

Welcome!

Exciting news from 2003 Annual General Meeting in Calgary! Ed Karpuk, last-year's vice-president of ANPC, accepted the position of president of this organization. By doing this, he committed to "caretaker" role that Dave Downing (stepping-down president) effectively applied throughout his two-year term as president. Thank you, Ed!

We welcome on board Alfred Falk and Janice Smith, who have volunteered to become members of Newsletter Editorial Committee. Alfred is taking over from Chris Manderson in preparing layouts of the IRIS newsletter and Janice will help with proof-reading of the articles.

If you would like to submit an article for publication, you can send it to Ksenija at ksenija@shaw.ca

In this Issue...

AGM 2003: President's Report	4
Workshop 2003: Abstracts	6
Another Successful Dandelion Festival	11
The Global Strategy for Plant Conservation – an update	12
News and Notes	13
Role of Native Plant Societies in Grassroots Conservation	14
Book Review: Alberta Wayside Flowers	16

Control of Smooth Brome at Nisku Prairie

Birgit Friedenstab

Nisku Prairie is a remnant northern fescue grassland. Today, less than 5% of the original fescue grassland remains in Alberta. It is located south of Edmonton, in the County of Leduc, just east of the Nisku Industrial Park, in the South Vistas acreage subdivision. This municipal reserve, owned by Leduc County, is approximately 30 acres in size. In 1993, the County designated it as "Nisku Prairie Park Reserve". Since May 2000, the Alberta Native Plant Council has an agreement with Leduc County to fulfil the management/stewardship needs of the prairie.

In the summer of 2002, the ANPC began treating smooth brome at Nisku Prairie. We decided that it was best to begin a regular program of treatment with herbicide while the populations were relatively small. Most of the smooth brome populations are at the borders of the property (beside roads, pasture land, and acreages. Plants that are found throughout the remainder of the grassland areas are usually isolated, or are diffuse plants in a small area.

Some of the lack of heavier smooth brome invasion in Nisku Prairie may have been due to the regular midseason mowing that Leduc County performed twice a year up until 1994. The mowing seemed to reduce brome's vigor, resulting in less litter build up than currently existing, and also prevented smooth brome seed dispersal. Since 1994, however, there has been

very little mowing, no grazing, and there was only one fire that burned a very small portion of the grassland area. Smooth brome seems to be invading the prairie, but its spread has not been properly documented.

The area chosen for the first attempt to control smooth brome was a pipeline right-of-way (ROW) at the extreme north edge of the grassland area. This pipeline was installed in the early 1970's, prior to the practise of using native seed mixes for reclamation, so during its excavation for repair in the fall 2001, the sod on the ROW was not salvaged, as it contained mostly smooth brome with little native material. By removing the smooth brome from this area, we hoped that the neighboring grassland would provide the seed and other plant material to re-vegetate the ROW naturally. If necessary, we would supplement with commercial native seed.

We also planned to treat other smooth brome plants scattered throughout the field bordering this ROW. I have named the different sections of grassland areas in Nisku Prairie in order to refer to them. The field that the ROW is located on is referred to as the "middle field". It is almost totally cut off from the other grassland areas by aspen groves. In future years we planned to treat the brome found in the other fields: "south" and "east" fields.

August 24th, 2002, the designated work day, dawned bright and clear — a desirable weather condition for application of herbicide. However, we didn't feel so blessed later, when the temperature soared to a sweltering 32° C! We began with an explanation of how to identify smooth brome (by the seed head and by the “w” pattern on the grass blade), followed by a demonstration of how to “load” and use the herbicide applicator.

The herbicide applicator was recommended and described to me by Suzanne Gill (warm thank-you to Suzanne for all her advice and assistance!). The recommended contraption was originally designed by Rob Staniland of Talisman Energy for controlling smooth brome in the rough fescue prairie on his acreage west of Calgary. The purpose of the applicator is to be able to selectively apply herbicide solution to the smooth brome, while preventing contact with the native, desirable vegetation. Each applicator (also nick named “gizmos”) is comprised of one pair of barbecue tongs (12”) and two paint roller refills. Each paint roller is placed on the tong ends. Suzanne stressed that the paint rollers had to be very thick pile, so that they would absorb more solution. In order to prevent the rollers from turning during use, I found that a few layers of duct tape on the tong end

inside surface of the two rollers (i.e. when the tongs are squeezed together the solution is applied to where the two rollers touched each other only). The herbicide is applied by pinching the two rollers together on the bottom of the grass blade (i.e., the leaf is between the two rollers) and keeping them pinched while pulling

tape in parallel lines along the ground. Each worker treats the area within his/her lane. The entire crew works alongside of each other; and anyone finishing first can help others catch up. When the length of survey taped area is treated, everyone moves the tape into the untreated area, and the process is repeated. Thank-you to



Nisku Prairie volunteers in action in plus 32° C.

up, thus wetting the blade of grass.

Additional details of the methods

- Used Green Cross brand of glyphosate (143g/L glyphosate concentrate)—label said “rainproof in 2hr”. 1L container was purchased—we used most of the bottle;
- Concentrate was diluted 10:1, as per S. Gill’s recommendation to use in the 10 :1 to 5:1 range. This is twice as strong as the manufacturer’s recommendations;
- 7 litres of the diluted roundup were used to treat the area;
- 8 herbicide applicators were constructed and used;
- 8 volunteers applied herbicide for approximately 4 hrs each; total of 32 hrs of labor (it was too hot to work any longer, as some of us were suffering early signs of sunstroke already!);
- Total expenses for supplies = \$178.37;
- The herbicide applicators will be stored and will be reused indefinitely, so subsequent work days will be much less expensive.

Notes / Observations / Recommendations for next time

- We developed a technique for treating a heavily infested area, which ensures that coverage of the grass is complete and prevents repeat applications or missed areas. “Lanes” are created by placing long strips of equal length of surveyor’s

Dennie O’Brien for the suggestion!

- For treating sparsely infested areas: one or two people scan the field and mark the location of the brome plants with flags. One color flag was used to identify a plant; and a different color flag was substituted after it was treated. In order to monitor the effects, we left these flags in place. Unfortunately, they have not been useful as most of the plastic flag material deteriorated and fell off, or was damaged by vehicular traffic;

- We tried a few methods of applying the solution onto the rollers: spraying the solution using hand-held (1L) bottles, squirt-bottles (juice bottles that have an adjustable squirt opening) set to allow a small amount of fluid through the opening, and a large spray canister. All methods worked, but the spraying methods were probably easier to manage because they allowed for more even, and less heavy application of the solution. The spray was set to spray coarsely, to ensure that aerosols were not created (safety precaution for both the prairie plants and the workers).

- Gloves were worn at all times by the workers!

- Even though we used very thick piled rollers, the glyphosate solution tended to drip if too much solution was applied. It is very important that only the minimum of solution be applied to the roller



Patsy Cotterill applies herbicide to smooth brome.

gave the rollers a tighter fit. To load the applicator, the solution is applied to the

(necessary to apply frequently, rather than less frequent heavy application). Also, if the solution is applied too heavily, the outer surfaces of the rollers will become saturated, which will then result in contact with non-targeted plant surfaces;

- The wheelbarrow was a very useful tool — it carried the solution as we moved, and it caught the over spray and drips that occurred while the solution was being applied to the rollers;

- Except for the plants on the pipeline right of way, the smooth brome was quite ripe —that is, the seeds were falling off as we treated the plants. Also, the grass in the dryer areas had very few good green leaves due to the drought and the lateness of the season. It has been recommended that in future we treat in June or July;

- The plants on the pipeline ROW were quite short for the most part, and thus were difficult to treat. Also, the portion of the row that was in between two forests was quite wet with dew, which might have caused diluting of the herbicide;

- We were not able to document the number and size of plants/areas treated due to GPS troubles.

Results of the treatment

In September of 2002, much of the grass on the area treated on the ROW had yellowed. My observations in late May 2003 showed that some areas on the ROW appear to have been controlled well, while

others show little apparent control of smooth brome. I believe that this apparent failure in some areas is due to a combination of very little blade surface availability (the grass on the ROW was only a few inches long, and was lying close to the ground, so difficult to pinch with the rollers), and the heavy dew in the shaded area.

I haven't been able to assess the effects on the more solitary plants throughout the field, as it's still early in the season. Gladly, I haven't noticed any damage to surrounding native plants.

Goals for smooth brome control in 2003 and beyond

- Re-treat the area treated in August of 2002;

- Treat the "east" field — a large area with brome along the extreme eastern edge, and many plants along the southern border/fences;

- Treat the "south" field at the extreme south edge. The large brush pile created by an acreage owner has recently been removed. This disturbed area now needs to be treated and reseeded to reclaim it.

Many thanks to the following people for their hard work and sweat : **Patsy Cotterill, Alison Dinwoodie, Cherry Dodd, Birgit Friedenstab, Ed Karpuk, Gilmour Lund, Marge Meijer, Dennie O'Brien and Beryl Rice.** Thank you also to **Suzanne Gill** for her guidance and

suggestions for building the herbicide applicators (paint rollers on barbecue tongs!) and method of application. I feel this was a successful event —we all worked towards the goal of preserving this remnant prairie, as we're learning some of the do's and don'ts along the way.



Part of the "mighty crew": L-R Dennie O'Brien, Patsy Cotterill (crouching), Gilmour Lund, Marge Meijer, Birgit Friedenstab.

The Alberta Native Plant Council

Mailing Address

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

2002–2003 Board

President

Ed Karpuk
ed.karpuk@gov.ab.ca

Secretary

Lorna Allen
lorna.allen@gov.ab.ca

Treasurer

Mryka Hall-Beyer
mhallbey@ucalgary.ca

Northern Director

Pat McIsaac
pmcisaac@telusplanet.net

Central Director

Eileen Ford
hh3@telusplanet.net

Southern Director

Steven Deugau
knoxent@telusplanet.net

FAN Directors

Elaine Gordon
ecgordon@telusplanet.net
Heather DeCoursey (alternate)
hmansell@canada.com
Ken Sanderson (alternate)
ksanders@sandnarrows.com

Conservation Action

Heather DeCoursey
hmansell@canada.com

Education and Information

Elisabeth Beaubien
elisabeth.beaubien@ualberta.ca
Jim Posey
jpo@canuck.com

Rare Plants

Linda Kershaw
lkerkshaw@incentre.net
Jane Lancaster
janelanc@telusplanet.net

Reclamation and Horticulture

June Flanagan
june.flanagan@uleth.ca

Webmaster

Ken Sanderson
ksanders@sandnarrows.com

Newsletter Committee

Ksenija Vujnovic
ksenija@shaw.ca
Janice Smith
janice_smith@pc.gc.ca
Alfred Falk
falk@arc.ab.ca
Chris Manderson
cmanders@telus.net

President's Report

2003 Annual General Meeting, May 3, 2003

Dave Downing, retiring President

The year 2002 seems to have been a somewhat quieter time for ANPC activities than 2001, the year of the Rare Vascular Plants book. Perhaps this is a good thing – we got the chance to be a bit more introspective and consider where we would like to go next as an organization. We also got the chance to focus on more local projects that promise to provide great opportunities for Albertans to learn more about our native plants and get their hands dirty in the process. I'll provide a brief overview of our activities since the 2002 AGM.

In September 2002, we followed the advice of our auditor, who at the last AGM suggested that we invest some funds in projects that are aligned with our goals or run the risk of being viewed by the tax people as a profit-generating organization. Accordingly, we decided to support the following projects at that time:

Edmonton Naturalization (Patsy Cotterill, Cherry Dodd): a project to promote the use of locally adapted native species by homeowners, schools and municipal parks authorities in the Edmonton area.

Plantwatch (Elisabeth Beaubien): a project which has been underway for many years to promote the value of phenological studies for climate change monitoring and other purposes.

Wild Alberta (Federation of Alberta Naturalists, represented at ANPC by Elaine Gordon): a project to restructure and upgrade the Provincial Museum's natural landscapes gallery.

I would like to thank all of the people involved in these projects for their efforts. Having worked with them over the last couple of years on the fund-raising aspects of their respective projects, I can attest to the patience and perseverance one must have when applying to any agency for funding, no matter how good the cause. It is a testament to their abilities and the quality of their proposals that they have been able to attract funding from a variety of sources other than ANPC, and we are pleased to be able to help make it happen.

There has since been a significant amount of interest expressed by others in

ANPC funding, and in response we have developed a funding policy, points-based scoring system, and application form. There is still some work for the Board to do to finalize these tools and to set a ceiling on the amount of funds that can be awarded in a given year. This includes when this should be done, taking into account financial concerns such as keeping a prudent reserve and the fact that worthwhile projects may come along at any time of the year. It may be that sources of revenue other than workshops, memberships and grants will need to be explored, and it may be that the ANPC could provide the organizational structure through which those interested in specific projects could undertake fund-raising activities. Bingos are supposed to be smoke-free by 2005, I hear.

Since the last AGM, Wayne Bessie has stepped down as chair of the Reclamation and Horticulture Committee, and June Flanagan has taken over. June put a huge amount of work into revising the plant source list, which is a very detailed review of what's available and who sells it. It's on the ANPC website. Heather Sinton, David Walker, Dana Bush and Lorna Allen have been working on a companion publication, *Guidelines for the Collection and Use of Native Plants*, and they're looking for comments, so if you're interested, download it from the ANPC website and send your comments in. In fact, if you haven't visited the ANPC website for awhile, you should check out the publications page – there are seven different informative publications you can download on a variety of topics.

A small but energetic group consisting of Eileen Ford, Ed Karpuk, Steve Deugau and Jim Posey started on a new crusade this year. For some time, the ANPC has been advising people to be cautious about the purchase of wildflower seed mixes from nurseries and greenhouses because they potentially contain weeds or plants that could become serious invaders. Eileen and others have been buying up seed packets, looking for places to have them analyzed to see what's really inside, and have written letters to the government

asking for clarification on the status of wildflower seed mixes containing potentially invasive or weedy species. It would be a daunting and probably inappropriate task for the ANPC to take on any sort of a control role, however, we feel that any information we can provide to those whose job is to control invasive and weedy species will be useful. We also want to educate the public about this issue, so that people can make informed choices when purchasing the packages.

The ANPC is volunteer steward for four natural areas:

The White Horse Wildland Park: Although our many years of reclamation work spearheaded by David Walker, Elisabeth Beaubien and the Alpine Club of Canada (Alison Dinwoodie) have ended, our vigilance has not. Alison wrote a good review of the proposed Cardinal River Coal haul road, and David has been doing a little education of wayward ATV drivers on his visits to the area.

The Clyde Fen candidate natural area: This area, which lies north of Edmonton, has not yet been assigned formal natural area status. Derek Johnson is the volunteer steward representing ANPC. With his help, we wrote a letter to Ken Kowalski, MLA for the area, asking that this be done, and that the government also purchases the adjacent lands that are important to ensure the long-term survival of the fen. Mr. Kowalski acknowledged receipt of our letter and indicated that it had been sent to Mike Cardinal for review. Very recently, we have heard from Gene Zwozdesky, Minister of Community Development, that the government may support an order in council for protection of both the Clyde Fen and the adjacent area.

The Nisku Prairie Natural Area: Birgit Friedenstab is responsible for coordinating stewardship activities for the Nisku Prairie Natural Area in the County of Leduc, and she convinced the Shell Environmental Fund that this area was indeed worthy of preservation. We thank them for providing us with money for fencing. We have entered into an informal working arrangement with A Rocha, another organization with conservation interests, who are willing to help with tasks like fence building and maintenance. I'm sure Birgit will be happy to hear from anyone who wants to get their hands dirty in the

next few months.

Big Sagebrush Candidate Natural Area: Reg Ernst has taken over from Adrien Corbiere as ANPC's representative for this area. Reg knows the area very well and the ANPC thanks Reg for taking this task on.

The ANPC continues to participate on the Endangered Species Conservation Committee. Chris Manderson and Dana Bush attended several committee meetings this year, and emphasized the importance of protecting rare plants and their habitats. Cherry Dodd and Elisabeth Beaubien represented the ANPC on the Pesticide Advisory Committee in Edmonton, and if the committee's recommendations are accepted, Edmonton will be a healthier place to live.

Our associates with the Federation of Alberta Naturalists have undertaken a huge project, Wild Alberta, which is well underway and involves a major restructuring of the Provincial Museum natural history display. When I said at the beginning of this report that it had been a relatively quiet year for the ANPC, perhaps I should have qualified that to exclude members who are also involved with Wild Alberta. Elaine Gordon is our appointed FAN director and has worked hard to ensure that native plants are properly represented in the displays and to give ANPC the opportunity to participate in other aspects of the Provincial Museum's business.

I thank all of the people who have been involved in these projects for their service to the ANPC over the last year. I also thank the following people who have been actively involved in ANPC programs over the last year:

Lorna Allen, now in her 16th year as secretary, for making sense out of the four-hour meetings, seemingly covering several hundred topics each, and for helping me through another year as president and co-coordinator of the workshop.

Mryka Hall-Beyer, our treasurer since 1999, who has done a wonderful job of managing the books despite the fact that she has been on sabbatical leave in one place or another in the world. I also thank **Ruth Johnson** for helping Mryka out.

Shelley Karpuk, who agreed to look over our books again this year. We very much appreciate Shelley's efforts as our public representative to ensure that we

have properly reported our financial health.

Chris Manderson and **Ksenija Vujnovic**, who work together to produce our newsletter, IRIS. Chris has put his own creative stamp on the paper and Ksenija maintains strong editorial control of the contents. The result is an attractive and well-written summary of items that are of interest to many ANPC members. Unfortunately, Chris will not be able to continue as newsletter editor for the next term, and we are asking for one or more members to take over part of the newsletter production task. I would like to present Chris with a certificate that acknowledges his five years as newsletter editor, and a heartfelt thank-you from all your loyal readers.

Jane Lancaster and **Linda Kershaw** for their continued work in support of the Rare Plants Committee;

Elisabeth Beaubien and **Jim Posey** for making sure the word gets out about the value of native plants in Alberta. Elisabeth, Linda and **Elaine Gordon** will be star attractions next week (May 10) in Edmonton at the Dandelion Festival, a joyous celebration of the vernal equinox. Last year, it was so successful that the John Jantzen Nature Centre has signed on as a full partner this year. Jim also did the brochure for our fescue workshop and thank goodness he's such a patient and talented guy.

Sarah Wilkinson and **Susanne Visser** for giving of their own time to help others in Edmonton and Calgary know more about plants here and elsewhere in the world, through their plant study groups.

Pat MacIsaac, **Eileen Ford**, and **Steven Deugau**, respectively the northern, central and southern Directors, who coordinate ANPC events and programs in those three areas of the province. Eileen and Steven I've already mentioned in connection with the wildflower seed project; and Pat also contributed to the Alberta Conservation Authority's Peace River Parkland Remnants project.

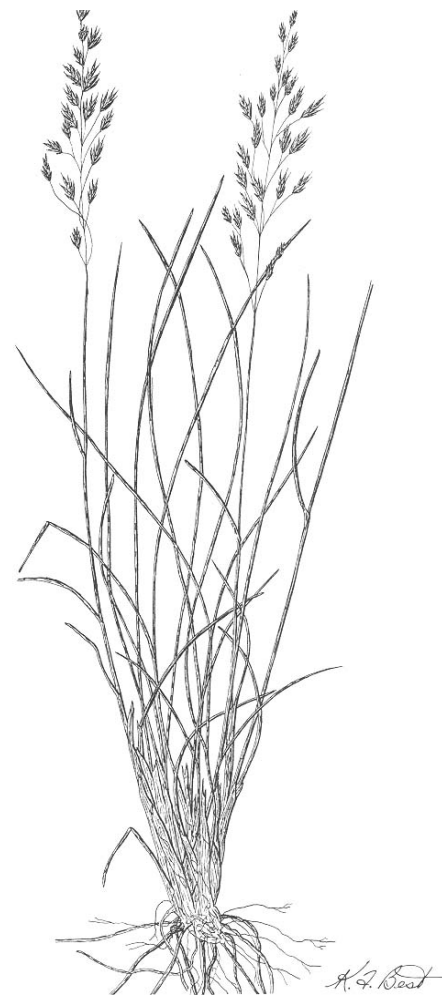
Ken Sanderson, our Webmaster, who is a new father, has a full time job, is going to school, and still manages to keep our website in running order.

Heather DeCoursey, who works hard as our conservation action coordinator.

Ed Karpuk, our vice president, who is still recovering from last year's workshop but has probably been performing various

rituals to prepare himself for the next logical step in his progression.... Do make sure there's lots of room on your hard drive for emails, Ed.

Elisabeth Beaubien asked me a while ago whether I had "fun" being President. Elisabeth strikes me as an irrepressibly cheery sort, otherwise *Plantwatch* would never have survived the storms it has weathered, and the ANPC might not have made it this far either. She seems to have "fun" with everything. If you haven't noticed, my personality is not the same as hers and "fun" is a word that I use quite sparingly, so I had to think about that for a while. For the most part, I have enjoyed the experience of being president, but most especially I am grateful for the opportunity I have had to work with and learn from my fellow board members, all of whom are unique and interesting characters. I am grateful for the opportunity that I have had to serve the ANPC, and I will continue to help out where I can.



Alberta Native Plant Council

Workshop, May 03, 2003

Presentation Abstracts with Speaker's Biographies

Rough Fescue: Alberta's New Provincial grass

Don Tannas, MLA, Highwood, Alberta

Don Tannas, MLA for Highwood, described the lengthy process involved in getting the Bill 201 Emblems of Alberta (Grass Emblem) Amendment Act, 2003, passed. This Act designated rough fescue as Alberta's provincial grass. The process was initiated by the Prairie Conservation Forum (PCF), whose 2001–2005 action plan called for implementation of a "process to select a provincial grass that will be a symbol of our prairie heritage and convey a sense of prairie as home.." As chair of the PCF committee working on the project, Cheryl Bradley was instrumental in this initiative and made the personal request to Mr. Tannas to sponsor the bill.

Albertans voted by means of a "Get a Grass!" ballot, and rough fescue proved the most popular choice. In presenting the bill to the Legislative Assembly of Alberta at second reading on February 24, 2003, Mr. Tannas observed that rough fescue is a "very worthy symbol of our prairie heritage of rich grasslands and fertile soil, soil that was the gift of the grasslands to the first homesteaders and remains a gift to our farmers and our ranchers today. The prairie and foothills grasslands sustained the buffalo and Plains Indians for thousands of years before the ranchers and homesteaders arrived." During the second and third (March 24) readings of the Bill, numerous members spoke enthusiastically in favour of the Bill, praising the excellent forage value of rough fescue, especially in winter, its sturdiness and resilience and its historical and cultural importance, while noting also its vulnerability to development and the need for good stewardship. The Bill received royal assent on March 17, and on April 30 it was proclaimed by Order in Council and became law. (See below for a summary of steps in the overall process of achieving designation of rough fescue as Alberta's provincial grass.)

Mr. Tannas was thanked for his

excellent work in steering this Bill through the legislative process.

Get a Grass! In Search of a Prairie Emblem for Alberta

October 1999 Alberta's Prairie Conservation Forum (PCF) initiates a project to select a provincial grass emblem and calls it *Get a Grass! In Search of a Prairie Symbol for Alberta*.

February 2000 The Minister responsible for provincial emblems approves the concept of designating a provincial grass.

June 2000 PCF members select a short list of five candidate grasses using results of an opinion poll and evaluation of ecological, economic and cultural values of 10 finalists. Candidates are western wheat grass, June grass, rough fescue, blue grama grass and green needle grass.

January 2001 *Get a Grass!* Is publicly announced and information is widely distributed on the candidate grasses and on opportunities to vote by mail-in ballot or through the PCF webpage. Over 8,000 brochures are distributed.

May 2001 Rough fescue is announced as the winning candidate following tabulation of 2,021 votes. It receives 738 votes (36%) followed by June grass with 556 votes (28%), blue grama grass with 305 votes (15%), western wheat grass with 226 votes (11%) and green needle grass with 196 votes (10%).

November 2001 The Provincial Museum of Alberta assesses rough fescue as suitable for a provincial emblem. The Minister responsible for provincial emblems encourages PCF to move towards official designation through a Private Members' Public Bill.

March 2002 Don Tannas, MLA Highwood, agrees to sponsor a Private Members' Public Bill to have rough fescue officially designated a provincial emblem and directs drafting of the Bill. Letters of support are solicited.

February 19, 2003 Bill 201: *Emblems of Alberta (Grass Emblem) Amendment Act*, 2003, passes First Reading in the Legislative Assembly of Alberta.

February 24, 2003 Bill 201 passes Second Reading following two hours of debate and support by members of the Legislative Assembly. Rough fescue bookmarks are provided to each MLA.

March 10, 2003 Bill 201 passes Committee of

the Whole.

March 24, 2003 Bill 201 passes Third Reading following a further hour of supportive debate.

March 27, 2003 Bill 201 receives Royal Assent.

April 30, 2003 Bill 201 is proclaimed by Order in Council and comes into force. Rough fescue is Alberta's official provincial grass.

(Financial contributions to the *Get a Grass!* project were made by Alberta Sport, Recreation, Parks and Wildlife Foundation, Canadian Wildlife Service and the Alberta Native Plant Council. Volunteer time and in-kind services and contributions were valued at over \$10,000.)

Note: a suitable call-out would be this quote from Mr. Broyce Jacobs, Hon. Member for Cardston-Taber-Warner.

"... Ecologically, it would be hard to argue for a better grass to represent Alberta. Rough fescue has a wide geographic range in Alberta, covering the foothills, the montane, and the prairie regions of the province. The grass known as rough fescue consists...of three closely related species that have between them adapted to the diverse habitat found in Alberta. Of all the western provinces only Alberta has all three rough fescue species within its boundaries. This is truly an Alberta grass."

Don Tannas, MLA, was elected to his fourth term as Member of the Legislative Assembly for Highwood on March 12, 2001, and was subsequently re-elected as Deputy Speaker and Chairman of Committees. He is a member of the Legislature Standing Committee on Legislative Offices and the government caucus Standing Policy Committee on Economic Development and Finance. He also presently serves as a Member of the Health Committee on Collaboration and Innovation.

Mr. Tannas was the first elected Deputy Speaker and Chairman of Committees of the Legislative Assembly of Alberta in 1993. He was re-elected by the Assembly following the 1997 and 2001 general elections. In addition to his regular duties as MLA, Mr. Tannas has served on a number of committees.

Mr. Tannas was employed as a Teacher and Principal for the Foothills School Division from 1962 to 1989. From 1969 to 1971 he took a leave of absence and worked with CIDA as a teacher trainer in Uganda.

In 1992 he was awarded the Commemorative Medal for the 125th anniversary of Confederation "in recognition of significant contribution to compatriots, community and to Canada." In 1998 Mr. Tannas was named a Paul Harris Fellow by the Rotary Foundation and Rotary International "in appreciation of tangible and significant assistance given for the furtherance of better understanding and friendly relations among peoples of the world."

Mr. Tannas continues to be an active community leader as member and past President of the High River Rotary Club and member of the Canadian College of Teachers. He is a past member of the Boy Scouts Group Committee; Air Cadet Committee; Downtown Revitalization Committee; Economic Development Committee, Tourism Committee; Municipal Plan Review Committee; and Good Shepherd Lutheran Church Board.

Alberta's Fescue Grassland – A Natural Delight

Cliff Wallis, Cottonwood Consultants Ltd. and Cleve Wershler, Sweetgrass Consultants, Calgary

Alberta's fescue grasslands come in many different packages. From the stunning floral displays in extreme southwestern Alberta to the rolling waves of grass at Little Fish Lake east of Drumheller, each is a natural delight. This visual journey in the Fescue Grassland regions of Alberta travels from some of the world's most extensive northern fescue grasslands, in the Bodo/Neutral Hills and Rumsey Blocks at the edge of the Aspen Parkland, south and west along the Red Deer River and its tributaries. It then picks up the isolated Cypress Hills and Calgary area, heading south along the foothills to the edge of the Montane, with some of the world's most beautiful grassland scenery and stunning floral displays. This provides a showcase for the landscapes, flora and fauna that make up this remarkable region.

Cliff Wallis was born a long way from fescue grasslands in London, England before moving to Calgary at the age of 6. Cleve Wershler has been at home on the prairies and parklands since being born in Yorkton, Saskatchewan. Both met at the University of Calgary and graduated with

degrees in Botany and Zoology. They did field inventories and planning with Alberta Parks before forming their own companies, Cottonwood Consultants Ltd. and Sweetgrass Consultants in the late 1970s. Both are Professional Biologists with diverse backgrounds in protected areas, ecological land classification, species at risk, and significant features identification.

Cliff and Cleve have undertaken fieldwork professionally since the early 1970s but were into wild plants and animals long before graduating. Cleve studied Calgary's fescue grasslands in the mid-1960s before his favorite spot was converted to the virtual monoculture that is now Confederation Park. Cliff got his introduction to fescue grasslands around Drumheller doing special studies in his undergraduate years. Both continue to be fascinated by grasslands around the globe and work for their protection in professional and volunteer capacities. Cliff is currently advising on nature reserve management in the temperate grasslands of Inner Mongolia. Cleve continues to work on a variety of species at risk and habitat protection projects in Canada's grasslands.

Grazing Management of Rough Fescue

Barry W. Adams, Range Management Specialist, Alberta Sustainable Resource Development, Lethbridge

Rough fescue communities are renowned for their adaptations to provide forage for livestock and wildlife species like elk. The species is highly prized by ranchers due to the stability and flexibility it affords to their ranching operations. Historically, fescue prairie supported populations of wintering bison. A rich history of ranching experience and scientific research provide guidance to grazing management decisions in rough fescue plant communities. Early stocking rate studies (1948) evaluated the sustainability of Foothills Rough Fescue communities under late-spring and summer grazing at light, moderate, heavy and very heavy stocking rates. More recent studies, and the adaptive grazing practices of ranchers, have focused more on the natural adaptation of rough fescue to winter

grazing. Though readily damaged by spring and summer grazing, rough fescue is tolerant of winter use. Rough fescue is a "hard" grass and achieves a high curability due to a well-developed sclerenchymatous layer in the leaves and the characteristic of leaf rolling. The value and quality of grazing opportunities in the fescue grassland are perhaps most threatened by the modification of rough fescue plant communities to invasive agronomic species, like Kentucky blue grass, timothy and smooth brome, changing the character of the grassland. The presentation provided an overview of grazing management options that promote healthy and sustainable rough fescue communities.

A range management graduate from the University of Alberta (B.Sc. 1977, M.Sc. 1983), Barry Adams has worked with the Public Lands Division (Alberta Sustainable Resource Development) since 1976. Barry currently serves as Range Management Specialist in Lethbridge, delivering a program of range inventory, applied research and extension to southern Alberta ranchers. A key focus of his work has been to assist ranchers to apply the principles and practices of range management to promote healthy range and a sustainable livestock operation. Currently, his major priority is the Alberta Rangeland Health Assessment project, to develop new tools and standards for assessing the health of rangelands in the province. Barry and Allison live in Lethbridge with their sons, Ross and Malcolm.

Natural Variability and the Conservation of Fescue Prairie Remnants

Dr. Jim Romo, Department of Plant Sciences, University of Saskatchewan

Before European settlement, fescue prairie extended throughout the Northern Great Plains as an ecotone between grasslands to the south and east and forests to the north and west. Presently, fescue prairie is one of the most threatened ecosystems in western Canada. Much of this prairie has been severely altered by human activities, leaving mostly small and widely scattered remnants. Modification of the natural

disturbance regime is a subtle and insidious threat to the conservation of many remnant fescue prairies. Principles of natural variability and the natural disturbance regime form the foundation on which conservation approaches can be developed for conserving the remaining Fescue Prairies. It is recommended that variability in natural ecological processes be restored to prairie remnants to enhance or maintain biological diversity. Fire and grazing should be restored as processes to create a mosaic with temporal and spatial variation in composition, structure, and functioning. Burning and grazing by herbivores in an historic manner to create a shifting mosaic of patches of varying size and various states of recovery are central to conserving remnants of fescue prairie. This variability can be achieved by restoring variability in timing and spatial relations of burning and grazing. Variability in these ecosystem processes is predicted to be essential for maintaining habitat heterogeneity and thus biological diversity. Commitment to a long-term approach of conserving processes is essential for conserving biological diversity in remnant Fescue Prairies.

Jim Romo was born and raised in Bainville, in the extreme northeastern corner of Montana. It was during that time that Jim extensively explored his playground, the native grasslands and coulees. After graduating from high school, Jim enrolled in the University of Montana, taking a Bachelor of Science degree in Range Habitat Management in 1976. During his undergraduate program he was fortunate to gain employment with Dr. Lee Eddleman in the School of Forestry at the University of Montana, working on reclamation of coal-mined lands with native plants in southeastern Montana. In 1980, Jim took a Master of Science degree in Resource Conservation at the University of Montana under the auspices of Dr. Eddleman, studying competition between native grasses and two non-native annual plants. In between these degrees and after taking his M.Sc., Jim continued working on the same reclamation project that gave him the opportunity to break into science and research. Jim enrolled at Oregon State University in 1981 and completed his Ph.D. in Rangeland Ecology in 1984. After a short stint with the U.S. National

Park Service, Jim accepted a faculty position at the University of Saskatchewan where he has since been for more than 17 years. Jim teaches courses in Grassland Ecology, Wildland Ecology, Range Ecology and Management, Landscape Ecology and Vegetation Management and other subjects when needed, supervises graduate students, and conducts research in various aspects of grassland ecology.

Rough Fescue Trivia

Dr. David G. Walker, David Walker & Associates Ltd., Calgary

Floral induction in rough fescue still remains a mystery. Major seed production in most areas of Alberta was reported for the years 1902, 1952, 1964, 1975, 1987, 1990 and 1994. Moderate but widespread production was reported for the years 1966, 1977, and 1996. Minor production in local areas has been reported for several intervening years. Recent research on other species points to a series of chemical switches that control the development of floral shoots (possibly several years before flowering) that may be independent of floral induction (generally the previous fall), followed by seed production (mostly influenced by weather). The infrequent and unpredictable flowering habit of rough fescue is one of the most important reasons for the difficulty in conserving this species.

Rough fescue seed which was wild harvested from three separate locations in central and southern Alberta and southern Saskatchewan had zero viability after 4 years in storage under normal seed warehouse conditions. Archival seed storage conditions can be achieved by storage at -20°C (standard food storage chest freezer).

Several projects have demonstrated that rough fescue can be re-established from seed and from sod transplant. Stand development is slow compared to other native species. Rough fescue plants transplanted to the Mixed Grass Prairie region northwest of Medicine Hat survived the 1999–2002 drought, while many species typical of the ecoregion did not.

Dr. David G. Walker is a researcher, teacher, and consultant specializing in land reclamation. He is an Adjunct Associate Professor of Environmental Design, University of Calgary. He is a

Certified Professional in Erosion and Sediment Control (CPESC), Professional Agrologist (PAG), Professional Biologist (PBIOL), and Certified Professional in Rangeland Management (CPRM). David has 28 years of experience in the field of land reclamation in western and northern Canada and parts of northwestern USA. He has consulted to all levels of government, National and Provincial Parks, the oil and gas industry, electrical power industry, ski industry, and non-governmental organizations. Dr. Walker has over 20 years teaching experience at the university graduate level and also at the technical level for professional development courses.

Long-Term Influences on Rough Fescue in the East Kootenay Region of BC

Tim Ross and Brian Wikeem, Ross Range and Reclamation Services, Cranbrook, British Columbia

Understanding the dietary overlap of sympatric ungulates is essential in formulating grazing management plans that provide adequate forage for animals and which protect the range resource. This project was initiated to provide information on food habits of whitetail deer (*Odocoileus virginianus*), mule deer (*Odocoileus hemionus*), elk (*Cervus elephus*), and cattle (*Bos taurus*), which was considered necessary to help resolve long-standing conflicts on forage allocation and help improve future management practices in the Rocky Mountain Trench. The study was conducted from 1992 to 1994 at Skookumchuck Prairie, 50 km north of Cranbrook, British Columbia. Deer, elk and cattle feces were collected at monthly intervals in a “three-way enclosure” during periods when each ungulate occupied the study area. Samples were analyzed using microhistological procedures. The number of plant species in deer and elk diets generally ranged from 36 to 52. Shrubs and trees dominated deer diets in all years (range 24% to 98%) with bitterbrush (*Purshia tridentata* (Pursh) DC.), Douglas-fir (*Pseudotsuga menziesii* (Mirbel) Franco.), and buckbrush (*Ceanothus velutinus* Dougl.) being the most important species in winter. Grasses were generally unimportant in

deer diet (<10%) except in spring when they comprised nearly 20% of the diet. Small-flowered penstemon (*Penstemon procerus* Dougl.) was the most prevalent native forb eaten by deer. Alfalfa (*Medicago sativa* L.) and clover (*Trifolium* sp. L.) were also used in all years but only comprised about 5% of deer diet. Elk mainly ate grasses throughout the year and especially in winter and spring. Elk grazed a diversity of grasses and forbs but rough fescue was usually the dominant species eaten and small-flowered penstemon was the most important forb. Elk also grazed alfalfa and clover in summer and fall. Shrubs averaged up to 35% of elk winter diet although they were eaten in all foraging periods. Soopolallie (*Shepherdia canadensis* (L.) Nutt.), low Oregon grape (*Berberis repens* Lindl.) and Douglas-fir were the most important shrubs in winter, but generally they only represented a small proportion of the diet. Cattle diets were the least diverse of the three ungulates with 32% fewer species eaten compared to deer and elk. Grasses and forbs dominated cattle diets while shrubs generally were eaten sparingly. Rough fescue, Idaho fescue and bluegrasses were the most important grasses for cattle. Shrubs and forbs were a minor component of cattle diets although bitterbrush was used to a limited extent in summer (<10%). In this study, the main dietary overlaps indicated that cattle had potential to compete with elk in fall and winter through their summer grazing. Similarly, elk had the potential to compete with cattle on summer range through spring grazing on sympatric habitats. No competition was expected by elk or cattle with deer, except possibly for specific species such as bitterbrush in particular years.

Tim Ross is a Professional Agronomist from near Cranbrook in southeastern British Columbia. He has been involved with range issues in BC for nearly 20 years, and has been a range management consultant since 1990. He has worked extensively on topics such as live-stock/wildlife interactions, and on forest ingrowth and related issues.

Northern Prairie Sod Transplant *Don Snider, Alberta Transportation, Edmonton*

In 1996, the Alberta Government announced its plans to twin the recently designated North-South Trade Corridor in Alberta. The trade corridor stretches from Coutts on Hwy 4 in southern Alberta to the B.C. border west of Grande Prairie. This twinning project encompassed Hwys 2, 3, 4, 16, 34 and 43. Significant portions of these highways were already twinned.

Alberta Transportation prepared Functional Planning Studies (FPS) for the length of non-twinning roadways in order to determine where the best side of twinning would occur and to protect future interchange areas from development. Engineering consultants were hired to prepare the FPS. In order to obtain concurrence from Alberta resource management agencies, the FPS included a requirement to undertake an overview of environmental conditions along the roadway, as well as to obtain intergovernmental referral.

The referral comments for the FPS undertaken along the section of Highway 43 between Four Mile Corner and Valleyview indicated that there were some significant grasslands along the roadway but no information on their value or significance was provided. Ultimately, a decision was made to construct the new westbound lanes from Four Mile Corner to the Smoky River on the north side of the present roadway. Only during the negotiations to purchase the right-of-way through the SW13-72-5-W6 (Cochrane Property) was the significance and extraordinary value of the native vegetation identified.

Alberta Transportation hired Western Rangelands Consultants in 1998 to conduct a vegetation inventory and prepare mitigation plans for this native vegetation in order to allow roadway construction to proceed.

Alberta Transportation was prepared to expropriate the right-of-way when an agreement allowing the construction of the roadway was reached which included implementing a transplant program for the native sod. The agreement provided details on the location of the transplant material, and specifications for removal and transplanting of the native sod. Dr. A.

Bailey was designated as an independent consultant overseeing the project and erection of signage regarding the transplant program and the value of northern native prairie sod.

As no transplant program of northern native prairie sod had been done previously, new equipment had to be developed and tested. This was undertaken in the fall of 1999 on small areas of native vegetation from other locales. Other native sod transplant programs from throughout Alberta were also reviewed for applicability.

Alberta Transportation undertook the transplant program during the spring of 2000. An area of approximately 50 m by 800 m (approximately 4 hectares) was to be transplanted. The ultimate area moved was 2.8 ha.

Follow-up programs to determine the success of the transplant program have not been undertaken by Alberta Transportation.

Don Snider is a 20 year employee of Alberta Transportation. He is involved with all of the environmental aspects of roadway construction. This involves hiring consultants to evaluate historic resources, vegetation, wildlife, fisheries, wetlands, water quality and lately noise during the planning, design, construction, operation and maintenance of provincial roadways. Don graduated from Lakehead University in Thunder Bay in 1974 with a degree in Forestry. He worked in Ontario, Yukon, and Northwest Territories in the resource management field. In Saskatchewan he worked in the north looking after the environmental aspects of resource roads construction and also some southern highways after government re-organization. Being originally from northern Manitoba, Don felt that living on the southern prairies (Regina) was not conducive to his career, so he relocated to Edmonton where he has an enjoyable career working with consultants, contractors and special interest groups.

Seeding Strategies for Reclaiming Rough Fescue Grassland

Jane Lancaster, Kestrel Research Inc., Cochrane, Alberta

Two seeding strategies for reclaiming rough fescue grassland on a pipeline right-of-way in the Cypress Hills were compared. A non-native seed mix composed of annual flax and fall rye was used on Alberta portions of the EnCana Cypress Hills pipeline route. On the Saskatchewan side, a native grass seed mix including 50% mountain rough fescue was applied. Both treatments produced similar initial cover during the first year, a drought year. During the second year, the native seed treatment provided more vegetation cover and erosion control than the annual rye/flax treatment. Rough fescue seedlings have established on both reclamation treatments but provide little cover to date. The number of native species re-colonizing the disturbed soils from rhizomes, the seed bank or in-blown seed was similar for both treatments. Both seeding strategies were considered successful in the short term. There has been no introduction of genetic variability using the annual rye/flax mix, as there is using native seed cultivars. However, initial erosion potential is greater using the annual rye/flax mix.

Jane Lancaster has been working as a botanist in Alberta on a number of pipeline projects. As part of the development process she has conducted vegetation inventories, rare plant surveys, designed mitigation to reduce impacts to native prairie and conducted follow-up monitoring to assess the effectiveness of mitigation measures.

Jane sits on the ANPC Rare Plants Committee. She is editor of the ANPC's "Guidelines for Rare Plant Surveys" and co-editor of the "Rare Vascular Plants of Alberta" book, a project of the Alberta Native Plant Council.

Panel discussion: Is Oil and Gas Development and Conservation of Rough Fescue Prairie Possible? Cheryl Bradley and Dr. David Walker

Cheryl Bradley proposed that oil and gas development is not compatible with the conservation of rough fescue prairie.

She made the point that rough fescue grasslands need special consideration because of their rarity. Although Alberta has the largest area of rough fescue grassland (particularly plains and foothills rough fescue grasslands) in North America, relatively small percentages of fescue grasslands remain in the various vegetation Subregions, and some rough fescue community types are rare. Moreover, range and vegetation survey data indicate that rough fescue plant communities are more at risk of conversion to non-native community types than other grassland communities (such as Mixed Grass, Subalpine) in Alberta, probably because the soil is moist and fertile and susceptible to invasion by agronomic species such as Kentucky bluegrass, timothy and awnless brome, and by Canada thistle. Bradley cited her own and other studies indicating significant invasion of native communities from both paved and dirt roads. Bradley's third point was that there has been no documented example of successful restoration of rough fescue grassland after surface disturbance and/or invasion by non-native species, with the exception of narrow "no strip" pipelines. Attempts to reduce the cover and competitiveness of agronomic grasses in foothills rough fescue grasslands using fire, mowing and glyphosate have had poor results. A recent study of pipeline sites seeded to rough fescue resulted in poor cover, and although transplanted sod fared better, this and another study suggested that community composition changed such that dominance by deep-rooted bunch grasses declined and shallow-rooted rhizomatous grass species and forbs increased.

Bradley's conclusion was that conserving rough fescue communities is more beneficial than attempting to restore them. Avoiding surface disturbance of rough fescue grasslands and preventing invasion by non-native species is a necessary planning and management strategy if we are to have rough fescue grasslands in Alberta in 100 years.

Cheryl Bradley is a botanist and independent environmental consultant based in Lethbridge. She has worked for 25 years on vegetation inventory, rare plant survey and environmental assessment in southern Alberta. Cheryl has volunteered for a variety of initiatives to conserve native grasslands, including

protected areas planning in southern Alberta, workshops on prairie conservation, and the recent designation of a provincial grass.

David Walker spoke in opposition to Bradley's proposition. His contention was that the oil and gas industry is by no means the sole culprit in having negative impacts on rough fescue grassland. Ranching practices incompatible with the beneficial management of fescue grassland are probably more to blame. He argued that the cumulative effects of these practices and the surface disturbance created by the oil and gas industry leads to conditions that are not conducive to the sustainability of rough fescue. For example, an unscrupulous rancher may use the access road created by an oil company to truck in hay for his cattle, thereby introducing weeds that compete with the fescue, and possibly creating a continuously eroding road that would otherwise have been closed and recovered by the oil company. Heavy stocking rates, grazing at inappropriate seasons and destruction of riparian habitat are other practices creating excessive grazing pressure on native rough fescue. In some instances ranchers undermine the reclamation work undertaken by the gas/oil company. Walker is of the opinion that the current situation could be improved if some of the compensation payments paid to ranching lessees and owners by the oil and gas industry for loss of grazing land could be re-directed towards range improvement schemes. These could include alternative grazing arrangements, which would allow the fescue grassland longer grazing-free periods and hence greater time to recover.

History of the Rough Fescue Ancient Grasslands: Science and Speculations

Dr. Arthur W. Bailey, University of Alberta/Western Rangeland Consultants, Edmonton

This banquet address dealt with the origins, history and current management of North America's premier ancient grassland.

The origins of the rough fescue grassland can be traced to an Arctotertiary flora millions of years ago. With the rise of western and northern mountain ranges

came an evolution of grasslands and dependent herbivores and predators. More cooling led to glaciation. The entrance of early man and other critters into northwestern North America followed. Here, Dr. Bailey speculated on the likely role rough fescue grasslands played in sustaining early man.

The second part of the talk provided evidence of how aboriginal man managed the rough fescue grasslands two centuries ago. A western perspective was given of the role of eastern Canadian policy makers (and Europeans) on the rough fescue grasslands and on current residents. The settlement era to the present will be reviewed. Comparisons were made of the current state of the three western Canadian rough fescue ecosystems. The probable future of the rough fescue ecosystems was speculated.

Dr. Arthur Bailey is a Professor Emeritus in Rangeland Ecology and Management at the University of Alberta, Edmonton and President of Western Rangeland Consultants Inc.

Art developed the program in range management for both teaching and research for 31 years until he took an early retirement package in 1997. He was a champion of native grasslands and often clashed with the genetics-oriented agronomists and livestock breeders who predominate in prairie agriculture. Art has received various awards; he is the lone Canadian recipient of the prestigious Society For Range Management's W.R. Chapline Research Award. He has 108 publications, including being co-author of the book "Fire ecology: United States and southern Canada". About 35 students were supervised by him to completion of Ph.D. or master's degrees. He participated in about 100 other post-graduate student supervisory committees, including two from Africa.

Art was the scientific advisor to Alberta infrastructure regarding the 9 acre transplant (1000 semi-trailer loads) of a rare native grassland near Grande Prairie in the year 2000. He has consulted on projects involving native grassland ecology and management, wildfire losses, livestock grazing – crown land issues, and other resource management issues.



Part of the "Dandy" crew: L-R Elisabeth Beaubien, Kelly Ostermann, Elaine Gordon, Cherry Dodd and Candace Gordon.

Another Successful Dandelion Festival!

Lorna Allen

Why, asked my daughter, is the Alberta Native Plant Council putting on a dandelion festival? Aren't dandelions weeds? Good question, especially since we were on our way to the festival, and I had roped her into helping. Now, to come up with a good answer. Well, let's see – we thought a spring festival would be fun! An important consideration – but not the only one.

The idea for the festival grew out of a concern for the amount of pesticides that are used for what is really just a cosmetic purpose (give your lawn a face lift – get rid of unsightly dandelions). The point of the festival is not to advocate that people go out and plant more dandelions, but to suggest that it is possible to live with them, and maybe even to enjoy them. One of the key instigators, Elisabeth Beaubien, suggests that we just need to redefine what is a beautiful lawn – lawns full of dandelions are beautiful!

And a great sign that they are pesticide-free.

At the festival there were crafts for kids large and small. (See the photo of ANPC President Ed Karpuk and festival organizer Kelly Ostermann sporting the snazzy dandelion headband.) My daughter, who confesses she had fun helping with the kids' crafts, says Ed was a very attentive pupil.

There were also displays, nature walks



Kelly Ostermann and Ed Karpuk, sporting snazzy dandelion headbands.

and talks every 45 minutes. From the talks and displays, you could learn how to dig out those pesky dandelions with a variety of tools on display, in lieu of spraying. Or you could enjoy munching on dandelion delicacies — in quiche, muffins, pesto sauce for pasta, and the ever-popular weed balls (check out the dandelion recipes at www.anpc.ab.ca). So, instead of spraying dandelions, you can dig them out and maybe even eat them! But first make sure they have not been sprayed, of course.

Or another option: reduce the amount of lawn and plant — wait for it — native plants. There were talks on growing native plants from seed, and there were even some plants for sale. But, where else would you get your native plants from? Certainly not by just going out and digging them up from neighbouring parkland! The Edmonton Naturalization Group (sponsored in part by the Alberta Native Plant Council, of course) was there to help answer that question.

This was the second year for the Edmonton Dandelion Festival, and this year the John Janzen Nature Centre joined on as a full partner. From Elaine Gordon's work to design and sew the costume for "Digger"; to the dandelion baking talents of Elaine, Linda Kershaw, Elisabeth Beaubien, Susan Cubitt and Kelly Ostermann; to the organizational work of all these plus Cherry Dodd; to the help of volunteers, from both the plant council and the nature centre; many people helped to make this year's festival a "roaring" success. The winning poem in the poetry contest summarizes it all:

The Leafy King of the Lawn

*A yellow head, but not a roar.
At first you think there's nothing more.*

*Toothy leaves without a bite.
Does this lawn hunt at night?*

*Waiting, watching on your lawn,
Most people want them gone.*

*But unlike the mighty feline hunter,
This one's best when fired in butter.*

*Fritters, muffins, quich and coffee.
Pancakes, salads and even tea.*

*Who'd have thought that this leafy king
Would have so many gifts to bring!*

Long live Dandy the Lion Hearted!

By Doug, Judy and the kids

The Global Strategy for Plant Conservation – an update

Lorna Allen

In the Winter 2003 issue of IRIS, I summarized an article from *Plant Talk* on the proposed Global Strategy for Plant Conservation. The strategy has been developed as part of the Convention on Biodiversity, with an aim to co-ordinate existing plant conservation projects and to stimulate the new ones. In the recent issue of *Plant Talk* (No 32, April 2003), they report that the strategy was adopted at the sixth Conference of the Parties of the Convention on Biological Diversity in April 2002. The following is a summary from the website www.plantlife.org.uk/html/conservation_global_strategy.htm,

which gives details on a workshop held at Kew Gardens as the first phase in the implementation of the strategy in the United Kingdom.

The Global Strategy sets sixteen targets:

1. A widely accessible working list of known plant species, as a step towards a complete world flora.
2. A preliminary assessment of the conservation status of all known plant species: at national, regional and international levels.
3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience.
4. At least 10 per cent of each of the world's ecological regions effectively conserved.
5. Protection of 50 per cent of the most important areas for plant diversity assured.
6. At least 30 per cent of production lands managed consistent with the conservation of plant diversity.
7. 60 per cent of the world's threatened species conserved *in situ*.
8. 60 per cent of threatened plant species in accessible *ex situ* collections, preferably in the country of origin, and 10 per cent of them included in recovery and restoration programmes.
9. 70 per cent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated local and indigenous knowledge maintained.
10. Management plans in place for at

least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems.

11. No species of wild flora endangered by international trade.

12. 30 per cent of plant-based products derived from sources that are sustainably managed.

13. The decline of plant resources, and associated local and indigenous knowledge innovations and practices, that support sustainable livelihoods, local food security and health care, halted.

14. The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes.

15. The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this strategy.

16. Networks for plant conservation activities established or strengthened at national, regional and international levels.

Countries that are Party of the Convention on Biological Diversity are obliged to take action to meet these targets by 2010, and must report on progress every four years (2006 and 2010).

You can view descriptions of documents and Power Point presentations related to the 16 targets on the above-mentioned website.

Picture Credits

Photographs on pages 2, 3, and 11 are by Ed Karpuk.

Drawing of Rough Fescue on page 5 is by K.F. Best from *Prairie Grasses* by Jan Looman.

News and notes

New Books

New releases from Timber Press:

For more information, visit Timber Press at www.timberpress.com or contact
TIMBER PRESS

133 SW 2nd Ave., Ste. 450
Portland, Oregon 97204
USA

Toll-free telephone: 1-800-327-5680
Telephone: 1-503-227-2878
Fax: 1-503-227-3070
Email: info@timberpress.com

The American Woodland Garden: Capturing the Spirit of the Deciduous Forest

Rick Darke
ISBN 0-88192-545-4 (hardcover)
Price (USD): \$49.95

Tree Bark: A Color Guide

Hugues Vaucher
ISBN 0-88192-576-4 (hardcover)
Price (USD): \$39.95

Plant Resins: Chemistry, Evolution, Ecology, and Ethnobotany

Jean H. Langenheim
ISBN 0-88192-574-8
Price (USD): \$49.95 (hardcover)

Weeds in My Garden: Observations on Some Misunderstood Plants

Charles B. Heiser
ISBN 0-88192-562-4 (hardcover)
Price (USD): \$22.95

Natural Gardening in Small Spaces

Noël Kingsbury
ISBN 0-88192-564-0 (hardcover)
Price (USD): \$29.95

Native Plants in the Coastal Garden: A Guide for Gardeners in the Pacific Northwest

April Pettinger and Brenda Costanzo
(Revised and Updated)
ISBN 0-88192-582-9 (paperback)
Price (USD): \$19.95

The Genus *Arisaema*: A Monograph for Botanists and Nature Lovers

Guy Gusman and Liliane Gusman
ISBN 3-904144-91-X (hardcover)
Price (USD): \$69.95

Cyclamen: A Guide for Gardeners, Horticulturists and Botanists

New Edition
Christopher Grey-Wilson
ISBN 0-88192-587-X (hardcover)
Price (USD): \$39.95

Field Guide to the Wetland and Riparian Plant Associations of Colorado

The Colorado Natural Heritage Program
Available online at
www.cnhp.colostate.edu/documents/wetland_field_guide_2003.pdf

Programs and Possibilities: Conservation Easements in Alberta

(A new booklet on conservation easement programs in Alberta)
Available online at www.corvus.ca
Print copies are also available for a \$5.00 shipping and handling fee (contact Corvus Conservation directly at:
PO Box 68183
28 Crowfoot Terrace
Calgary, AB
T3G 3N8
Ph: 403-208-4486
Fax: 403-282-3460
Email: info@corvus.ca

The Standing People

K. Keane and D. Howarth
(A field guide of medicinal plants for the Prairie Provinces)
To order, send \$29.95 + \$7.00 postage to Keane and Howarth, #27 2001 8th St. E. Saskatoon SK S7H 0T8

The Magic of Montana Native Plants: a gardeners guide to growing over 150 species from seed

Sheila Morrison.
To order, send \$17.95 plus \$3.00 shipping (US Funds) to Montana Native Plant Press, 3912 Lincoln Rd, Missoula, Montana 59802

Flora and Climatic Conditions of the North Pacific

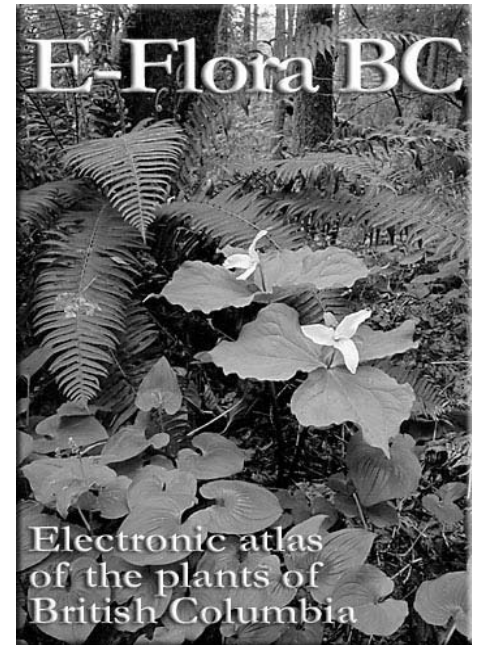
Berkutenko, A., H.G. Lumsden, and D. Lumsden.
(a collection of scientific papers)
ISBN 5-94729-010-3 (paperback)

Price (USD): \$40 (edition with color plates) + \$6 Postage; \$25 (without color plates) + \$6 Postage
For more information and for orders, contact the editor:
Dr. Alexandra Berkutenko, PO Box 225, Magadan 685000, Russia
e-mail: berkuten@online.magadan.su
Phone/fax: +7(41322)3-56-53
(all papers in English) excerpt from BEN 306

Websites

Celebrating Wildflowers 2003 Calendar of Events

Now online! To take a look at the listings on the web or print out a PDF file, visit www.nps.gov/plants/cw/events.htm



Atlas of British Columbia Plants

From: Brian Klinkenberg & Ross Waddell
c/o brian@geog.ubc.ca (extracted from BEN 311)

In 2002, the Native Plant Society of BC launched the first phase of E-Flora BC, an electronic atlas of the plants of British Columbia. In its first stages, E-Flora BC will develop a pilot project on the Orchids of BC. For more information on E-Flora BC, contact the project coordinator, Brian Klinkenberg [brian@geog.ubc.ca], or visit the E-Flora web pages at www.geog.ubc.ca/~brian/florae

**The University of Alberta's
Interdisciplinary Environmental
Lecture Series**

For listing of upcoming lectures, visit
www.ualberta.ca/ERSC/es.htm

Species and Habitat Conservation

Find details about workshop held at Kew Gardens as the first phase in the implementation of the Global Strategy for Plant Conservation in the United

Kingdom at

www.plantlife.org.uk/html/conservation_global_strategy.htm

Meetings

SEPTEMBER 2003

Native Plant Society of BC AGM 2003

Galiano Island

Sept 13, 2003

Check the NPSBC website for info
www.npsbc.org

**Planning Native Landscapes – Urban
and Rural Native Plant Summit VII**

Fargo, North Dakota

September 16–18, 2003

Best Western Doublewood Inn

For more information, visit
www.ag.ndsu.nodak.edu/ngpsrm

Defining a Natural Areas Land Ethic

30th Natural Areas Conference

Madison Wisconsin

September 24–27, 2003

For more information, visit
www.naturalarea.org

OCTOBER 2003

**Invasive Plants — Understanding the
threat**

Calgary Alberta

October 1–3, 2003

The Eastern Slopes Invasive Plants Council (ESPIC) is undertaking the sponsorship of a provincial conference to bring the public's attention to the threat of invasive plants. The conference agenda and more information can be accessed at
www.aaaf.ab.ca/invaders/

For more information, contact conference coordinator at:

Invasive Plants: Understanding the Threat
Box 49068

7740 - 18 Street S.E.

Calgary, AB T2C 4E9

Phone: (403) 236-1771

Fax: (403) 236-0719

E-mail: invasiveplants@shaw.ca

**Mosses and Bryophytes — a Native
Plant Society of BC workshop**

UBC — meet in front of the UBC bookstore

October 4 & 5, 9 am to 5 pm

For info contact S. Ellis

shona@interchange.ubc.ca

FEBRUARY 2004



**7th Prairie Conservation and Endan-
gered Species Conference**

Calgary, Alberta

February 26–29, 2004

For more information, visit
www.pcesc.albertawilderness.ca

International meetings into 2005

Visit www.plant-talk.org

**Role of Native
Plant Societies in
Grassroots Con-
servation**

Stanwyn G. Shetler

[Originally printed in *Marilandica* (Vol. 11, No. 1, Winter/Spring 2003 issue), the Journal of the Maryland Native Plant Society.]

In 1900, as the Audubon movement to save our native birds was getting underway, the New England Wild Flower Society (NEWFS) was born out of concern for our native plants. While haters were killing birds for their plumes, florists were robbing nature for their flowers. The Audubon movement caught on nationally much more quickly than the native plant movement, which did not really catch on until the second half of the 20th century, especially in the last 25-35 years, when many of the state societies were founded, such as the Virginia Native Plant Society (1982).

Across North America today there are numerous native plant societies under one name or another, including statewide societies in all but a few states. Perhaps the first of the state societies was the North Carolina Wild Flower Preservation Society, founded in 1951. The largest state society is the California Native Plant Society, founded in 1965, which in 2002 has over 10,000 members, 32 chapters, a budget of \$800,000, and 14 full- or part-time employees. The state societies vary greatly in size, budget, and staffing, but most are much smaller, with less than a thousand members, a budget of \$50,000 or less, and typically all-volunteer staffing.

Nothing is more central to their existence than the conservation of the native flora. The rampant development across North America during the last 40 years or so, which has destroyed or fragmented habitat on an alarming scale, has sparked unprecedented citizen concern for the native flora. In effect, the mission of every native plant society is the time-honored mission of the NEWFS: “to promote the conservation of temperate North American plants through education, research, horticulture, habitat

preservation, and advocacy.”

Few issues have energized the native plant societies in recent years as much as the growing scourge of invasive alien plants in the natural landscape. Thanks to dedicated members, the state organizations and their local chapters have often led the way in providing public information and guiding local eradication campaigns. Important as this focus is, it must be kept in balance and not become the tail that wags the native-plant-society dog.

Rescues of plants from doomed habitats have been a common activity. Gardening interests have also strongly influenced society agendas, particularly in encouraging the use of native species in landscaping and ecological restorations. Conservation education takes many forms, from field trips and tours to conferences, workshops, classes, school programs, publications, and Web sites. Some societies, as VNPS, are supporting state flora projects or other basic research.

In short, it would be hard to overestimate the importance so far of the native plant societies in the growing movement to save the native flora. At the same time there are some reasons for concern about the future.

I see native plant societies at a crossroad. Will growing natives become the obsession? Will our societies be remembered for saving wild habitat or for adding to the planted landscape? The business of our societies should be to save wild places, not to add to or promote planted landscapes *beyond* obvious gardens. Civilization is busily turning natural landscape into planted landscape at an ever faster pace, and native plant societies should be trying to slow down that process, not fuel it. Are we contributing to the clamor for planted landscapes? As the line between *the natural* and *the artificial* (planted) is being blurred on every hand, the North American landscape in general is being homogenized and our *natural* landscape thoroughly compromised. Planting native can be a cop-out for developers, who can develop wild land and then claim that they are mitigating the damage, perhaps even enhancing the environment, by landscaping with native species.

The plant-native trend has spawned a growing market for native species and a whole industry to supply them. The larger

the industry, the greater the likelihood of unscrupulous suppliers who will sell wild-collected plants. By pushing the use of native plants, we help to put a price on the heads of native species. Through their own conferences and plant sales, native plant societies help to stimulate and supply the native plant market. Shouldn't native plant societies be strong advocates of natural process in the revegetation of land, minimizing intervention and letting nature be nature whenever possible?

Then there is the question, What is a “native”? A plant from the same continent? Region? State? Part of a state? County? Site? Obviously a species can be native on one level and not on another. If a species is said to be native to an area, does that mean that all individuals of that species are automatically native there also?

Typically, we think of a species as native if it was here in pre-Columbian times, and I would add that an individual of that species must have reached its present-day site by the natural forces of dispersal and colonization without deliberate human intervention. I would go further and say that a native, regardless of source, near or far, becomes an alien or exotic the moment it is sowed or transplanted by human agency. Deliberate introduction, by definition, makes aliens of otherwise native plants. It is not the distance from the source that determines what is alien, but the act of planting. Thus, a native plants itself, an alien is planted by someone.

The plant geographer, in plotting and explaining plant distributions, must be able to rely on the authenticity of the individual records. Everything we know about the nativeness of plants derives ultimately from the geographer's records. The very act of transplanting or sowing falsifies in some measure, large or small, the history of plant migration and establishment and thus falsifies the concepts of “native” and “alien.”

From green concrete, fake turf, and plastic greenery and flowers to whole theme parks, ours is an age of fabricated landscapes of little redeeming value as synthetic surrogates for nature. Even our graves are decorated with plastic bouquets, certainly the ultimate cynicism in perpetual care. As a society, we have come to accept counterfeit biomes as the real thing. Surely, native plant societies

should spend more time studying nature and less time planting and manipulating it. There are only three rules for saving species—save habitat, save habitat, save habitat! That reality alone should govern our future agenda.

Stanwyn G. Shetler is Botanist Emeritus of the Smithsonian Institution, NMNH, the author of Annotated Checklist of the Vascular Plants of the Washington-Baltimore Area: Part I (Ferns, Fern Allies, Gymnosperms, and Dicotyledons) and Part II (Monocotyledons), and Botany Chair for the Virginia Native Plant Society. The above article is an abbreviated version of a talk given by Stan at the 2002 annual meeting of the Potowmack Chapter of VNPS.

Oops...

In *Encounters of the rare kind* article by Patsy Cotterill (*Iris* No. 43, Winter 2003), we most unfortunately attributed the two photos of common eyebright (page 7) and a photo of marsh felwort (page 8) to Patsy. However, they are the work of Gail Hughes of Lacombe, to whom we apologize for this error.

Book Review

Alberta Wayside Wildflowers

Linda Kershaw

2003. Lone Pine Publishing

160 pages, \$ 16.95 in Canada

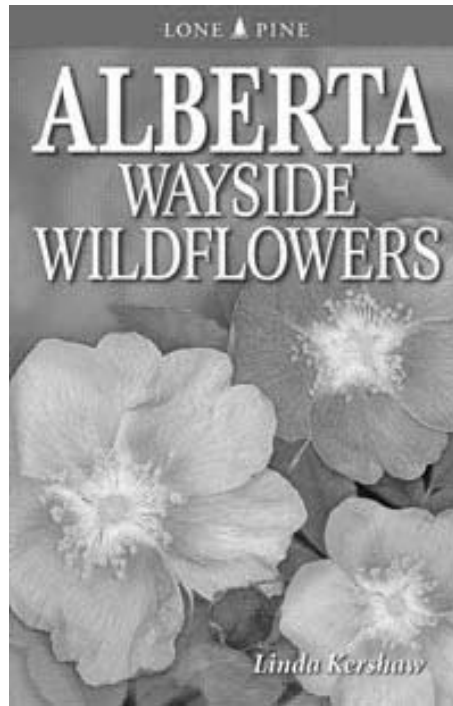
<http://www.lonepinepublishing.com/cat/>

ISBN 1-55105-350-0

Reviewed by Gail Hughes

It never ceases to amaze me how many different approaches there are to write a book on wild flower identification. Perhaps that is why I have so many in my collection. *Alberta Wayside Wildflowers* is a book that will appeal to both the novice and the more dedicated wildflower lover alike.

Linda Kershaw has worked very hard and successfully to take the mystery out of wildflower identification. She does so by presenting several methods of determining the identity of a flower. First, she departs from arranging the book in the traditional family order, opting instead for five broad groups of plants based on the structure of flowers or flower clusters. These are illustrated on the back cover with color-coded references to the pages where they will be found. An explanation of these groups is included in the introduction. (Also included on the back cover is a handy ruler for measuring plant parts.)



Color is the second method for identifying flowers. Just inside the front cover of the book there is a *Color Guide to the Flowers*. Small pictures of each of the 112 flowers in the book are arranged by color and referenced to the page where the description of each flower is found.

Thirdly, for those a little more adventuresome, there is a simple illustrated key for wildflower identification. Its use is clearly explained. The more technical terms are defined in

the illustrated glossary.

All three of these methods for identifying a given flower lead to the main portion of the book, the description of the 112 plants included in this book. Both a technical description and interesting information are included for each plant. The illustrated glossary helps define the more technical terms used in the description. For each plant there is both an excellent close up of the flower and a wider picture of the whole plant. These superb photographs, for me, are the best part of the book.

For those who are more than casually interested in determining the name of a flower, a number of topics are simply but clearly covered in the introduction. These include *Why Learn More About Wildflowers; What is a Wildflower; Floral Tricksters; To Pick or Not to Pick; Danger, Beware; Organization of the Guide and Fun With Flowers*.

I surveyed a number of future wildflower enthusiasts asking if this was a book they could and would use. They were unanimous in answering yes, noting it would be easy to carry along with them. In conclusion, for a person or family who has a budding interest in the flowers they see along the trail or wayside, *Alberta Wayside Wildflowers* would be an excellent choice for a resource.

Rare Vascular Plants of Alberta

can be purchased by ANPC members for the discounted price of \$25 plus \$6 shipping.

Send cheque or money order to:

Alberta Native Plant Council
Box 52099, Garneau Post Office
Edmonton, AB
T6G 2T5

Ship to:

Name _____

Address _____

Province _____ Postal Code _____

