

2004 ANPC Workshop

The Good Steward — Caring for our Natural Areas

May 8–9, 2004 in Edmonton
(note change of date)

You should have received a registration form for the **17th ANPC Annual Workshop** and **Annual General Meeting** with this issue of *Iris*. The theme for this year is stewardship—the principles and practice of caring for our natural areas. Details and registration form will also be available at the ANPC website <http://www.anpc.ab.ca>

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A Rose by Other Names

by Marsha Hayward

As each summer ends and the winter dormancy closes upon us, I cannot help but notice that the color and vibrancy of summer has faded all too soon.

The brilliant gold of early fall has gone by the way and been replaced by the olive drab of late autumn. There is, however, one wonderful splash of color amongst these quiet and muted tones and that is the deep, brilliant red of the rose hips on the wild roses.

The common Alberta rose has long been a symbol of the beauty and color of summer. As though by magic, in the month of June, somewhat ordinary green bushes are transformed when they become speckled by hundreds of beautiful pink

blossoms. Covering hillsides and pastures, stream banks and rural roads, the flowers seem to be everywhere. They also appear to attract every type of insect and smell wonderful.

My personal fondness for wild roses developed from memories of the bouquets of the fragrant wildflowers my mother often had in our house when I was a child. Now, my children take great delight in the comical way a huge bumblebee messes around in the perfusion of yellow stamens of the wild rose, becoming completely coated in yellow pollen. My mother had a never-ending memory of often-quoted verses and quotes by famous people. She quoted Shakespeare's "*That which we call a rose/By any other name would smell as sweet.*" So from that time forward, I connected roses to Shakespeare.

Recently, I purchased an out-of-print botany book at a yard sale. I was enchanted by the beautiful old botanical paintings. There were interesting written descriptions, which were worded differently than modern plant books I have read. From this text, I determined that the wild rose has three different species found on the Alberta prairies. I was aware of only one—the provincial symbol for the province.

For the ordinary and, I am ashamed to say, modern "illiterate" reader such as myself, botanical wording is in fact nothing more than gibberish. This is exactly what those in my grandmother's era would have commented upon: the inability of our generation to read or speak Latin. I admit we are illiterate, and



Wild Rose. Photo: M. Hayward

will also readily agree that our grandparents were quite learned in the nature of things (to borrow a modern term). Another way of putting it is simply that previous generations were much better at getting outside and noticing the world around them. We have compensated for this by relying on a lot of books and experts—the scientific types, that is.

This was clearly pointed out to me through the comments of one elderly lady that I have long been acquainted with. She said, “There once were wild roses in all the ditches in Alberta. They were beautiful. We used to go walking along the roadsides in the evening just to smell the flowers. Then they cut them out and planted some kind of grass.” She lived as a young girl with her family on a prairie farm in Compeer, Alberta and then moved north to Cold Lake in 1925.

She laughed when I pointed out to her that the different floral (or should I say botanical?) connotations with all the *eae*'s, *ii*'s, *us*'s, and *ous*'s are nothing short of a modern plant lover's nightmare. This strange language—which is Latin of course—was all very confusing to me, until I recently took a botany course out of sheer desperation just to learn all the Latin terms.

From there it became even more confusing. I logically assumed that the *rose* belongs to the rose family. I had wrongly assumed that the rose hip of that wild rose was a seedpod—and was surprised when I later discovered that the rose hip is actually a fruit, like an apple. I was surprised again when I learnt that the apple is a member of the rose family. Oh boy! Apples, as you know, grow on trees and roses on bushes. But, apple trees do not have thorns and rose bushes do—even though they are related.

By then I was seriously into the “please help me” stage. I needed therapy. I, along with the rest of my poor fellow students, did not reach enlightenment until it was pointed out by our esteemed professor (whom we reverently referred to as the “little God”) that there was an important connection between roses and apples. He kindly told us that, after the flower is finished its blooming stage and the fruit is forming, it closes off to form a separate-seed filled round *achene*.

I had reached the age of enlightenment. Alleluia! I could now relate. When I next examined the apple tree and the rose shrub and the leaves and the flowers, I could make the connection. I realized that the stamens and pistils and ovaries were a

common element in the way they were formed and performed their reproduction.

With a great sigh of relief, I proceeded to investigate further into the volumes of botanical research and names of discoverers. To my horror, I realized there were many different ways to group plants into families, and genera and phyla, and species. Leaping right into my search for the truth, even more horrific evidence appeared. I found that the original discoverers were not in agreement and that there were several more generations of “discoverers” to follow. An original discoverer was given the big hoopdela and the rest have just sort of fought it out for hundreds of years after—unless someone discovered a new species of the same plant, with slight differences, of course. Then it starts all over again.

It is no wonder botanists are commonly pictured in cartoons with hair raised in disorganized spikes, whorled unevenly about their heads, and that they require a huge magnifying glass glued to their nose just to see across a room. They've gone mad from bending over all those plants in the fields for years. All that research into all those plants who are related—but do not even remotely resemble each other—but actually are cousins from who knows when just because of some silly little seed pod thing, is enough to drive anyone a bit silly.

Not to be discouraged, I resorted to reading further (in a modern magazine). The rose hip is an important food with a potent source of Vitamin C. When isolated, the raw juice from rose hips is 6 to 24 times richer in Vitamin C than a glass of fresh squished orange juice. A wonderful tasting rose hip jam was also used in the thirties when there was a scarcity of fresh fruit. A dirty-thirties recipe includes a simple basic fruit and sugar combination. Once you have completed the messy separation of the seeds from the pulp – that's it. You're finished. And it is delicious! Another womanly favorite was rose water, for everything from just smelling nice to poultices.

The three species commonly found in Alberta are prickly rose (*Rosa acicularis* Lindl.), prairie rose (*R. arkansana* Porter) and the common wild rose (*R. woodsii* Lindl.) ❀

Letters

Dear Editors,

I cannot imagine a topic for the Iris that should have “Nazis” in it. It is not funny. Please do not allow the name “Nazi” in your newsletter.

Diana Baragar

This comment pertained to the article “Botany Alberta Field Trip No. 6” by Patsy Cotterill, published in the Fall issue of *Iris* (No. 45, 2003). The author has also received an e-mail questioning the use of term “co-opted” in the same article. The Newsletter Committee has asked Patsy Cotterill, our faithful member who contributes well-received articles to *Iris* on an almost regular basis, to explain her use of these questionable terms.

It has been brought to my attention that a couple of words I used in my Botany AB article in the last Iris raised eyebrows. One was my reference to Don Tannas, MLA for Highwood, being “co-opted” into steering through the legislation designating rough fescue as the provincial grass emblem. I used the word not in the sense of its literal definition, suggesting a somewhat undemocratic political act, but rather in its derivative sense of bringing someone onto one's side, persuading them to adopt one's position. It implied a slightly congratulatory tip-of-the-hat to the Prairie Conservation Forum for achieving this feat and as such was an attempt at humour. Nevertheless, Cheryl Bradley, of the PCF, points out that nothing coercive or underhanded took place: Mr. Tannas was the most suitable MLA to steward the Private Members' Bill to have a provincial grass designated through the legislative process and when approached he readily agreed to lead the process and did so very capably and successfully. Hence all the congratulations should go to him.

The other word that caused concern was “Nazi”, as in my calling President Ed Karpuk a “trail Nazi” on the Rumsey field trip. This was a humorous allusion to the “Soup Nazi” of the American comedy series “Seinfeld.” I checked with Ed before the article went to press and he had no problem with the label. However, I apologize to anyone for whom the term evokes involuntary shudders!

Patsy Cotterill ❀

Canada Thistle: Time for a Name Change

Everything you wanted to know about creeping thistle...

by Elaine Gordon

Anyone can change a common plant name. All it takes is enough people using a name and spreading the word until it is the most popular one around. In North America “Canada” thistle (*Cirsium arvense*) is the most often used common name for this obnoxious weed, but it is also known as creeping thistle and Californian thistle. In France it is goes by “chardon des champs”, Germany it is “Ackerdistel”, and in Spain ask for “Cardo cundidor”.

It's a nasty weed and it's harmful to the environment. It's time we all got together and changed the name “Canada thistle” to its European name, creeping thistle. Here are some interesting facts about Canada thistle (hereinafter known as creeping thistle) just in case you ever wanted to know.

Thistles (like so many weeds) generally have been associated with humans. The name “thistl” seems to have come from the word “pistel” or “thistil” sometime in the 8th century AD. In early times, creeping thistle was known as “cursed thistle” and belonged to a group of plants known as a ‘holy’ weeds because they were used for medicinal purposes including the plague and therefore were attributed to the saints. However, even in places of origin, it has been a problem for agricultural crops. Carolus Linnaeus himself, in 1753, wrote of this plant, “It is the greatest pest of our fields”.

Creeping thistle is the only species of thistle with rhizomes, which is how it got its European name. It is native to Europe or Eurasia (origins are quite fuzzy...) and was introduced to North America early in the 17th century. It's thought that its introduction was a case of mistaken identity by early settlers who thought they were bringing crop seed. Or it may have been brought in hay seed. As early as 1795 the state of Vermont declared it a noxious weed. According to the Nature Conservancy, it was declared a noxious weed by six provinces by 1991. I find this hard to believe. 1991?? Apparently it grows at its best between 37° and 59° latitude, both north and south, which puts us smack-dab in the middle of its favourite conditions, but the Northwest Territories, Yukon and points north may be spared.

It's too bad it's such a problem, because the flowers are actually really beautiful. The plants themselves are either male or female, although up to 26% of the male plants may have female flowers too. Female plants produce an average of 29 flowering shoots per square metre, each with an average of 41 heads per shoot.



Flowers of creeping thistle (*Cirsium arvense*). Photo: E. Gordon

The flowers of creeping thistle are almost always insect-pollinated, and studies indicate that more insect species visit creeping thistle than any other thistle species because it puts out copious nectar that is easily accessible.

So, there you have it: actually one good thing about creeping thistle—it's great for some insects. However, the benefit that insects get from creeping thistle is outweighed by its negative impact on native plant communities, which ultimately leads to a negative impact on overall insect diversity. Well, I tried to find one good thing...

Under good growing conditions (which, for this plant, means nearly everything), each flowerhead produces an average of 59 seeds. Let's see, that will be $59 \times 41 \times 29 =$ Yikes!! But that's under good growing conditions and includes all seeds. The actual number of seeds is much smaller,

varying from 100–64,300 viable seeds per square metre in Australia to 30,200 per square metre in Holland. I couldn't find the numbers for Canada, but they are likely as varied as Canada itself.

The seeds range in size from 2.5–3.2 mm long and average 1 mm in diameter. They weigh 0.67–1.53 mg/seed. Seeds have a feathery pappus to facilitate wind distribution, but for many of them, the pappus breaks off and they are left in the floret so they will germinate near their mom. Others spread up to 1 km away.

Seeds are also spread as contaminants in agricultural seeds, on farm equipment, and in cattle and horse poop (although this drops the viability rate to about 0.5%, possibly because of pH).

Here is an interesting bit for brightening up dull conversations: by far the most germinating seeds (94–100%) develop into female plants. Guess it takes just a few good males to do the work of many...

Interestingly, seeds cannot germinate on rubble or turf. Not that that stops them from spreading—their root systems are the primary method of getting around—as if that's news to anyone trying to get rid of them! Seriously though, their rhizomes can grow as much as 6 m in one season, putting up numerous shoots all along its length. Meanwhile, their vertical roots store water and nutrients in their many small branches. No wonder it takes years of pulling and digging to deplete it enough to actually kill it.

Horizontal rhizomes grow within 15–30 cm of the soil surface, in a straight line for 60–90 cm, then bend down and grow vertically. Another horizontal system is usually initiated at the downward bend. This bend is where the root system is thickest—up to 2 cm in diameter. The vertical root happily grows on down up to 6.8 m. (if it can). Individual roots live up to two years but new root buds develop in autumn after the aerial shoots die. Root buds are inhibited by the presence of the leaves and stem tissue, due to a competition for water. So, if you mow the leaves and stem, it encourages formation of root buds and a zillion more shoots cheerfully emerge, particularly encouraged with a bit of humidity.

In nature, roots are susceptible to damping off. They are very drought tolerant in established plants, but dry winters can result in mortality due to desiccation of roots. Cold weather? Hah! They laugh at the cold since they easily develop cold tolerance with increased exposure. Deep roots are

likely susceptible to freezing, but they are so deep that they are well insulated.

Growth of creeping thistles is legendary. Studies show that after just 18 weeks of germination, plants averaged 11 m of roots, 26 aboveground shoots, 154 underground shoots, and 111 m of roots with a diameter greater than .5 mm. If cut into 10 cm pieces, each piece could produce an additional 930 shoots. Whew! In one season, a root system can extend 4-5 m radially and individual established clones can reach 35 m in diameter.

First Nations people quickly became familiar with creeping thistle and used an infusion of its roots for mouth diseases. Some considered it to be "tonic, diuretic and astrigent". The young shoots and roots can be used in the same ways as asparagus and they were eaten in Russia. The flowers supposedly make good honey.

The problem with controlling creeping thistle is that most methods kill everything around it so that little or no native vegetation is left. The roots are too deep for most pesticides and fire must be used early or it will actually encourage growth. Usually a combination of biological control, prescribed fire or mowing may help control them, but these applications must be repeated for at least two years. Burning during dormant periods usually (but not always) reduces creeping thistle by encouraging the spread of native vegetation. Also, burning must be done early in spring. If done too late, biomass and shoot density will actually increase. Seedling density also increases following summer fire. In some wetlands, burning has no effect on thistle density.

When spot applications of pesticides are used (e.g., Roundup), root buds and re-growth of secondary shoots is reduced. These seem to have greater impact on plants at the bud to flowering stages than in younger plants, and work the best in August.

Mowing, as we saw earlier, encourages growth unless it is repeated over and over for only about four years. Terrific!! Covering them so that they cannot photosynthesize can kill plants, or they may actually be choked out by competitive species such as alfalfa and the sweet clovers, after which, you have to get rid of those...

More interesting stuff: seeds are available online. Yes! 850 euros will get you 1000 g of seeds. A steal—considering that there are 800 seed/g. That should easily take care of all your creeping thistle needs.

We have to admire their tenacity. Someone said that after a nuclear war the only living things left on earth will be cockroaches. Don't be too sure...

So—new name: **creeping thistle!** Spread it far and wide—the name, that is! ❁

Nisku Prairie Are you ready to get your hands dirty?

Here's an opportunity to "get your hands dirty"! Please mark your calendars and plan to help put the management plans into action. Nisku Prairie needs you!

Following are the planned work days for Nisku Prairie for the 2004 season:

April 3: Cutting and removing the trees that were cleared while doing the fence construction.

May 1: Cutting and removing the trees that were cleared while doing the fence construction.

June 5: Control of smooth brome (an invasive exotic grass) using herbicide.

July 10: Plant species count/confirmation and mapping.

August 7: To be announced .

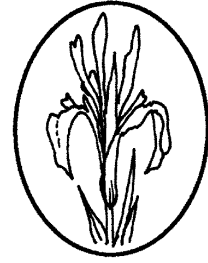
September 11: To be announced

If you are interested in helping out please contact Birgit Friedenstab at (780) 440-0971 or e-mail birgitf@telus.net or contact ANPC. ❁

ANPC Small Grants Program

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

ALBERTA NATIVE PLANT
COUNCIL
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Iris

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

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

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

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Submission deadlines for upcoming issues:

Spring	May 15, 2004
Fall	Sept 15, 2004
Winter	Jan 15, 2005

A subscription to IRIS is included with membership in the ANPC. To join, contact the Secretary, or check our web page, <http://www.anpc.ab.ca>.

Summer Berries!

by Marsha Hayward

In my opinion, there are few things that compare to the delicious fresh taste of summer berries. Whether it is your own secret patch on private land, or near your summer cottage at the lake, for many people berry picking is synonymous with summer.

Since I was a child, I've carried with me certain memories of the berry patch. I loved nothing more than to walk along a deserted country road and pick wild raspberries, or saskatoons, which were heavy and wet after a summer thunderstorm, with mud squishing between my toes. Ah yes—those idyllic days of childhood.

It was the forced berry picking that really irked my ire. To mention the very words “berry picking” in our house was to send myself and my brother and sister running for cover.



Blueberry (*Vaccinium myrtilloides*).
Original painting by Marsha Hayward

My mother, of course, was very clever in the manner in which she went about achieving the ultimate goal of filling the winter larder with wild berries—or in my words “forcing us into hard labor”. She first mentioned the word beach, and then more alluringly, camping. Over the supper table, she built up the plans for the anticipated weekend along with the devious help of my father (who incidentally had never berry-picked for one minute of his adult life). They talked about fishing and hikes and the

food we were to eat and the warmly remembered trips from last year. Somehow, the forced marches to berry patches in previous years seemed just a long ago unpleasant memory.

Next would come the big day, complete with all the chaos of packing the car with our numerous possessions (forgotten and unforgotten). Everyone piled into the car and, just when we thought we were well on our way to the ultimate camping destination—wham—then came the stop at the berry patch. It was unspeakable and ghastly. My parents were cruel and inhuman creatures bent on the tortures of the fragile minds and delicate bodies of ten years old girls.

Before our eyes lay the farm which boasted miles of (tame) raspberry canes conveniently located right along the road to our favorite beach. We (or should I say my mother?) had one single-minded mind-numbing goal, and that goal was to pick at least five ice cream pails of raspberries before we were allowed to go to the lake to swim! Life was so terribly unfair.

Now, my mother (bless her soul) could, and still can, cook up the most delicious berry recipes imaginable. However, not only did she insist that we pick tame raspberries, she also took great delight in torturing us throughout the wild blueberry season, the tame strawberry season and finally the cranberry season. And so we moaned and complained through the whole summer and then ate and ate and bragged and ate our way through miles of canned and frozen and baked berries throughout the winter.

Now, here I sit, thirty odd years later, prodding my own children down to yet another wild raspberry patch and phoning my mother long distance for the wild blueberry pie recipe she always served.

Contrary to popular belief, berry picking has become more popular in rural Alberta than ever before in our past. Each year, more and more Albertans spend time berry picking and growing their own patches of wild fruit.

In addition to that, there are now several very successful wild berry cultivators selling native berry canes and shrubs in Western Canada—and they have a fool-proof product. Wild berries are hardier and easier to grow in our climate than most domesticated berries. They are also much tastier and more disease tolerant.

I concur with the majority, who claim that wild berries have a much sweeter, yet spunkier flavor. They cook up better and hold their flavor and shape right through the cooking process. There are numerous recipes to choose from, right from grandma's old favorites to the many modern variations.



Wild Red Raspberry (*Rubus idaeus*).
Original painting by Marsha Hayward

Wild strawberry, gooseberry, choke cherry, pin cherry, black currant, red currant, cloudberry, bearberry, saskatoon berry, thimbleberry, dewberry, cranberry, high bush cranberry, blueberry, cranberry, buffalo berry, elderberry, huckleberry, raspberry, bog raspberry and the rose hip—these are all berries which are picked and enjoyed by Albertans. ❁

Corrections

IRIS No. 45, pages 1,2: photos attributed to Ed Karpuk were actually by Terry Krause. (Thanks, Ed, for submitting this correction.)

IRIS No. 45, page 3: photo credit for the picture of Gladys Pennock goes to Elisabeth Beaubien.

The Ethics of Plant Rescue

by *Moralea Milne*

[originally published in *The Victoria Naturalist* 60.4 (2004): 8-9]

The Victoria Native Plant Study Group (NPSG) has been in the forefront of the plant rescue movement. By negotiating with developers we save native plants, even some quite rare ones, from sure eradication under the blades and tracks of land clearing machinery. Since you must be a member of our organization to participate and as more people hear about the rather new concept of harvesting native plants from sites that are earmarked for immediate development, they join our group and we benefit from increased membership and the attendant annual fees. Sometimes these rescued plants are used in our gardens or sometimes they are donated to restoration projects throughout the Victoria area. Sometimes the seeds and cuttings are used to propagate more plants in nurseries and further the native plant gardening movement. These all seem to be activities that we can and should support.

But I wonder...

Spring 2002 and 2003 saw a huge plant rescue operation at what came to be known as the Langvista sites in Langford. Early spring 2002 found myself an eager participant in plant rescue activities. I was delighted to be able to save native plants from certain obliteration and provide my own property and a native plant garden I was attempting to create on my local municipal grounds with often expensive and hard to find native plant material. We all carefully followed the rules laid out by the developers and stayed well out of covenanted areas, glad to know some of the site's natural beauty and plant community was protected. I did give a moments pause to wonder where the many birds displaying territorial behaviour would be nesting this year. However there was a beautiful intact site across the road they could migrate to and I ignored the obvious, which was; that site would already have it's full complement of birds asserting their territories. Overall, I felt good about myself and my efforts.

Early 2003 myself and a friend bid on the contract to remove broom from the covenanted areas on this now developed site. Through this work we learned that the area across the road, the back side of Mill Hill Capital Regional District Park, was also about to be developed. I consulted with the

developers and found they were amenable to further plant rescue operations at this new site. NPSG membership grew as word of the wealth of plant material at this site filtered through the native plant enthusiast community.

This site was so amazing, everyone commented on the abundance and diversity of plant material. There were a few blue-listed *Isoetes nuttallii*, literally thousands of *Allium amplexans*, only recently declassified as a blue-listed species, both species indicative of an uncommon vernal wetland ecosystem. Some of the plants collected include: *Delphinium menziesii*, *Sisyrinchium douglasii* (now *Olsynium*), *Allium accuminatum* and *A. cernuum*, *Piperia* spp., *Spiranthes romanzoffiana*, *Calypso bulbosa*, *Erythronium oregonum*, *Camassia* spp., *Ranunculus occidentalis*, *Brodiaea coronaria*, *Triteleia hyacinthina*, *Fritillaria affinis*, *Saxifraga occidentalis* and *S. cespitosa*, *Lithophragma parviflorum*, *Eriophyllum lanatum*, *Lupinus bicolor*, *Clinopodium chamissoi*, *Lilium columbianum*, *Dodecatheon hendersonii* and *D. pulchellum*, *Trifolium willdenowii*, *Mimulus* spp., *Collinsia grandiflora* var. *pusilla*, *Plectris congesta*, *Grindelia integrifolia*, various native grasses, such as *Danthonia californica*, *Elymus glaucus*, *Festuca roemerii*, *Bromus* spp., and *Stipa lemmonii*, ferns *Aspidotis densa*, *Pentagramma triangularis*, *Cystopteris fragilis*, *Polystichum munitum* and *P. imbricans*, many unidentified mosses, lichens and fungi and there were large numbers of virtually all these plants. Some sharp-eyed members harvested *Aster curtus*, designated red-listed in B.C.

All these species begs the question, what did we miss? What other rare jewels were not apparent to our non-expert eyes? Mill Hill Park has recently been inventoried by Hans Roemer and he has found many more species and occurrences of rare plants than was previously thought to exist there. It is logical to consider the same would be true at this adjacent site.

This year brought a shift in my perceptions and I didn't feel quite so lucky to be involved in the "good works" of plant rescue, rather I felt increasingly sickened by the destruction and plunder of this hugely productive, rich, rare association of ecosystems. When someone declared they felt like "a kid in a candy store", I really started to wonder at the appropriateness of what we were doing. This was no candy store

that could be restocked with old favourites. It took many thousands of years to produce the assemblage of plants and animals at this site. Nothing we attempt in our lifetimes could ever replace the astonishing environment that was lost.

When I consider the number of people who made many repeated trips to this site to rescue plants, I wonder what could have been accomplished had that same time and energy been directed towards saving the site. I have heard the developers were willing to sell the site to CRD Parks. What if we had worked with the District of Langford, CRD Parks, GOERT, NGOs, the provincial and the federal governments? Could we have preserved this immensely rich and biodiverse community for future generations? Garry oak ecosystems are considered one of the three most endangered ecosystems in Canada, only a tiny fraction remains, and through our ignorance and inactivity we let a piece of the best of the last remnants be destroyed. Perhaps if we had not been so focused on "rescuing" individual plants we could have rescued an entire ecosystem. What good are the plants that we saved really? They have become mere gardening material rather than part of a dynamic ecosystem, is that a worthwhile trade?

Since this spring I have not participated in further "plant rescue" opportunities. I feel ambivalent about the value and appropriateness of this activity. Should we focus our limited resources on plant rescue? Or would the enthusiastic members of the plant rescue corps harness the power of their combined energies to the preservation of endangered ecosystems? Does the immediate gratification of "owning" rescued plants outweigh the long and sometimes arduous struggle to protect and preserve our natural heritage? Does the diplomacy involved in securing plant rescue options on a site preclude the ability to fight for the preservation of the site? Is there even an organization that is working to prioritize the acquisition of the last relics of our Garry oak ecosystems? Perhaps if I could be sure that we had explored all possible avenues to protect and preserve every remaining significant Garry oak and associated ecosystem site, then "plant rescue" operations would be worthwhile endeavours. At the moment I find myself sitting on the fence of indecision, staring at the crossroads of choice and I ask myself this question: if there is only a limited time left, what would I want to leave as my legacy? ❀

Clyde Fens Natural Area 2003 site inspection and May Species Count

by J. Derek Johnson

On May 25, 2003, myself, Graham Griffiths and three interns from the Northern Forestry Centre, Laura Chittick, Jocelyn Montgomery, and Carla Weitzel, went to the Clyde Fens Natural Area for the annual May Species Count, which doubles as an annual site inspection. Imagine our great surprise when we pulled up to our usual disembarkation point only to find that the SE quarter of Section 16, which had been up for sale last year, had been sold, and the new landowner had cleared all the trees off whatever passed for upland forest. This was a great disappointment. Even though it was never part of the natural area, this poplar stand was always good for a few unique species on the May Count. About the only "good" thing to say about the land clearing was that it added many annual weedy species to our May Count list.

In addition to having cleared the trees, the new landowner had fenced the quarter. The fence line along the north side of the quarter was anything but straight and we had our suspicions that it actually wandered into the existing natural area.

The natural area boundaries are in the process of being checked to see if this is indeed the case. We were quite concerned that the fencing meant that the new landowner planned to run livestock on the quarter. This would be disastrous for the pitcher plants. Even though they occur in the two quarter sections which currently make up the natural area, many of them were burned in the fire of 2001 and they will be slow to recover to the stage where they will flower again. Most of the pitcher plants that survived the 2001 fire intact are on the private quarter section and they

would not handle livestock trampling at all well.

After we got over our original shock and concern, we proceeded to traverse the rest of the natural area checking the recovery following the 2001 fire and looking for plants in flower. We didn't get particularly sooty this year, as we did last year, because much of the scorched bark had fallen off the fire-killed trees. Just as I suspected last year, many trees killed in the fire were starting to blow down and we had to make several detours to get around them. The extra time required to do this probably found us several additional species in flower.

Last year I was concerned that the caragana (*Caragana arborescens*) around the old farmstead in the northeast corner of the natural area was recovering faster than the aspen suckers. However, this year it was evident that the aspen suckers had taken off



The remains of the poplar forest in the SE quarter of Section 16 adjacent to the Clyde Fens Natural Area. Photo: J.D. Johnson

and were outstripping the growth of the caragana in most places. Except for a couple of places where the caragana is the thickest, the aspen should be able to stay ahead of it and replace the stand that was burned. We still may need to consider some topical herbicide to kill the caragana where it is thickest so that it does not interfere with the developing aspen forest.

It was a pleasant day to visit the fen and we ended up with a total of 46 plant species in flower, which was a considerable improvement over the 30 species seen in the very late spring of 2002. ❀

The Alberta Native Plant Council

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News and Notes

Books—Recent arrivals from Timber Press



Native trees for North American landscapes (2004)

Guy Sternberg and James W. Wilson
ISBN 0-88192-607-8, (hardcover, 552 pp)
Price (USD): \$59.95

In pursuit of plants: experiences of nineteenth and early twentieth century plant collectors (2004)

Philip Short
ISBN 0-88192-635-3, (hardcover 352 pp)
Price (USD): 29.95

Botanical Latin (Fourth Edition, 1992)

William T. Stearn
ISBN 0-88192-627-2, (paperback, 560 pp)
Price (USD): 29.95

The orchid in lore and legend (2000)

Luigi Berliocchi (Edited by Mark Griffiths,
Foreword by Henry Oakeley)
ISBN 0-88192-616-7, (paperback, 200 pp)
Price (USD): 19.95

For more information visit Timber Press at
<http://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

Other books



According to the **Flora of North America** website (<http://hua.huh.harvard.edu/FNA/>), there are now 7 volumes published in the series:

Volume 1: Contents (1993)
ISBN 0195057139 (hardback, 400 pp)
Price (USD): \$95.00

Volume 2 :Pteridophytes and Gymnosperms (1993)
ISBN 0195082427 (hardback, 496 pp)
Price (USD): \$95.00

Volume 3: Magnoliidae and Hamamelidae (1997)
ISBN 0195112466 (hardback, 616 pp)
Price (USD): \$95.00

Volume 22: Magnoliophyta: Alismatidae Arecidae, Commelinidae (in Part), and Zingiberidae (2000)
ISBN 0195137299 (hardback, 384 pp)
Price (USD): \$95.00

Volume 23: Magnoliophyta: Commelinidae (in part): Cyperaceae (2002)
Flora of North America Editorial Committee. (ed.) 2002.
ISBN 0195152077 (hardback, 640 pp)
Price (USD): \$95.00

Volume 25: Magnoliophyta: Commelinidae (in part): Poaceae, part 2 (2003)
ISBN 0195167481 (hardback, 814 pp)
Price (USD): \$120.00

Volume 26: Agavaceae, Aloaceae, Burmanniaceae, Dioscoreaceae, Haemodoraceae, Iridaceae, Liliaceae, Orchidaceae, Pontederiaceae, Smilacaceae and Stemonaceae (2003)
ISBN 0195152085 (hardback, 752 pp)
Price (USD): \$120.00

For ordering information, check
<http://www.oup-usa.com/>



People and Plants conservation book series:

(six titles available in English):

Plant invaders: the threat to natural ecosystems

Quentin C. B. Cronk and Janice L. Fuller,
1995.

People, plants and protected areas: a guide to in situ management

John Tuxill and Gary P. Nabhan, 1998.

Applied ethnobotany: people, wild plant use and conservation

Anthony B. Cunningham, 2001.

Uncovering the hidden harvest: valuation methods for woodland and forest resources

Bruce Campbell and Marty Luckert (ed.),
2002.

Biodiversity and traditional knowledge: equitable partnerships in practice

Sarah Laird (ed.), 2002.

Tapping the green market: management and certification of non-timber forest products

Patricia Shanley, Alan R. Pierce, Sarah A. Laird and S. A. Guillén (ed.), 2002

For more information, check
www.rbgekew.org.uk/peopleplants
or order from:

Stylus Publishing LLC
PO Box 605
Herndon VA 20172-0605
tel: 1-800-232-0223;1-703-661-1581
fax: 1-703-661-1501
Styluspub@aol.com

Several books are available for orchid lovers:

Wild orchids of North America, North of Mexico

Paul M. Brown and Stan Folsom, 2003
ISBN: 0813025729 (paperback, 256 pages)
Price (CDN): \$46.25

The wild orchids of Arizona and New Mexico

R. A. Coleman, 2002
ISBN: 0801439507 (Hardcover, 256 pages)
Price (CDN): \$36.86

The wild orchids of California

R. A. Coleman, 1995
ISBN:0801430127 (Hardcover, 264 Pages)
Price (CDN): \$39.16

See <http://www.sandersbooks.com/> for more information.

The **Alberta Wildlife Status Report Series** has a number of plant related publications:

(Published by Alberta Sustainable Resource Development and the Alberta Conservation Association. Download from <http://www3.gov.ab.ca/srd/fw/riskspecies/>. Click on "Detailed Status", and go to the Plants section)

Report No. 48: Status of the small-flowered sand verbena (*Tripterocalyx micranthus*) in Alberta, by Bonnie Smith, 2003

Report No. 44: Status of the Yucca Moth (*Tegeticula yuccasella*) in Alberta, by Donna Hurlburt, 2002

Report No. 35: Status of soapweed (*Yucca glauca*) in Alberta, by Donna Hurlburt, 2001

Report No. 31: Status of the western spiderwort (*Tradescantia occidentalis*) in Alberta, by Bonnie Smith, 2000

Report No. 21: Status of the western blue flag (*Iris missouriensis*) in Alberta, by Joyce Gould, 1999

The **Alberta Species at Risk Report** series also has a number of plant related publications.

(Published by Alberta Sustainable Resource Development and the Alberta Conservation Association. Download from <http://www3.gov.ab.ca/srd/fw/riskspecies/>. Click on "Reports".

Report No. 66: Inventory and monitoring protocol for naturally occurring western blue flag (*Iris missouriensis*) in Alberta, Reg D. Ernst, 2003

Report No. 61: Inventory of western spiderwort (*Tradescantia occidentalis*) in Alberta: 2002. (2003 Addendum), by Sue Peters, 2003

Report No. 59: Rare plant inventory of the eastern edge of the lower foothills natural subregion, west-central Alberta, by Jennifer Doubt, 2002

Report No. 38: A census and recommendations for management for western blue flag (*Iris missouriensis*) in Alberta, by Reg Ernst, 2002

Report No. 21: Proposed protocols for inventories of rare plants of the Grassland Natural Region, by Cliff Wallis, 2001

Report No. 18: Western blue flag (*Iris missouriensis*) in Alberta: a census of naturally occurring populations for 2000, by Reg Ernst, 2000

To order printed copies, contact
Information Centre-Publications
Alberta Environment-Alberta Sustainable Resource Development
Fish and Wildlife Division
Main Floor, Great West life Building
9920-108 Street
Edmonton, AB, T5K 2M4
(780) 422-2079

or

Information Service
Alberta Environment-Alberta Sustainable Resource Development
#100, 3115-12 Street NE
Calgary, AB, T2E 7J2
(403) 297-6424

Websites

A British conservation group, the Wildscreen Trust, has launched an online resource called **ARKive** (www.arkive.org).



The latest in digital technology to brings together the world's most important nature films, photographs, and sound recordings, using them to build vivid and fact-based portraits of Earth's endangered plants and animals.

Visit http://www.forestworld.com/public/silvics/silvics_frame.html to find useful information on approximately 200 tree species.

Visit www.usna.usda.gov/Gardens/invasives.html for a new summary of the invasive plant issues.

For information on the **Compleat Botanica** software for vegetable and flower gardeners, mail-order nurseries, garden clubs, herbalists, and plant professionals, check <http://www.crescentbloom.com/>.

Check <http://www.goert.ca/reference/invspecies.htm> to find out about some nasty invasive creatures in Garry oak and associated ecosystems in British Columbia.

Training tool on Convention on Biological Diversity useful for the classroom and community training is available at <http://www.kew.org/data/cbdbotanists.html>

Calendar of events

May 8–9, 2004 ANPC Workshop and AGM

Details on page 1 of this issue.

June 18–20, 2004 Botany Alberta

Details on page 12 of this issue.

June 28–30, 2004 Monitoring whitebark pine for blister rust: a methods workshop

This event will take place in the Conference Center at Holiday Inn SunSpree Resort in Yellowstone, Montana.

On-line registration is available at https://www.umt.edu/ccesp/secure/whitebark/wb_registration.htm

(NOTE: attendance is limited to 80)

For more information contact Debbie Graham, Continuing Education, University of Montana at (406)- 243-4623, or by email: debbra.graham@mso.umt.edu.

July 5–7, 2004 Botany BC

Atlin, British Columbia.

Information on this event is now posted at <http://members.shaw.ca/dmeidinger/botanybc/>.

August 24–27, 2004 SER2004, International Conference on Ecological Restoration

The Society of Ecological Restoration International's 16th annual World Conference on Ecological Restoration Victoria, British Columbia

For more information, visit http://www.serbc.info/public/ser_seminar.





Whitehorse Creek/Drummond Creek area. Photo: A. Falk

Whitehorse Wildland Wanted—More volunteers!

by Alison Dinwoodie

A NPC, as a Steward of the Whitehorse Wildland Park (formerly the Cardinal Divide Natural Area, CD), has done sterling work in the past with reclamation of some of the eroded areas at the Cardinal Divide. After seven years of annual attention, spearheaded by David Walker, this phase of our activity has come to an end. There are small encouraging signs of regeneration, particularly the alpine bluegrass (*Poa alpina*). In such an unforgiving climate, where seedlings are blasted

by drying winds and bitter frost any month of the year, it will be some time before we can really see the effects of our hard work.

It was thus very disappointing to see that a 4-wheel drive had been driven right across the reclaimed area last year, west of the parking lot, leaving foot-deep ruts and destroying in minutes the growth of many years. Charges have apparently been laid, but whether that is enough to deter future yahoos remains to be seen. Meantime, there are still occasional off-highway tracks up to the East Cardinal Divide ridge, although fewer than in past years thanks to more

vigilance and education from the Conservation Officers.

This means that as Stewards, we have to continue to be vigilant in the area and to report on such incidents—as well as the more rewarding documentation of interesting alpine plants. So guess what? We are looking for some more volunteers!

Elisabeth Beaubien has been the main Steward organizer for the ANPC all these years, while I have worked closely with her on behalf of the Edmonton Section of the Alpine Club of Canada (ACC). I have retired from the ACC position, but am continuing independently as a Steward, but both Elisabeth and myself are looking for others to start taking over. I will continue to help with some coordination, but we need a representative from the ANPC.

We are looking for:

- One or two people to monitor the trails once or twice a year on a regular basis. It would really help if the same individual would commit to a period of at least three years, as it is the continuity of observations that really counts. No great skills are required, apart from an observant eye and reporting ability, though it would help to be a reasonably strong walker!
- Someone to apply for a grant to get some students to set up properly-organized monitoring stations, so the annual reports could provide more systematic data.
- The middle section of the East CD trail is badly in need of restoration. I'm afraid it probably needs a small back-hoe to re-make a proper ditched trail to prevent on-going erosion. We need someone to organize and oversee this operation, which I'm told might only take one weekend—if the backhoe operator knows what he is doing!
- I am working on a small trail guide pamphlet for the WWP, so would welcome someone to “ground-proof” it!
- Many individuals have collected information over the years about the plants in this fascinating area. It would be good if we could get a coordinator to pull this together, with eventual publication of a small booklet on the Flora of the Whitehorse Wildland Park.

If anyone is interested in any of the above projects, or would like more information, please phone me at (780) 437-7183, or e-mail at adinwoodie@shaw.ca. ☘

Job Opportunity

Wanted: Contract Employee interested in Naturalization Projects (Landscaping and Restoring with Wild Plants) in Edmonton.

The Edmonton Natural History Club, operating through the Edmonton Naturalization Group (ENG), has funds for a summer contract that involves

- recruiting volunteers for ENG-related projects and activities
- assisting with the marketing of ENG's new book "Go Wild"
- some hands-on gardening and seed harvesting
- computer work related to developing templates for record-keeping

Work period: May through September; part-time (38 person-days); flexible schedule.

For more information please contact

Cherry Dodd at (780) 466-7570; e-mail cad@transcena.com or Patsy Cotterill at (780) 481-1525; e-mail nutmeg@planet.eon.net.

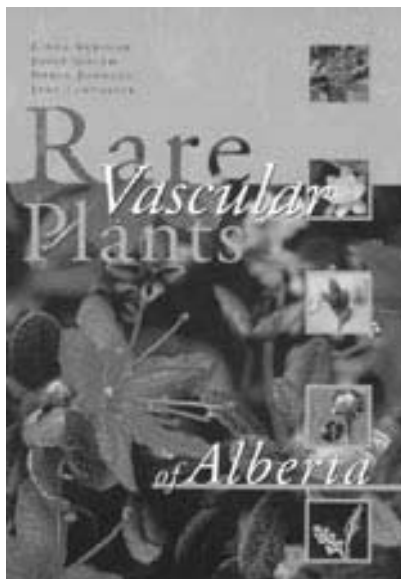
ANPC Objectives

The **Alberta Native Plant Council** strives to:

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

The Council's specific objectives are:

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



How can you buy a book, save some money and support ANPC? *The Rare Vascular Plants of Alberta* is available from the ANPC. We are selling books to members for only \$25.00 each. This is a 16% discount, but with the added benefit of no GST, it is equivalent to a saving of 22% or \$7.05 per book. What a bargain! And, the ANPC makes \$4.17 for each guide sold.

If you live in or near Edmonton, Red Deer or Calgary, you can pick up books from the following individuals:

Calgary

Mryka Hall-Beyer,
Dept. of Geography,
University of Calgary,
(403) 220-6586 wk; 284-1621 hm
mhallbey@ucalgary.ca

Edmonton

Lorna Allen,
tel. (780) 427-6621 wk;
(780) 436-8032 hm; fax 427-5980
lorna.allen@gov.ab.ca

Joyce Gould
Dept. of Renewable Resources,
University of Alberta,
(780) 492-4155 wk
ajgould@ualberta.ca

Red Deer

Eileen Ford
Box 12, Penhold AB
(403) 886-4905 hm
hh3@telusplanet.net

Note: Our agreement with the University of Alberta Press allows us to sell books only to ANPC members and to people

attending lectures and workshops involving the editors of the book and/or ANPC members. It is important that we sell only to non-competing markets. Consequently, if friends or fellow researchers are visiting from out-of-town and want to buy a copy, we can sell them one, but we cannot sell books to local people who are not affiliated with the ANPC. The price for non-members is \$30.00 each (with no GST). Maybe this is an incentive to join! ❁

Grassland to Rockland Tour 2004

A Joint initiative of the Edmonton Natural History Club, Edmonton Bird Club and Calgary Field Naturalists.

Bob Parsons of the Edmonton Bird Club would like to make a special appeal to the "Plant People" to join in on this fantastic trip.

Choose to join the tour at any of the locations on the given dates. For more information contact Bob Parsons at (780) 488-1344 or download brochure from <http://cfns.fanweb.ca/BrochurePrairieGrasslandTour04.pdf>

Itinerary

May 18-23

Brooks area (visits to Dinosaur Provincial Park and Bow City Medicine Wheel Project Headquarters at Tillebrook

May 24-30

Writing-on-Stone Provincial Park is headquarters. Also visit Milk River Natural Area, Verdigris Lake and others.

May 31-June 2

Camp at Crandell Mountain or Townsite in Waterton Lakes National Park.

June 3-7

Crowsnest Pass Birding Festival and First Annual species count.

Call for nominations Come join the ANPC Board!

The following elected positions on the board of the ANPC are open for a two year term, starting in May 2004

Treasurer
Northern Director
Central Director
FAN Director #2

Elections for these positions will be held at the ANPC Annual General Meeting (AGM) in Edmonton on May 8. Nominations can be submitted by contacting any of the board members or at the AGM.

Position of **Chief Editor of *Iris*** will also be vacant after this issue, because Ksenija has decided to take over some new exciting volunteering opportunities. We are looking for a volunteer to take on the role of Chief Editor starting with the next (Spring) issue.

Volunteering for ANPC can be as big or as little of a commitment as you'd like, but in either case, it guarantees a lot of fun. Board members meet once every two months, with a break over the summer. But you don't have to commit to regular meetings—you can help out with one or more ANPC committees: Conservation Action, Education and Information, Reclamation and Horticulture, Rare Plants, and the Newsletter. Involvement on the Board is a great opportunity to contribute to worthwhile activities and have fun in the same time.

Botany Alberta No. 7

Plans are in place for Botany Alberta No. 7, which will take place in the lovely Lakeland country in and around Lac La Biche, June 18–20, 2004. For more information contact:
Jennifer Okrainec (780) 623–5333
jennifer.okrainec@gov.ab.ca
Ted Johnson (780) 623–5435
ted.johnson@gov.ab.ca
Tom Maccagno (Lac La Biche) (780) 623–4177
tmaccagn0@yahoo.ca
Elisabeth Beaubien (Edmonton) (780) 438–1442
e.beaubien@ualberta.ca



Slender-leaved sundew (*Drosera linearis*) grows in bog near Siebert Lake. Photo: T. Maccagno.

Want to Plant a Garden with Natives this Year?



Check out ***GO WILD! With Easy to Grow Prairie Wildflowers and Grasses*** by Edmonton gardener Cherry Dodd and the Edmonton Naturalization Group. Published by the Edmonton Natural History Club and the ANPC, this 94-page, coil-bound book provides descriptions of and growing instructions for 32 plants native to the Edmonton area. ***GO WILD!*** is available at selected events and outlets. It will be sold at a discount to ANPC members at the ANPC conference in Edmonton on May 8th.