



IRIS

Newsletter of the
Alberta Native Plant Council,
Garneau P.O. 52099
Edmonton, Alberta T6G 2T5

Fall/Winter 1992

Issue 15

Editors Note

As our thoughts turn to Christmas, snow, skiing and cosy hearths, add to your calendars the upcoming annual ANPC workshop to be held in Calgary, February 20, 1993. This year's theme is one that has garnered a lot of attention over the last few years, and revolves around issues and threats related to vegetation in the Rocky Mountain Front ranges, particularly the Bow Valley Corridor. The conference will examine the role of various agencies and organizations involved in development and/or conservation strategies for the area, including the Canadian Parks Service, Alberta Tourism, Parks and Recreation, the Town of Canmore, Alberta Forestry, Lands and Wildlife, and the Bow Valley Naturalists among others. The conference will be followed by the AGM, to which all members are invited; at this time, new executive positions will be chosen.

In other news, the ANPC has been very active over the past few months; see committee reports in this issue for details. ANPC member Kathy Wilkinson ran a well-attended grass identification workshop at the University of Calgary herbarium this fall, and member Mike McNaughton ran a successful seed exchange at Parkland Nurseries, Red Deer on September 6th. The Edmonton Plant Study Group and Calgary Field Naturalists' co-sponsored some great summer field trips again, and through donations, the ANPC helped to sponsor a forest management workshop at Cypress Hills, plus the current development of materials on the rare flora of Alberta, and on cottonwoods.

Lastly, to all those of you who donated monies to the ANPC, a big thanks of appreciation; a list of donors has been included in this issue. Thanks also to Patsy Cotterill for her two years to date as head of the Plant Study Group in Edmonton and to Carole Armstrong, steward for ANPC for Big Sagebrush. Keep up the good work, everyone!

See you all February 20th at the 1993 ANPC workshop!

Joan Williams

Alberta Native Plant Council Executive

Chairman: Elisabeth Beaubien
(University of Alberta Devonian
Botanic Garden, Edmonton)

Vice-Chairman: Cliff Wallis
(Consultant, Naturalist, Calgary)

Secretary: Loma Allen (Biolo-
gist, Natural and Protected Areas,
Alberta Forestry, Lands and
Wildlife)

Treasurer: Joyce Gould

Northern Director: Dr. Joan
Snyder (Grande Prairie)

Central Director: Mike
McNaughton (Red Deer)

Southern Director: Kathleen
Wilkinson (Biologist, Consultant,
Calgary)

Director (Federation of Alberta
Naturalists representative): Derek
Johnson (Canadian Forestry
Service)

In this Issue...

Green Spaces, Mountain Places ANPC Annual Conference	2
The Romance of the Fescue.....	2
Notes From Footner Lake	4
Purple Loosestrife Update	4
1992 Endangered Spaces Progress Report	6

Plants of Northern British Columbia...	5
Volunteer Projects	7
Donations to ANPC	5
Committee Reports	3
Conferences/ Tours	5, 8
Native Plant Organizations	8
Publications	8

Green Spaces, Mountain Places— February 20, 1993

ANPC Annual Conference & Annual General Meeting

The Alberta Native Plant Council will host its 1993 annual conference on February 20, at the University of Calgary (please see enclosed registration form). This year's theme, "Green Spaces, Mountain Places", focuses on the issues and threats to native plant species and habitats in the Bow Valley corridor and adjacent mountains and we are pleased to report that we have many interesting speakers lined up representing the viewpoints of local naturalists, parks and alpine reclamationists. The conference will be followed by a brief Annual General Meeting which is open to all. More information will be presented in the next newsletter, but **MARK YOUR CALENDERS NOW!**

We are looking for volunteers to help with several jobs:

- advertise the workshop
- help run the registration desk
- operate a slide projector
- help the food committee
- jot down workshop summaries for IRIS
- take new memberships (on conference day between 8:00-9:30 a.m. & at coffee breaks)

If you would be willing to help out, please contact Kathleen Wilkinson at 278-3203 as soon as possible.

had reached full growth, the bison moved to summer pastures in the heartland of the prairies. There they dined on wheatgrasses *Agropyron spp.* and needlegrasses *Stipa spp.* while the fescues grew undisturbed awaiting their autumn return.

We have substituted cattle for bison, and fences for migration routes. The cattle graze summer and winter, a regime to which fescue is unadapted. Year by year the fescue decreases. The Alberta Forest Service is studying the ecology of the foothills rough fescue in their grazing leases. With short-term moderate grazing they find that rough fescue declines and Parry's oat grass *Danthonia parryi* and sedges *Carex spp.* increase. If grazing ceases the grasslands return to fescue-dominated grasslands. Fescue has its limit though. If overgrazed to the point that Kentucky bluegrass *Poa pratensis* invades, the fescue grasslands will not recover - cannot recover. Even when grazing is removed, Kentucky bluegrass remains a dominant species, outcompeting the Parry's oat grass and allowing dandelion and timothy *Phleum pratense* to invade. A new community has then been established.

Fire also has its place on the prairie. As you stand on the hills looking east, you can squint your eyes and imagine a world without fences, roads or ploughed lands. Fires ignited by lightning in Saskatchewan or set by the Peigans on the banks of the Oldman River might have swept across rivers and ravines deep into the foothills. The result is that fescue is well adapted to frequent fires. Without fires the grasslands become stagnant and overgrown. The diversity decreases and shrubs invade. As these shrubs age they become woody and unpalatable. The animals move elsewhere to graze or browse and the range declines. A fire rushing through, burns the woody vegetation, opening up the site for grasses and forbs. The shrubs are set back but not killed. Their new vegetation is tender and succulent, and the animals return. With repeated 3 to 5 year burning the range shifts to grasslands, and waves of fescue wash the shores of the mountains. ■

The Romance of the Fescue

C. Dana Bush

There is a romance to the southern foothills along the edge of the Rockies. West of the town of Longview, you can climb into the hills and gaze east across the prairies. The view is unbroken by trees - you have the sense of seeing forever, and if your eyes were just a little sharper, perhaps you could see the Atlantic ocean far past the vast prairie ocean.

It is a place of wind and sun and cold. It is, as Don Gayton describes in his evocative book *The Wheatgrass Mechanism* "... a thin membrane of grass, stretched tightly over secret horizons of soil, and shaped by drought, geography, and solitude." This is the historic land of free-roaming bison, wapiti, wolves, deer and Native people.

The fescue grasslands are diverse and complex. Clare and Kathy Tannas are entranced with this diversity. They laid 15 frame transects in the mixed grass prairie and found 10 to 20 species. The same transects in the foothills rough fescue prairie revealed 20 to 40 species - twice the number. As you travel north from Montana to the Red Deer River, or up the side of a mountain, or even around the side of a mountain you'll encounter different combinations of grasses, sedges, forbs and shrubs all within a matrix of foothills rough fescue *Festuca campestris*.

These foothill prairies evolved with bison, fires and fescue. The bison, according to Don Gayton, wintered at the edges of the boreal forest and the foothills. Here, when the bitter winds swept across the prairies, they could find shelter in the trees and bed down in the deep snow. Here too, was fescue grasslands, providing protein rich winter forage. In the spring, before the fescue

Committee Reports

Conservation Action

Conservation Action committee head Cliff Wallis reports that the Water Resources Policy is moving along. The Grasslands Naturalists hosted a successful forest management workshop for Cypress Hills; proceedings should now be available.

Lethbridge member Cheryl Bradley is working on a brochure on cottonwoods, discussing the biology, benefits and factors affecting its survival. Alberta Forest Products Association (AFPA), AWA and CPAWS met with Alberta Forestry, Lands and Wildlife officials this fall regarding a protected areas strategy for northern forests. AFPA will push this issue.

A meeting about the use of Cardinal Divide was held on December 5. ANPC lobbied to keep the Cardinal River Headwaters free from motorized vehicles but, because of opposition from a number of other interested parties, the discussion will continue.

Finally, Cliff is asking members to write their MLA's regarding the Endangered Species legislation. If you would like to participate in Conservation Action committee activities, please contact Cliff Wallis (Calgary 271-1408).

Rare Plants

Rare plants committee is currently working on a rare flora of Alberta to be published through the ANPC. Linda Kershaw says they will aim for 350 species; the format will include 1-page descriptions of each species, plus accompanying photos and illustrations. The list of species has been reproduced in the most recent issue of PICA (Calgary Field Naturalists' Society); we hope to include it in the next issue of IRIS as well.

Committee chairman Derek Johnson noted that several rare species were located this year; the sedge *Carex lacustris* at the Pegg Garden and at Entwistle, the sedge *Carex crawei* at Wainwright Dunes, and the rush *Cyperus schweinitzii*, *Lygodmesia rostrata* (annual skeleton weed) and *Cryptantha fendleri* (cryptantha) at Wainwright. Kathy Wilkinson also found several rare plants at Buffalo Lake, and in the Crowsnest Pass. If you had sightings of rare plants this summer, and/or would like to join the Rare Plants Committee, please contact Derek (Edmonton 436-8321).

Information & Education

Committee chairman (Northern Region) Dan McIsaac reports that they are focusing on three major projects these days: 1) purple loosestrife campaign 2) regional plant lists and 3) checklists for natural areas around the province. Information re: the checklists will appear in the next issue. If you would like to join this committee please contact either Jim Posey (Calgary 560-2551) or Dan McIsaac (Spruce Grove 962-5462).

Reclamation & Horticulture

Dale Gray of Calgary, put in a tremendous effort in completing a seed list information mailout to Alberta rural newspapers. Travis Chemicals assisted with the mailout of the seed list to seed companies and municipalities. Thankyou for your work on this project.

The city of Calgary is planning an "entrancing project" that involves using native species rescued from areas slated for development. Ethics guidelines are still under way, and committee chair Dana Bush also notes that there is a need to do checklists for plants along the Bow and Elbow rivers.

If you would like to work on any of these projects, or would like to find out more about the Reclamation and Horticulture Committee, please contact Dana (Calgary 282-3975).

Letter to the Editor

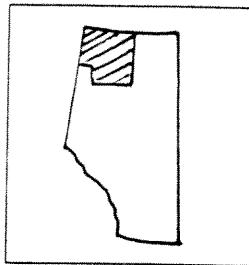
I wish to submit the article "Notes From Footner Lake Forest" for printing in the Fall/Winter issue of Iris. My intention is to acquaint fellow ANPC members with this forgotten northern forest and some of the thing happening here that I am involved in.

Karen S. Herrmann (article on page 4)

Notes From Footner Lake Forest

Karen S. Herrmann, Ecologist, AFS,
Footner Lake Forest

Footner Lake Forest is located in the northwest corner of Alberta. It covers 76,135 square kilometres or 11% of the provincial landbase. It is largely unknown by the rest of the province because it is remote and access is limited throughout most of the area. Industrial development includes forestry, oil and gas development, and farming. The effects of these on the intrinsic value of the forested land is of concern. Efforts are being made to manage the forest from an ecological view.



Because this corner of the province is not well known, data on species occurrence is limited. The Alberta Forest Service, AFS, is currently defining the ranges of plants of the area. Some species are known to occur here, but this information is not reflected in provincial range maps. Beaked hazelnut, chokecherry, and elderberry are three of many examples.

The staff at AFS-Footner Lake Forest have recognized the need to study the entire forest from soil to tree-top instead of just looking at timber (merchantable trees). Non-commercial species are now noticed. For example, the rare White Adder's Mouth orchid (*editors note: Malaxis monophyllos*) has been sighted west

of High Level. Four individuals were found growing near the edges of wet depressions in a mature white spruce stand. All had set seed and were dormant. On a previous visit, one plant was found flowering.

Another initiative implemented by Footner Lake Forest is the requirement to use only native species to reclaim disturbances in the forest. It is hoped that this will reduce the introduction of weed species.

Footner Lake Forest includes five ecoregions: Low, Mid and High Boreal Mixed Wood; Low Boreal Cordilleran; and Boreal Subarctic. AFS, acting as stewards of public forest land, is taking steps to ensure maintenance of these ecosystems.

Purple Loosestrife Committee (Alberta) Update

On October 22, 1992 Elisabeth Beaubien (Chairman, ANPC) met with representatives of other government and non-government agencies to discuss how to deal with *Lythrum salicaria*. As a result, a number of positive actions were initiated at both the regional and national level. These have been summarized as follows:

- as of January 1992, *L. salicaria* has been placed on the noxious weed list (under the Weed Control Act by Alta. Reg. AR 78/92). Manitoba has also declared purple loosestrife a noxious weed. P.E.I. has declared all *Lythrum* as a noxious weed; Ontario has declared it a noxious weed in certain counties only.
- biocontrol agents (i.e. insects) have been received in Canada, but have not yet been released. No releases are planned in Alberta because infestation rates are low and the aim is for eradication, not control.
- in Alberta 7 new sites were confirmed in 1992, for a total of 22. Control mechanisms (hand pulling, chemical treatments) were undertaken at all reported sites.
- it was concluded that both the ornamental variety and purple loosestrife should be considered a threat. Both are quite similar, and both types produce seed.
- a national committee has been formed to develop a national strategy for dealing with this weed. They will coordinate research and program awareness, and maintain a national inventory of infestations, etc.
- the final group consensus was that the Alberta committee will endorse the removal of the entire *L. salicaria* complex. That means encouraging and enforcing (via Agriculture Fieldmen) the removal of all *Lythrum*, including ornamental varieties. Also, the Nursery Trade will be encouraged to discontinue resale of ornamental *Lythrum*. This removal will continue for a 10-year period; there are numerous other perennials available to replace it on the market.

Editors Note: Known as the "zebra mussel of the wetlands" in eastern Canada, the whole complex should be considered a noxious weed. Unfortunately there is still opposition to its removal from within the horticulture trade, but information and public awareness campaigns will help to enforce the new regulation. ANPC hopes to organize river eradication trips next summer (which could also be a lot of fun!) . You can help too by removing Lythrum from your garden. Round-Up, Garlon 4 and Amitrol-T have been successful in the past in its control, but only use if the plants are more than 30 m from water. And again, if you find new locations of Lythrum, contact the Crop Management Branch, Alberta Agriculture (Edmonton 427-7098) or Alberta Natural and Protected Areas (Edmonton 427-5209).

Donations

The ANPC wants to give special recognition to all of you who have made generous donations to the council over the past years.

To date ANPC has received \$1231.00 in donations. THANKYOU!!!

May 1, 1992-

November 6, 1992

P. Achuff
E. Beaubien
J. Campbell
D. Fabijan
A. & C. Falk
S. Garden
B. Hallworth
A. Hendry
J. & L. Honsaker
D. Johnson
E. Karpuk
T. Maccagno
D. Mead
E.M. Moran
P. Norris
R. Paget
M. Parker
G. Rankin
M. Sware

M. Lewis
P. McIsaac
D. McIvor
M.T. Myers
S. Nielsen
P.J. Norris
P.J. Olthof
S. Paulson
S. von Rennenkampff
A. Rudiak
B. Smith
R.N. Smith
I. Sturges
M. Sware

May 1, 1989 -

April 30, 1990

M. Bastian
W. de Groot
M. Flatman
E. Gordon
M. Lewis
M.F. White
C.P. Wenger

May 1, 1988 -

April 30 1989

R. Smith
S. Sware
M.F. White
B. Whitton

1987-April 30, 1988

S. Alberts
E.J. Clark
R.G.H. Hall
M. Horrocks
G.I. & S.J. Houghton
J. MacKay
W. Moser
M. Sware
K. Wilkinson

May 1, 1990, -

April 30, 1991

C. Bradley
P. Clayton
P. Cotterill
J. Duncan
M. Flatman
E. Gordon
O. Hammer

Plants of Northern British Columbia

Best field guide of '92

Editors: A. MacKinnon, K. Pojar, R. Coupe. 1992. BC Ministry of Forests and Lone Pine Publishing. 352 pp.

This book is a must for every Alberta naturalist! Congratulations to all ten authors involved. What a great way to do a plant field guide: involve many specialists from different fields of botany, plus local naturalists who know the area in question!

A big advantage of this guide is the diversity of plant groups presented. Sections include: trees, shrubs, wildflowers by family; grasses, sedges and rushes; ferns, horsetails, clubmosses; mosses and lichens. Twenty-one excellent keys are provided to assist in identification of confusing groups such as willows, *Ribes* (currants and gooseberries) and grasses. The photographs are very good, with supplementary sketches to add details of flower or leaf. To show the size of the plant a squirrel or moose sketch occasionally provides scale.

Plant descriptions are detailed, including abundant tips on similar species, use of plants by native groups, and derivations of both scientific and common names.

The book is a handy size for the field, with rounded page corners providing ease of handling. The reference list is extensive. One possible improvement would be to add more common names, as they contain much local cultural information. I did not have the opportunity to "test drive" this guide in B.C., but found it very useful for the boreal area of western Alberta. Chris Czajkowski, a wilderness guide living in Nimpo Lake, B.C., reviewed this book for the fall 1992 issue of "Wildflower" (Canadian Wildflower Society). He calls the book "superb, for the high dry plateau country of north and central B.C."

Now we need a "Plants of Northern Alberta" in the same format, to include our Canadian Shield treasures from the NE corner of the province (eg: Moccasin flower, *Cypripedium acaulis*). Will prospective authors please step forward?

Review by: Elisabeth Beaubien, November 1992 (President ANPC; coordinator Alberta Wildflower Phenology Survey, Devonian Botanic Garden, University of Alberta, Edmonton T6G 2E1)

Conference

January 17-20, 1993 — 1st Interprovincial Range Conference. Saskatoon, Saskatchewan. Organized by the Grazing and Pasture Technology Program, the Stock Growers Association and the Saskatchewan Agriculture Development Fund. Topics include: rangeland resources of western Canada, rangeland ecology and multiple-use management of rangeland. Early Bird registration \$117.10. After December 18, \$144.45. For more information, contact Faisal Taha (306) 569-2633 or FAX 306 569-8799.

Alberta Lagging Badly in Wilderness Protection Efforts

from World Wildlife Fund News
Release, September 22, 1992

Province Receives a "D" Grade in National Report Card

...The Government of Alberta received a "D" grade for its poor performance in protecting the province's wildlands and wild waters during the past year, according to a national report on the status of wilderness protection efforts in Canada issued by World Wildlife Fund Canada.

The 1992 Endangered Spaces Progress Report, which was released in Calgary, Edmonton, Lethbridge and Medicine Hat and simultaneously in Ottawa and at news conferences across the country, warns that Alberta, along with most other senior Canadian governments, must pick up the pace of its wilderness protection efforts if Canada's rich, natural diversity is to be preserved.

The report assesses progress by Canada's 13 senior governments in meeting the goal of the Endangered Spaces campaign. Launched by World Wildlife Fund in 1989, the campaign has as its goal the establishment of a network of protected areas, representing each of Canada's 340 natural regions by the year 2000. While the campaign has been endorsed by the federal government and nine of the other provinces and territories, Alberta has yet to commit to the Endangered Spaces goal.

Only New Brunswick, with a "D-" grade, scored lower than Alberta. Manitoba also earned a "D". The highest grades were an "A-" for the federal government (terrestrial areas) and for P.E.I. The grades were based on a combination of factors, including: new protected areas established during the past year, protected area commitments for the coming year and the extent to which options for wilderness protection are being foreclosed in the jurisdiction. However, the report notes that Alberta did take a positive step in recommending the province's participa-

tion in the Canadian Heritage Rivers Program.

"Alberta is a 'have not province' when it comes to our government's efforts on parks and wilderness designation," Dianne Pachal, of the Alberta Wilderness Association, said "Only New Brunswick has shown less leadership in mapping out a long-range protected areas agenda. Wouldn't it be great if Premier Getty left behind a blueprint for hanging onto the full range of Alberta's wild country by the year 2000?"

The Endangered Spaces Report details specific Action Agendas to be accomplished by each jurisdiction over the coming year. For Alberta, these Action steps are:

- Endorse the Endangered Spaces goals and an Action Plan with target dates.

- Identify and reserve a large boreal wilderness area and initiate protection of wilderness tracts in each of the 5 other broad groupings of Alberta's natural regions.

- Initiate the protection of the largest remaining natural area within each of the 7 natural regions where the preferred option of protecting large, contiguous, roadless wilderness (500+ km²) no longer exists.

- Develop an action plan for the province's Ecological Reserves program.

- Complete environmentally significant area (ESA) assessments and develop legal protection for ESA's along the 4 transportation corridors that traverse the Rocky Mountain natural regions.

- Nominate Christina River and Clearwater River as Canadian Heritage Rivers

Progress by Alberta in implement-

ing this Action Agenda over the course of the year will be a key factor in determining the province's rating for the 1993 Endangered Spaces Report. However, an historic meeting on November 25th of all of Canada's protected area ministers (the Ministers of Parks, Environment and Wildlife for the provincial, territorial and federal governments) affords an important opportunity for Alberta, as well as for the other jurisdictions, to demonstrate leadership on the protected area front before the end of 1992.

"The November 25th meeting is an unprecedented event which has the potential to break through the inertia that is stalling current wilderness protection efforts in this country," Monte Hummel, President of World Wildlife Fund Canada, said at the national release of the Endangered Spaces Progress Report in Ottawa. "Canadians will be looking to the ministers for real leadership, including a commitment to the completion of a representative system of protected areas from those jurisdictions which have not already done so. We will also be looking for an announcement of a new protected area for each jurisdiction and the tabling of action plans for completing each jurisdiction's protected areas system."

To date, only one quarter of the country's natural regions have been represented with protected areas. To achieve the Endangered Spaces goal will require representing more than 2 natural regions per year through to the end of the century. Yet, the 1992 Report shows that only two of Canada's natural regions were represented during the past year. Meeting the Endangered Spaces goal will also likely mean that at least 12% of the country will be set aside as protected area—a target established by the Brundtland Report. To date, only 4.6% of Canada is protected.

Public support for the Endangered Spaces campaign has grown tremendously since its launch. Nearly 500,000 Canadians have signed *The Canadian Wilderness Charter*—the mission statement of the campaign. In addition, 250 organizations, ranging from the Canadian Chamber of Commerce to small naturalists groups have endorsed the Charter. At the November 25th meeting, WWF is planning to present a giant collage of photographs and drawings, celebrating the rich diversity of Canadian wilderness, to the assembled ministers. The pictures are being collected by Body Shop stores across the country between September 13th and October 11th as part of a joint effort by the Body Shop, World Wildlife Fund and the Environmental Youth Alliance.

In Alberta, 24 non-governmental organizations are supporting the Endangered Spaces campaign. Groups include the Alberta Wilderness Association, CPAWS—Alberta, the Alberta Chamber of Commerce, and the Nature Conservancy of Canada—Alberta Region.

Corporate support for the Endangered spaces campaign has also grown tremendously. The Canada Life Assurance Company is providing a grant of \$500,000 over five years in support of the campaign. In addition, support has been received from a number of their sponsors, including CIBC, Canadian Airlines, IBM, and Environment Canada.

For further information: Dianne Pachal, Alberta Wilderness Association—Calgary 283-2025 and Pat McIsaac, Alberta Wilderness Association, Edmonton 439-0648 or Kevin Kavanagh, World Wildlife Fund, Ontario (416) 489-8800.

Volunteer Projects

Volunteer Steward Program

Project Duration: Ongoing

Aims: To provide the opportunity for public participation in the management of natural areas; and to enhance site monitoring and management activities (e.g. inspections, fencing, signs) that will assist with the long-term protection of natural areas.

Volunteer Duties: As a minimum, a volunteer steward is asked to visit their assigned natural area twice a year, and observe and report to the department on the condition of their site. Volunteers may undertake additional projects (e.g. trail development, biophysical inventories) as long as they are consistent with the management objectives for the site. volunteer stewards are not obligated to stay with the program for any defined length of time; it is strictly voluntary. However, they are encouraged to make a minimum commitment of two years.

Qualifications: Volunteer stewards can be individuals (including government employees), groups, organizations and corporations, proving they are Alberta residents either over 18 years of age or, if younger, have parental consent

or belong to an organization under adult supervision.

Contact: Natural and Protected Areas, Volunteer Steward Coordinator, 4th floor, Petroleum Plaza, South Tower, 9915-108 Street, Edmonton, Alberta, T5K 2C9

Trees by 2000

Project Duration: Ongoing until the year 2000

Aims: To raise community awareness about the importance of trees to the environment, locally and globally and to plant one tree for every citizen of Red Deer by the year 2000 (60,000 trees).

Volunteer Duties: Tree planting, public education, volunteer coordination, networking with other business and groups in the area and coordination of planting details.

Qualifications: A deep concern for the environment.

Contact: CAGE, #1,6300-45 Ave. Red Deer, Alberta, T4N 3M6. Phone 403 342-1722.

May Day Count

Project Duration: Ongoing

Aims: To document species diversity and abundance of flowering plants, mammals and birds by region in spring.

Volunteer Duties: Identify and record species of flowering plants, birds and mammals in specified regions during the last weekend in May. Those interested in establishing a count should contact the provincial coordinator.

Qualifications: Ability to identify species of flowering plants, birds and mammals and keep accurate and complete field records. Observer teams are formed and thus inexperienced as well as experienced observers can participate.

Contact:

Plants-Derek Johnson Northern Forestry Centre, 5320-122 St. Edmonton, Alberta T6H 3S5. Phone 435-7306.

Birds and Mammals- Federation of Alberta Naturalists Provincial coordinator, Box 1472, Edmonton, Alberta T5J 2N5. Phone 453-8629.

reprinted from Working With Wildlife — A Volunteer's Directory by Carla Palaschuk

Canadian Native Plant Organizations

National

Canadian Wildflower Society
P.O. Box 110
1848 Liverpool Road
Pickering, Ontario L1V 6M3

Provincial

Alberta

Alberta Native Plant Council
Garneau P.O. 52099
Edmonton, Alberta Y6G 2T5

Ontario

Canadian Wildflower Society
Wellington/Waterloo Chapter
c/o Allan Anderson, Botany Dept.
University of Guelph
Guelph, Ontario N1G 2W1

Canadian Wildflower Society
West Toronto Chapter
600 Palmerston Ave.
Toronto, Ontario M6G 2P9

Nova Scotia

Nova Scotia Wildflower Society
6360 Young St.
Halifax, Nova Scotia B3L 2A1

Newfoundland

Canadian Wildflower Society
Newfoundland Chapter
Box 9, Site J, RR 1
Portugal Cove, Newfoundland
A0A 3K0

Publications

Alaskan Wildflowers. V.E. Pratt. Alaskakrafts Publishing Anchorage, Alaska. 136 pp. [\$14.00 US].

Barrenland Beauties: Showy Plants of the Arctic Coast. P. Burt, 1991. Outcrop Publishing. Box 1350 Yellowknife, NWT, X1A 2N9. [\$24.00 Cdn].

Fescue grasses of Canada, Aiken, S.G., & S. J. Derbyshire, 1990. Publ. 1844/E Research Branch, Agriculture Canada, Ottawa. 113 pp.

Gray's Manual of Botany. A. Gray, rev. by M.L. Fernald, 1987. Dioscordies Press, Oregon. 1632 pp. [\$60.00 US]

Kinnikinnick. Published quarterly by The Friend of the University of Alberta Devonian Botanic Garden. The University of Alberta, Edmonton, Alberta, T6G 2E1

Native Plants for Northern Gardeners. L.C. Snyder, 1991. Anderson Horticultural Library, Chanhassen, Minnesota. 277 pp. [\$29.95 US].

Native Trees, Shrubs and Vines for Urban and Rural America: a planting design manual for environmental designers. G.L. Hightshoe. 1988. Van Nostrand Reinhold Company, New York. [\$130 Cdn].

Orchid Biology. Arditti, J. (ed.), 1990. Timber Press, Oregon. 432 pp. [\$58.00 US].

Plants of northern British Columbia. A. MacKinnon, J. Pojar, and R. Coupe', (eds.). 1992. Lone Pine Publishing, Edmonton. [\$19.95 + GST Cdn].

Rare Vascular Plants in Canada—Our Natural Heritage. G. Argus & K. Pryer. 1990. Canadian Museum of Nature, Ottawa. 191 pp. [\$17.00 Cdn].

Regreening the National Parks. M. Frome, 1991. The University of Arizona Press, Tuscon, Arizona. 250 pp. [\$30.00 US].

Working with wildlife—a volunteer's directory. Palaschuk, C. 1992. Environment Canada (Canadian Wildlife Service) and Alberta Forestry, Lands and Wildlife (Fish and Wildlife).

Tour

February 11-28, 1993 — Tropical Agro-Ecology Tour in Costa Rica (Ecology & Agricultural Development). An international study tour for professionals in agricultural or environmental technologies to look at alternative land-use strategies in tropical agriculture. Program sponsored by Olds College Extension Services in conjunction with the Costa Rican Technological Institute. All expenses included, \$3200 Cdn. Contact Geraldine Byrne (program coordinator) at (403) 556-8638 or Richmond Godfrey (International Education Coordinator) at (403) 556-8254.

IRIS is published three to four times yearly by the Alberta Native Plant Council. Subscription is included in membership to the A.N.P.C. The Council's aim is to increase knowledge of Alberta's wild flora and to preserve this diverse resource for the enjoyment of present and future generations.

Memberships and letters to the editor are welcomed and should be sent to:

Alberta Native Plant Council
Garneau P.O. 52099
Edmonton, Alberta T6G 2T5

Membership fees are:

\$ 15	Individual
\$ 25	Family
\$ 10	Student
\$ 10	Retired
\$ 50	Corporate
\$ 500	Lifetime

Printed with the assistance of Olds College