

Stewards of Alberta's Protected Areas Association (SAPAA)

NEWSLETTER NO. 14 FEBRUARY 2006

NEXT AGM, 2006

Mark your calendars! The next AGM will take place on October 21, 2006, at the Hastings Lake Community Hall southeast of Edmonton. Further details will appear in the next newsletter.

SUMMER FIELD TRIPS

Laura and Bruce Martin of Friends of Redwater Sandhills Natural Area have kindly agreed to host a field trip for SAPAA in conjunction with the Edmonton Orienteering Group, on June 10th, 2006. Please meet at the north staging area and parking lot at 10:00 a.m. To get to this rendezvous, take the Manning Freeway or Hwy 21 to Fort Saskatchewan. Continue east on Hwy 15 to the junction of Hwy 830. Turn left and head north on Hwy 830 to Hwy 38. Turn left on Hwy 38, cross the Vinca Bridge and continue west until you see the sign for Victoria Trail. Turn right onto Victoria Trail and follow the road for approx. 2 miles (3.2 km) to R.R. 205. Turn left onto R.R. 205 and head north approx. 3 miles (5 km) to the staging area. Be prepared to walk on sandy soil and spend about 5 hours outdoors. Check our website at www.sapaa.fanweb.ca for further updates.

DRAFT FIRE MANAGEMENT PLAN

This extremely dry winter has given new impetus to developing or updating fire management plans. John Woitenko, Steward of Riverlot 56 Natural Area, is working on a generic plan that should have application in many natural areas or can be used as a template for more site-specific plans. Contact John at (780) 459-0475 or stay tuned!

SAPAA LISTSERVE

At the recent AGM, it was suggested that a Listserve should be set up for our group through yahoogroups.ca. Thanks to Rod Olstad, it is now up and running. There are a number of potential benefits for SAPAA members:

1. We can invite one another on field trips to our respective stewardship areas.
2. We can inform one another about relevant books, articles or issues.
3. Members can share other relevant information with one another, particularly local stewardship problems and success stories.

"Yahoogroups.ca" is a free service provided by "yahoo.ca". The SAPAA yahoogroups.ca Listserv is supposed to be secure, as it is for members only, so non-SAPAA members should not be able to acquire your email address. View our Group home page at <http://ca.groups.yahoo.com/group/sapaa>.

To join the Listserve, send the Membership Secretary, Marilyn Shannon, an e-mail at kandms@telus.net so that she can check that you are a current member of SAPAA. She will then inform Rod who, as moderator of the Listserve, will add you to the list.

To send and receive messages, use the Group email address: sapaa@yahoogroups.ca. Note that when you send a message from the Listserv, it is automatically sent to all members of the group. If you wish to respond privately, you must cut and paste the individual's private email address.

You do not have to be a member of yahoo.ca to join the Listserve, but if you wish to access the other features of this service, e.g., to check other messages, post files, photos, etc., you will need to sign up as

a member of yahoo.ca. To become a member of yahoo.ca, go to <http://ca.yahoo.com/> and fill in the "sign-up" membership form.

If you decide you no longer wish to be part of the Listserve, simply click on 'Unsubscribe', at the bottom of the Listserve messages.

We hope that you will join this Listserv to improve communication amongst our members. For those of you without e-mail, we will try to keep you informed, either by newsletter or phone, if something is really important or urgent.

APPROPRIATE ACTIVITIES IN NATURAL AREAS? WE NEED YOUR INPUT

The question was raised recently of how we interpret one section of our bylaws. As every member of SAPAA is supposed to agree with the Purposes of the Association (Bylaw 1.2), clarification was needed of Purpose # 3, 'to promote the use of Alberta's Protected Areas for educational and research purposes, and for *non-intrusive, nature-oriented* activities, compatible with each individual site' (italics mine). This follows from Purpose # 2, 'to promote the preservation, protection and restoration of the ecological integrity of Alberta's Protected Areas.'

The term *non-intrusive* was put in originally to refer to the usual nature study, hiking, bird-watching, etc., to distinguish them from the more aggressive, high-impact activities such as OHV or other motorized vehicle use, which have such a negative effect on so many so-called 'protected' areas. Activities appropriate for each site are supposed to be indicated in management plans, but as very few of the Natural Areas have any plans, conduct is basically left up to the local land manager to decide.

Demands on NAs have also risen due to greatly increased numbers of participants enjoying outdoor sports such as mountain-biking, cross-country skiing and orienteering. Although these activities are non-motorized, they can still be very intrusive and have a higher impact than the land can bear. The problem is, where do we draw the line?

This question was supposed to have been addressed in the long abandoned Heritage Act. Perhaps it is time to re-visit the Protected Area classifications and make some adjustments to the regulations. Distinguishing between Natural (Conservation) Areas and Natural (Recreation) Areas might help initially; this was in the original concept for Natural Areas but was never addressed in detail.

So, we are left with more questions than answers.

- **How would you define *non-intrusive, nature-oriented* activities?**
- **What should we do if SAPAA members promote highly intrusive activities in NAs?**
- **Should SAPAA lobby the Government for more definite guidelines?**
- **Any other suggestions? What do you think?**

We would really like some feed-back and guidance! Contact Alison at (780) 437-7183 or email adinwoodie@shaw.ca

AGM, KERRY WOOD CENTRE, RED DEER, OCTOBER 22, 2005

The morning began with a presentation by **John Kristensen, Assistant Deputy Minister of Alberta Community Services, Parks Division**. His talk was entitled “**Moving Natural Areas into the 21st Century: What it means to be Volunteer Stewards.**” Speaking to an audience of about 17 SAPAA members, John observed that what he had found most challenging during his tenure as ADM was many people’s lack of understanding of the value and nature of parks ecosystems and ecosystem services. The government is now attempting to address this problem. Although it is difficult to put a dollar value on natural landscapes, establishing economic values for some of the services parks provide can gain political attention. Another problem is the popular resistance to words such as “preserve” and “conserve” which are equated with precluding development. Nevertheless, industry is becoming more responsive to landowners. Giving an example of his own experience with his property in southeast Edmonton, John said he was not able to prevent a pipeline crossing his land, but could influence its location. Similarly, communities armed with information can influence the location of power lines, and landowners can hold out for directional drilling of oil and gas wells.

John admitted that legislation protecting natural areas is not as strong as the laws for wilderness parks; however, given the resistance to preservation, a looser designation has been the only way to obtain some NAs. About 70% of wildland parks and a smaller proportion of provincial areas allow hunting and operation of existing oil and gas wells within their boundaries. Companies can purchase a lease after an established provincial area, but no surface drilling is allowed. John noted that he preferred these arrangements (allowing leases, but with qualifiers), because industrial activity will eventually be phased out leaving the parks already part of the parks system and available for the future. Coal-bed methane extraction can present a threat because it calls for tighter spacing of wells; however, the government can dictate the same spacing as for natural gas wells, which in some cases may make it uneconomic for companies to proceed. The Rumsey block fescue grassland area (Rumsey Ecological Reserve and Natural Area) is an especial problem, because its large area makes directional drilling from outside the reserve difficult.

In answer to a question about ATV use on public lands, John observed that ATV use is not permitted in provincial parks or ecological reserves, but is allowed on designated trails in wildland parks. He admitted that it takes legal teeth to enforce compliance. John called on stewards to be ambassadors for natural areas – something we need to remember as we go about our stewardship duties. Our thanks to John for an enlightening presentation.

Speaking in the afternoon after the AGM, **Rebecca Reeves** gave a spirited and inspiring account of her experiences with provincial parks and her new role as **ParksWatch Program Coordinator** for the Canadian Parks and Wilderness Society (CPAWS), based out of Edmonton. Rebecca’s skills as a communicator and coordinator came across clearly during her presentation: she is able to bridge the gap between bureaucracy and ENGOs, and while being a passionate advocate for her causes she nevertheless has a fine sensitivity to political realities. Rebecca is also a board member of the Alberta Environmental Network and is outreach coordinator for the Alberta Foothills Network. She noted that the ParksWatch team, which includes Neil Darlow as program director, will initially focus on provincial parks, but may extend to urban parks in the future. Rebecca calls for more parks to be established, creating better connectivity. She supports creation of a West Castle Ecological Reserve and Kakwa Provincial Wildland Park. The ParksWatch program welcomes volunteers. For more information visit www.cpaws-edmonton.org

SAPAA Officers, 2005-2006

The following were elected by acclamation at the AGM: President **Peter Kershaw**; V-P **Hubert Taube**; Treasurer/Membership Secretary **Marilyn Shannon**; Recording Secretary **Alison Dinwoodie**; Director: **Jim Pratt, John Woitenko, Tony Blake**; Newsletter **Patsy Cotterill, Linda Kershaw**

Treasurer's Report

The year ended with a deficit of \$181.19, due to publication of three newsletters and extra costs from the Edmonton meeting. Thanks to **Alan Hingston** and **Pat Clayton** for auditing the treasurer's report.

ADOPT-A-PLANT (APA) PROGRAM

Botanically-minded stewards, or even those who just enjoy a bit of detective work, will want to consider taking part in this program organized by provincial botanists and the Alberta Native Plant Council (ANPC). Even if you are not familiar with Alberta's plant life in general, you can quickly learn to recognize one or more plants of special interest and concern, and your natural area may be the ideal place in which to follow the fortunes of rare species over time. Training in detection, monitoring and recording will be provided at special workshops. The program can also arrange for an expert to assist you on site. Sleuthing rare plants can add a new dimension of interest to your site reports!

In 2006, Adopt-a-Plant Alberta (APA) is launching its first year of operation with the presentation of **three rare plant workshops**. The first one will be a joint APA/ANPC Workshop, Saturday, April 8th at Red Deer College in Red Deer. The APA/ANPC workshop will provide an overview of rare plants and lichens, where they occur, how priorities are set for data collection, and the Adopt-a-Plant Alberta program. This workshop is suitable for anyone interested in rare plants, and it is also considered the first training session for APA volunteers. A nominal registration fee will be charged for the APA/ANPC workshop. For more information, check the ANPC website at www.anpc.ab.ca.

The remaining two workshops are hands-on, technical sessions devoted to training registered APA volunteers, and are scheduled for May 13th at the University of Calgary and May 27th at the Devonian Botanic Garden (a short distance west of Edmonton). At these sessions, participants will choose a vascular plant, bryophyte or lichen to 'adopt', and will learn to develop key skills such as:

- accurately reading maps and air photos
- using a Global Positioning System (GPS) to record plant locations
- filling in ANHIC (Alberta Natural Heritage Information Centre) data forms

Since the training will be the same in both sessions, volunteers may select the location and date that is most convenient. These workshops will be free of charge.

Stay tuned for further details on these events. To become an APA volunteer, contact:

- **René Belland** (Devonian Botanic Garden) rene.belland@ualberta.ca; (780) 987-3054 (Edmonton)
- **Dana Bush** (Alberta Native Plant Council) cdbush@telusplanet.net; (403) 282-3975 (Calgary)
- **Ed Karpuk** (Alberta Native Plant Council) ed.karpuk@gov.ab.ca; (403) 340-7114 (wk) (403) 347-5723 (home) (Red Deer)
- **Margot Hervieux** (Alberta Community Development) margot.hervieux@gov.ab.ca (780) 538-5603 (Grande Prairie)

Correction: In the last newsletter in the article on monitoring the word "quadrant" was mistakenly used instead of the word "quadrat." A quadrat delineates a square area of variable size that is to be examined and monitored for plant vegetation composition, cover and change.

Brush Up Your Botany! Sheet No. 1 Graminoids: Grasses, Sedges & Rushes

by Patsy Cotterill and Linda Kershaw

The term “graminoid” (meaning grass-like plants) refers to plants belonging to the sedge (Cyperaceae), grass (Poaceae, formerly Gramineae) and rush (Juncaceae) families. It contrasts with the term “forb” which covers all other herbaceous (non-woody) flowering plants. When graminoids are in a vegetative (i.e., non-flowering) state, consisting mainly of long, narrow green leaves, it may be difficult to identify them, even to family, so “graminoid” becomes a useful if imprecise ecological term. A steward monitoring a vegetation plot might want to say, for example, that “the plot has 30% graminoid cover.”

Graminoids all belong to the large group of flowering plants known as the monocotyledons or monocots. Apart from having a single cotyledon (seed leaf) that emerges at seed germination, monocots have parallel-veined leaves, which are often long and strap-shaped, and various other characteristic features. Forbs include all non-graminoid monocotyledons, and all herbaceous dicotyledons. (Dicotyledons include trees, shrubs and herbs that have two cotyledons, net-veined leaves of various shapes, and other characteristics in common.) While few dicotyledonous herbs will be mistaken for graminoids, some non-graminoid monocots could be, but the leaves of these plants tend to be thicker and fleshier than those of graminoids. With experience, you will be able to recognize subtle differences in the leaves of different groups, but when you first learn how to identify a plant, it is important to have specimens with flowers and/or fruits. If you are doing any monitoring of your natural area, or are compiling a species list, you will want to identify your graminoids at least to genus level (e.g., *Juncus*) and preferably to species (e.g., *Juncus balticus*). For this you will need flowers and fruits. All sedges, grasses and rushes have small, inconspicuous green, brown or straw-coloured flowers that are best seen with a hand lens. Although they may all appear similar at first glance, on closer examination you will discover that the flowers of the different families are quite distinctive.

Even before the flowers mature, you can get some idea as to which graminoid family you are dealing with by examining the stems. A rough guide and useful mnemonic is: “sedges have edges and rushes are round, and grasses are

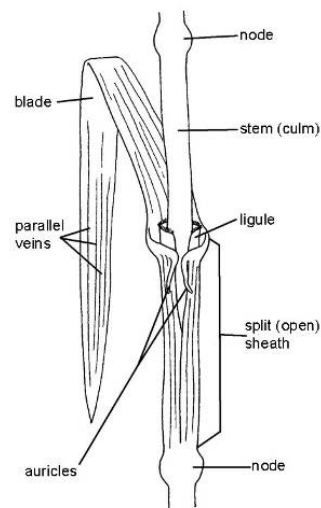
hollow right to the ground.” This rhyme refers to the flower-bearing stems of graminoids. Bear in mind though that, like all rules, there are exceptions: not all sedges have obviously triangular stems and the stems of grasses are not always hollow. Leaves can also help you to distinguish the three main families. Graminoid leaves typically consist of a sheath (encircling the stem) and a blade. Where the blade and sheath meet, many species have a small collar-like membrane called a ligule.

Rushes have stems that are round and solid (pithy) with inconspicuous joints (or nodes). Their long, narrow, untoothed leaves have blades that may be flat or cylindrical. The sheaths are usually open (curled around the stem but not fused into a tube), although the edges may overlap. Leaves on the stem are aligned in three vertical rows.

Plants in the sedge family have solid stems that are usually (but not always) triangular in cross-section, and have inconspicuous joints. Their leaves are also arranged in three rows, but the sheaths are usually closed.

Grasses, on the other hand, usually have hollow stems with conspicuous solid joints and their leaves alternate in two rows along the stem. The margins of grass leaf sheaths usually overlap, but in a few species they are fused to form a complete tube. In grasses the ligule is a useful diagnostic character, especially when no flowering specimens are available.

The leaves of both sedges and grasses may be flat or cylindrical (inrolled; usually a feature to conserve moisture), but their edges never fuse to form complete tubes as in some rushes.



Grass Leaf Parts

Of the three families, the flowers of the rush family are the easiest to interpret (flowers of the grasses and sedges will be dealt with in other articles). The two major genera found in Alberta are the rushes (*Juncus* species) and the wood-rushes (*Luzula* species). The flowers of these plants can be thought of as miniature lilies, despite their small size and drab (usually) brown colour. Like lilies, they have six separate tepals (i.e., floral parts that are too similar to be distinguished as either petals or sepals), around three or six stamens, and a single ovary with three stigmas. The ovary matures into a brown, often shiny capsule that splits open to release the seeds. Rush and wood-rush seeds are ellipsoidal or spindle-shaped, and in some species they have tiny translucent appendages or “tails” at one or both ends. Rushes usually have numerous seeds in their three-celled capsules, whereas wood-rushes have only three seeds in their single-chambered capsules.

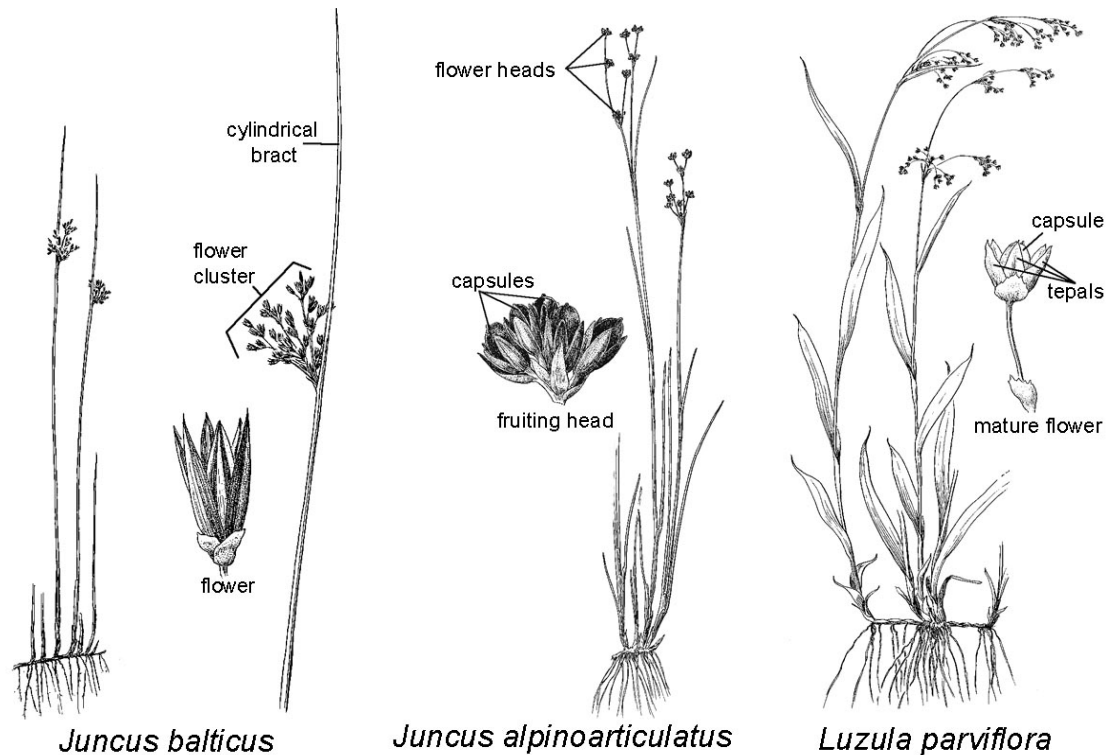
In the rush family, wood-rushes are the most likely to be confused with grasses or sedges, because of the arrangement, texture and relatively broad, flat shape of their leaves.

However, wood-rush leaves can often be distinguished from those of other graminoids by the hairs along the leaf edges near the base of the blade. In comparison, *Juncus* leaves are hairless and more likely to be narrow, and in many species their blades are slender tubes. Although the plants of rushes and wood-rushes are often very different, a close look at their flowers quickly reveals the family relationship of the two genera.

Twenty-one species of rushes and seven species of wood-rushes are described in the *Flora of Alberta**. A key to some of the most common species of this family can be found in the well-illustrated guide, *Plants of the Western Boreal Forest and Aspen Parkland***.

* Moss, E.H. 1983. *Flora of Alberta*. Revised by J.G. Packer. University of Toronto Press, Toronto, Ontario.

**Johnson, D., L. Kershaw, A. MacKinnon, J. Pojar. 1995. *Plants of the Western Boreal Forest and Aspen Parkland*. Edmonton, Lone Pine.



Juncus and *Luzula* illustrations from Hitchcock, C.L., A. Cronquist, M. Ownbey & J.W. Thompson. 1955-69. *Vascular plants of the Pacific Northwest*. 5 Volumes. University of Washington Press, Seattle, Washington, with permission.