As riparian areas are the most productive and possibly the most sensitive of North American habitats, it has been proposed that they be viewed as an endangered habitat, especially appropriate in our case since cottonwood forests have been in decline throughout the west and in the Wild and Scenic River corridor.

The causes of cottonwood forest decline

are many: altered hydrology is the most basic, but improper grazing and nonnative plant invasion are more important in our study area. The [United States] Bureau of Land Management (BLM) has started to alter grazing regimes along the corridor but many species of nonnative plants are well established; we recorded 39 species of non-natives and 5 category 1 noxious weeds on 154 plots. No plot had less than 5% of its total herbaceous cover as exotic species, 36% of plots had over 95% cover in exotics, and 5% of the plots had only non-natives in the herb layer! Nonnative smooth brome (*Bromus inermis*), which is not categorized as a noxious weed in Montana, was the typical dominant under the cottonwood canopy with suffocating effects on native species. As exotic cover went up, native species richness declined.

While 38 of the 39 nonnative species were herbs, the one woody nonnative, Russian olive, may pose the greatest threat and offer the most potential for management. Russian olive has invaded many western riparian areas and can totally dominate as a dense monoculture. While a few species may benefit (which provides the motivation for continued domestic planting in some

continued page 5...

Call for Nominations

ANPC has both elected and volunteer (non-elected) positions on the board. The elected positions are for a two-year term. Nominations are now being requested for the following positions, which are up for election this year.

Positions up for Election

Vice-President
Secretary
FAN Director

ANPC members may offer to stand for election for a selected position, or nominate others (with agreement from the nominee).

Nominations may be mailed to:
Alberta Native Plant Council
Box 52099
Garneau PO
Edmonton, Alberta T6G 2T5

Elections will be held at the Annual General Meeting, to be held in conjunction with the April 21, 2007 Workshop in Calgary, Alberta.

Open non-elected positions

In addition, ANPC is looking for volunteers for the following non-elected positions:

Volunteer Coordinator
Conservation Action
Webmaster
Iris Layout Editor

Or emailed to:
lorna.allen@gov.ab.ca.

... Riparian Forests, continued.

areas), research is clear that habitat is degraded for many native birds and probably also bats, several of which are Species of Concern. The impact seems to be most direct on insectivores and cavity-dependent species. Russian olive hosts fewer insects than natives and lacks the cavities found in older cottonwoods.

The Wild and Scenic Missouri River can be viewed as two halves. The western half has much more private land, with the potential for domestic plantings of Russian olive to serve as the necessary seed source for a riparian infestation. The eastern half is mostly BLM managed, isolated from seed sources, and presently free from Russian olive. All 15 plots with Russian olive were in the western half and at low cover values, presenting an opportunity to control this ecologically devastating invasive. As few stretches of large western rivers still maintain enough natural hydrology to regenerate cottonwood forests, and have the combination of public ownership and seed-source isolation necessary to exclude Russian olive, the Upper Missouri Wild and Scenic River may represent an almost unique opportunity to retain these magnificent cottonwood gallery forests.

The complete report on this project will be available soon from the Montana Natural Heritage Program website: www.mtnhp.org. The report also includes information on the amphibian, reptile, bat, and small mammal species found, four of which (one in each group) are on the Montana Animal Species of Concern list. There is also additional information on many other aspects of the Wild and Scenic River corridor ecology. ❀

ANPC Small Grant Program

The ANPC Small Grant Program which provides funds for research, study and appreciation of native plants supporting plant conservation is now in place. The application form can be obtained through ANPC webpage: (www.anpc.ab.ca/contact.html) or by e-mail: info@anpc.ab.ca or by writing to ANPC at the following address:

Alberta Native Plant Council
Box 52099, Garneau Postal Outlet
Edmonton, AB
T6G 2T5

Plant Happenings

UPCOMING EVENTS

8th Prairie Conservation and Endangered Species Conference and Workshop
March 1–3, 2007 Delta Regina Hotel, Regina Sask. www.pcsc.ca

The World Beneath our Feet. Jeff Battigelli of Earthworks, (www.earthworksresearch.com) will talk on soil micro-organisms (to be confirmed). March 21, 7:45 pm University of Calgary Engineering Building E241. cfns.fanweb.ca/archives/2007/CFNS-news-Feb-Mar-07.pdf

Edmonton Horticultural Society AGM and Presentation. *What's New in the Garden* by Jim Hole March 26, 2007 at 7:30 p.m. Northgate Senior Citizens Recreation Centre, 7524 – 139 Ave. www.edmontonhort.com/calendar/monthlymeetings/meetings.asp

The Edmonton Plant Study Group Fall–Winter Schedule, 2006–2007. Everyone Welcome! All meetings at J. Percy Page Centre, 11759 Groat Road, 3rd floor, Room 8. The room open sat 7:00 pm and presentations start at 7:30 p.m.

The Boreal Forest — A Mycological Wonderland by Markus N. Thormann, Mycologist, Canadian Forest Service, and President of the Edmonton Mycological Society Monday, March 12, 2007
Alpine and Subalpine Plants – Life in the Land of Extremes by Joyce Gould, Senior Botanist, Alberta Natural Heritage Information Centre Monday, April 16, 2007

WEBSITES

www.srd.gov.ab.ca/fw/wildspecies/
The General Status of Alberta Wild Species 2005 now available. Contains assessments for 2811 species under 10 categories: birds, mammals, amphibians, reptiles, fish, butterflies, gastropods (*e.g.* snails), bivalves (*e.g.* clams), odonates (*e.g.* dragonflies)

www.albertaefp.com/index.html
Environmental Farm Plan workshops are free and the process prompts thoughtful analysis of the site where you live, including such things as water sources, wastewater disposal, fuel storage, energy efficiency, and health of native wetlands and uplands.

PUBLICATIONS

Best of Alberta Day Trips from Calgary. Revised Edition Bill Corbett ISBN 1–55285–766–2

Alberta Beneath Our Feet. Brian Hitchon ISBN 0–9680844–2–7

The Wild Flower Key. Francis Rose. Revised and updated by Clare O'Reilly 2006. 576 pp. Key to wild flowers of Britain and Ireland.

Wild Orchids of Florida. Paul Marin Brown University Press of Florida. 409 pp. www.upf.com

OTHER

Flora ID Northwest. Computerized plant identification keys for vascular plants. The keys contain complete descriptive information for all vascular plant species known to grow in BC and the Pacific Northwest (both native & naturalized introduced species). Bruce Barnes. Download order form from the Native Plant Society of British Columbia at www.npsbc.org.

Catalogue of Saskatchewan Vascular Plants. Provides a much updated version (November 2006) of the **Checklist of the Vascular Plants of Saskatchewan.** Vernon L. Harms Access on-line at: www.parc.ca/saskflora/info/annotated_catalogue_of_saskatchewan_vascular_plants2012006.pdf

INTERNATIONAL CONFERENCES

3rd International Orchid Conservation Congress March 19–23, 2007 San Jose, Costa Rica
www.plant-talk.org/Pages/confer.html

1st International Biodiversity Congress May 22–25, 2007 Bangkok, Thailand
www.plant-talk.org/Pages/confer.html

5th Plant Europa Conference on the Conservation of Wild Plants in Europe September 5–9, 2007 Cluj-Napoca, Romania www.plant-talk.org/Pages/confer.html
❀



Rare Vascular Plants of Alberta is available from the ANPC to members for only \$25.00 each. This is a 16% discount, but with the added benefit of no GST, it is equivalent to a saving of 22% or \$7.05 per book. What a bargain! And, the ANPC gets \$4.17 for each guide sold.

You can pick up books from Mryka Hall-Beyer (Calgary), Lorna Allen (Edmonton), Joyce Gould (Edmonton), or Eileen Ford (Red Deer).

Note: Our agreement with the University of Alberta Press allows us to sell books only to ANPC members and to people attending lectures and workshops involving the editors of the book and/or ANPC members.



Whitebark Pine Photo-derived graphic: A. Falk

The Alberta Native Plant Council

Gameau P.O. 52099
Edmonton, AB T6G 2T5
website: www.anpc.ab.ca
email: info@anpc.ab.ca

2006-2007 Board

President

Kelly Ostermann
kostermann@eba.ca

Past President

Ed Karpuk
ed.karpuk@gov.ab.ca

Secretary

Lorna Allen
lorna.allen@gov.ab.ca

Treasurer

Mryka Hall-Beyer
mhallbey@ucalgary.ca

Directors

Patricia McIsaac (Northern)
pmcisaac@telusplanet.net

Eileen Ford (Central)
hh3@telusplanet.net

Cheryl Bradley (Southern)
ecgordon@telusplanet.net

FAN Directors

Birgit Friedenstab
birgitf@telus.net
Elaine Gordon (alternate)
ecgordon@telusplanet.net

Conservation Action

Vacant

Membership Secretary

Kelly Ostermann
kostermann@eba.ca

Education and Information

Mari Decker
maridecker@wildmail.com
Jim Posey
jpo@lincsat.com

Rare Plants

Linda Kershaw
lkerkshaw@incentre.net
Dana Bush
cdbush@telusplanet.com

Reclamation and Horticulture

June Flanagan
june.flanagan@uleth.ca

Webmaster

Ken Sanderson
ken@sandnarrows.com

Newsletter Committee

Laurie Hamilton
laurie_hamilton@irisenvironmental.ca
Alfred Falk
falk@arc.ab.ca
Janice Smith
watsmith@telusplanet.net
Chris Manderson
cmanders@telus.net
Pat McIsaac
pmcisaac@telusplanet.net

Alberta Native Plant Council (ANPC)
20th Workshop and Annual General Meeting

**Fragments of the Boreal
Forest**

Saturday, April 21st, 2007
Delta South Calgary
135 Southland Drive SE, Calgary, Alberta



What's the current state of Alberta's Boreal Forest? Please join us in Calgary to explore this vast and botanically diverse portion of the Alberta landscape. Potential topics include:

- landscape overview
- changes over time
- new plant discoveries
- present and future effects of climate change
- mountain pine beetle and the implications for forestry
- wetland issues
- fungi/plant interactions
- ethnobotany
- oil and gas and oil sands developments
- cumulative effects
- conservation and preservation



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.

The day will conclude with an evening banquet and a presentation by **Peter Lee** entitled "The Boreal and The Bra: Brace Yourself".

All events on Saturday will take place at the Delta South Calgary.
7:30 am - Check-in start and last minute registration
8:30 am – Workshop presentations begin
4:30 pm – Annual General Meeting
6:00 pm – Reception including a cash bar and Banquet

Workshop registration includes a buffet lunch and coffee breaks. The banquet is an optional extra. Free outdoor parking is available.

Free space for display tables is available on a first-come, first-served basis.

For information on display tables and registration please contact:
Mari Decker: telephone (business) 403-538-5698; email: maridecker@wildmail.com, or

Laurie Hamilton: telephone (business) 403-543-4455; email: laurie_hamilton@irisenvironmental.ca



Registration:

Fill out the following registration form and mail it to:

2007 ANPC Conference
c/o Laurie Hamilton at Iris Environmental Systems Inc.
635 36th Ave. NE
Calgary, AB, T2E 2L8

Include a cheque or money order payable to:

Alberta Native Plant Council

We cannot accept other forms of payment.

The development of the program is underway. Please see www.anpc.ab.ca for regular updates.



Deadline:

Early registration is up to and including **March 30th, 2007**. After that a late registration fee will be charged. Deadline for banquet tickets is **April 13th, 2007**. Cancellations will be refunded in full, if notification is sent to one of the contacts indicated above (Mari or Laurie) by **April 13th, 2007**.

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) \$50.00
 (if you are already a member, or if a membership payment is enclosed)
- Non-Member \$60.00
- Student \$30.00

Late Registration **after March 30th**

- Member (new or current) \$60.00
- Non-Member \$70.00
- Student \$40.00

Workshop Registration Total \$ _____
 Banquet Ticket @ \$35.00 ea \$ _____
 Banquet Guest(s): _____

My diet is restricted (please describe, so we may meet your needs during the workshop and banquet):

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 \$ _____

Accommodations:

A variety of non-smoking rooms (singles, doubles and suites) have been blocked for registrants for the night of April 20th at the Delta South Calgary; please book by **March 15th** to take advantage of the special rates and mention **Alberta Native Plant Council**. Call 1-877-278-5050 for Hotel Reservations. The Delta South and Red Top Taxi offer a \$16 one-way fare or \$32 round trip fare between the Delta South and the Calgary International Airport.

This workshop follows a two-day conference (April 19th and 20th) held in the same location by the Alberta Society of Professional Biologists (ASPB) entitled "Solutions to Ecological Issues in the Oil Sands." If you'd like more information on this conference, please visit www.aspb.ab.ca.

How to get there:

The Delta South is located in southeast Calgary, on the southeast corner of McLeod Trail and Southland Drive. Please refer to the map for access details.

