

WAGNER NATURAL AREA NEWSLETTER

Volume 8 Number 2 October 1994

Newsletter of the Wagner Natural Area Society, Management Committee
and Volunteer Stewards of Wagner Natural Area, Spruce Grove, Alberta



Wagner Natural Area Society presents

Annual Members' Night 1994
on Thursday, October 20, 1994 at 7:30 p.m.
in the Provincial Museum Lecture Room, Ground Floor

"Managing North of Bruderheim Natural Area"
Stewards Dennis Jonker and Jan Carroll will speak on their experiences
as stewards of this Natural Area

Jack Wojcicki, Public Relations Manager for The Dinosaur Project, The Ex Terra
Foundation, will relate his experiences with invertebrates (we think) in a talk entitled:
"From Sandman to Spiderman and Back: Pond-ering what I've Done."

President's Report, by J. Derek Johnson

Refreshments to follow. Please bring your own mug. Admission is free and open to everyone. There will be
an opportunity to buy or renew memberships in the Wagner Natural Area Society.

Meadow Blazingstar
(*Liatriis ligulistylis*)
in North of Bruderheim
Natural Area.
Photo: P. Cotterill



Wagner Wildlife Encounters

by Edgar Jones

On June 22 this year, Alice Hendry advised me that Aileen Rhodes, a former Wagner summer student, had seen a small owl poking its head out of one of the owl boxes on the Wagner property. To authenticate the species, Alice and I checked this box on the same date and we found a saw-whet owl sitting on six eggs, a normal clutch for this species. One meadow vole was in the nest box. On June 23, the box was checked again and photographed from a ladder, and this time a little brown bat, which had presumably been caught by the owl, was inside the nest box. The nest box was not visited again until July 13, at which time I banded the adult female and the four oldest of the six young in the box. The two youngest still had their eyes closed and were too small to accept a band. The female sat close by and watched the procedure. No prey items were in the nest at the time of this visit.

On June 23, while I was banding five young tree swallows in one of our many



Saw-whet owl's eggs and little brown bat (prey ?) in nest box.

Photo. E. Jones

boxes, John Klem, a friend who was with me at the time, flushed a female common snipe off four eggs. The nest was in a stand of young fireweed plants. Sandra Tober reported the location of another nest when she flushed a female off four eggs near the marl ponds, on June 2.

On June 30 I was again in the area making yet another attempt to locate a pair of great crested flycatchers which Alice had reported near her house. Alice and I then walked into a swamp to try to determine the owner of a nest of four eggs which she had found a couple of days earlier. Judging from the very short glimpse we got of the female bird as she flushed off and the size of the nest and eggs, I came to the conclusion it was the nest of a white-throated sparrow. This species seems to have diminished quite rapidly over the years. The cause is unknown, but is currently under study by wildlife authorities.

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President's Report

by J. Derek Johnson

It's been another busy year for the Wagner Society, with no shortage of activities, tasks or issues to deal with.

We were again able to hire a SEED student for the summer. Sandra Tober, in addition to carrying out regular site maintenance duties and being the Society's visible presence before the public, was also busy with many of the research activities the Society has initiated over the years. These included the Breeding Bird Survey (over 70 species encountered this year) and the Butterfly Survey, begun last year, which netted (!) 31 species over a nine-week period. These studies were started to keep track of the various species found in the Natural Area and how their populations change over time. The tree swallows in our network of nest boxes did better this year than last with the weather generally being more favourable at fledging time. The amphibians at Wagner also enjoyed a successful year after two previous dry summers when few tadpoles survived. Sandy also made prints from some of the slides in the Wagner collection so that we would be able to change the theme of our display to suit presentations to different groups of people. Thanks for your efforts, Sandy. They're much appreciated and we're glad you enjoyed your summer at Wagner.

In the good news department, the interchange at Secondary Highway 795 and Highway 16X has been completed and appears to be operating smoothly. The only immediately evident effect on the Natural Area has been garbage blowing into the site from the construction area.

General maintenance of the site was not too demanding this summer, with few

attempts being made to burn down the picnic shelter (!) but some inconsiderate people still continue to dump garbage at various access points into the Natural Area.



It's been a great year for amphibians in Wagner.
Wood frog, *Rana sylvatica*.
Photo: Natural and Protected Areas

In the bad news department, beaver are becoming a problem in parts of the Natural Area. Even though the resident beaver were trapped out this year, a lodge east of the entrance gate on old 118 Avenue continues to attract beavers moving through the area and their damming activities have resulted in the death of many trees and the occasional backing up of water into a marl pond. The lodge cannot be blown with explosives because it is too close to Highway 16X, so the Society is looking at other options of how to remove it. In the arena of plant problems, infestations of Canada thistle and perennial sow-thistle are becoming more serious in some of the fields and along trails.

Several formally and informally organized tours and presentations were done by the president and other society members over the summer, resulting in the president's T-shirt collection increasing by two! Members of the Society also had the

opportunity to review and comment on the section on Wagner that is to be included in the upcoming Edmonton Region Wildlife Viewing Guide that is being steered by Harry Stelfox of Alberta Fish and Wildlife Services.

The Society has received a generous donation of \$275 from the Environment Club of the Neil M. Ross School in St. Albert. The money will be put towards purchasing another bench for the Marl Pond Trail.

The Society has been wrestling with a management plan for the Natural Area for some time. After a lot of discussion amongst members and input from Society vice-president Dave Ealey and staff of the Natural

Areas program, we have adopted in principle a working document based on a Cathy Mowat's original M.Sc. thesis.

As I write, the Society looks forward to another interesting annual members' night on October 20, with speakers Dennis Jonker and Jan Carroll from North of Bruderheim Natural Area as well as water spider specialist Jack Wojcicki. The Wagner recognition award will be presented again this year. Barry Jenkins will be recognized for his services as president during the turbulent time of the road controversy and as a member of the successful negotiating team known as the WAGSAG committee.

OOOps!

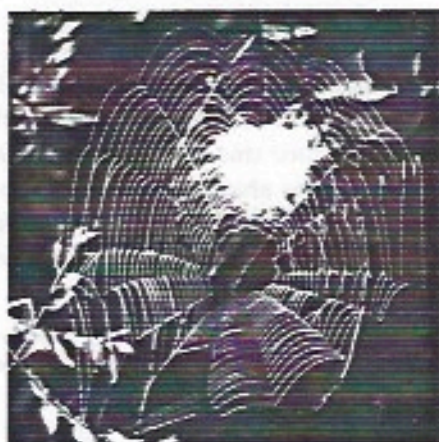
My apologies to those of you whose last Wagner newsletter contained an article on beavers that stated that absence of the penis bone indicated that the beaver was a male. This was not due to lack of sex education on the writer's part but rather to careless editing on the editor's part (actually one and the same person!). Fortunately no complaints were received from gender-challenged beavers, so no harm done. The promised (threatened!) second instalment of the beaver article will appear in the next issue, owing to an abundance of other copy for this one.

—Ed.

Wagner Society Executive, 1994

President - Derek Johnson (436-8231)
Past President - Terry Thormin (482-1389)
Vice-President - Dave Ealey (422-0858)
Treasurer/Membership Director - Janice Cantafio (963-3938)
Secretary/Newsletter Editor - Patsy Cotterill (481-1525)
Director/Public Relations - Alice Hendry (962-4836)
Director - Barry Jenkins (458-1794)
Director - Edgar Jones (436-5327)

In the event of an emergency in the Wagner Natural Area, please contact Natural and Protected Areas staff, Dept. of Environmental Protection, at 427-5209.



Did you know that many spiders don't weave webs or orbs at all? They rely on a variety of techniques to hunt down their prey. Terry Thormin, leading a Bug Walk on August 20, gave us some fascinating glimpses into the *modus operandi* of spiders.

Photo: L. Cummins

Summer Student's Report, 1994

by Sandra Tober

Altogether, the summer of 1994 has been a very interesting and rewarding one. This report will highlight some of my activities and findings throughout the summer.

My summer at Wagner started on May 16. My first priority was to get acquainted with the area and that involved reading the student information package, which was very useful. I have since tried to organize it further as well as add to the information, hopefully to aid future students. Organizing the information that is available on Wagner may be an ongoing project that would be worthwhile for other students to consider undertaking.

Two projects were completed over the summer, the Breeding Bird Survey and a butterfly survey. It is hoped that both will be continued over the years. The butterfly survey has been set up so that it only takes a little over an hour a week at the least, allowing future students to pursue other interests as well if they are not particularly interested in butterflies.

The Breeding Bird Survey (BBS) resulted in over 70 species reported during the summer with 48 species found on the actual survey itself (within the survey parameters). Some major changes were made to the methods of the BBS as I felt that it should be a little more scientific so that the numbers obtained by the students can be more comparable year to year. The major change

was in the time allowed to count birds at each point, which was reduced to three minutes (down from as high as 30 minutes). I purchased a tape recorder as an aid in bird identification. I taped the songs I didn't know and then took the tapes to Terry Thormin for song identification.

The butterfly survey is something new for Wagner. It expands on the idea of the 1993 survey, which was to find out what butterflies are in Wagner, using more scientific methods. The survey is basically a transect count of butterflies found along the Marl Pond Trail route, starting from the gate entrance and ending where the loop meets. It was based on a British butterfly monitoring scheme that has been in place since 1976 in various natural areas in Britain. Completed over the years, this survey can keep track of the various butterfly species, their flight periods and some of their population dynamics. A butterfly net and spreading boards were ordered and I participated in John Acorn's butterfly course to prepare for the survey. The 1994 survey in

Wagner resulted in 31 species being found over a period of nine weeks. All the species were already on the checklist John Acorn has compiled for Wagner. A conservative collection was also made (23 individuals) to be given to Terry Thormin to add to the existing collection. I did attempt to spread some of the butterflies myself,

but after mangling a few skippers decided to leave it to the professionals! I found butterflies to be fascinating creatures and I hope this survey is continued each year. John Acorn also hopes this survey is carried out every year!

Meeting up with visitors at Wagner seemed to be a matter of hit and miss. I did try to make myself available on some weekends when the weather was nice and when more people would be expected. Unfortunately, I usually ended up spending that time alone, meeting only one or two people. May and June seemed to be the months I met up with most people but I don't know how accurate an assumption that is. I did manage to give a few informal tours and some people did enquire about getting tours of the area. I told them to call Natural Areas but nothing ever came of it. Perhaps more information on this posted on the bulletin board at Wagner would be useful. Hopefully, the guest books that are now in place will last (as I chained them to the posts) and will give more information on the numbers that go through as it has in previous years.

The two deer stands found earlier in the summer were taken down in mid-June. No other stands or traps were found otherwise. More than one deer skull with its top cut off (the trophy, no doubt) was found in the area. Only skulls and a few rib bones were ever found and it is unknown if these animals were killed in Wagner or if the bones were just simply dragged off Jasper Keizer's gut pile by coyotes. [Mr. Keizer is an Osborne Acres' resident and taxidermist.—Ed.]

I came across a number of mammals in my wanderings throughout the area. Most notable was the moose cow with twin calves that I stumbled upon more than once on the BBS. White-tailed deer were also in abundance as well as snowshoe hare and various species of voles and mice and, of course, red squirrels. A beaver was seen in the southwest dugout. There were many signs of coyotes but none were ever seen. On one occasion, I startled an ermine, or short-tailed weasel, in Atim field. It may have been there for the nest boxes although I suspect only one nest to have been preyed upon. This nest had

had its eggs mysteriously removed (at least, they were eggs the last time I checked but they might have hatched since). The birds re-laid and then the nest was abandoned. A domestic cat was also seen sitting beneath a nest box, apparently waiting for something to come out. Although predation did not seem to be a large factor in the success of the tree swallows in '94, it should be looked for in the future and steps perhaps taken to reduce it.

The tree swallows did very well this summer despite some bad weather. Only one full nest was lost to a period of cold, rainy weather. Twenty-eight nest boxes have been found in Wagner: 10 in Atim field, 15 in the Villeneuve field, two along the eastern fence line and one at the end of the Cabin Trail by the south fence line. It is possible that more are scattered throughout the area. In addition, there are two owl boxes. The first box contained a family of northern saw-whet owls that were subsequently banded by Edgar Jones. The second owl box was found at the end of July and was apparently empty. The locations of these nest boxes are marked on the map in the BBS report so they can be found next summer and then checked earlier.

Minnow trapping was done in August to see if any new minnows had made their way into Wagner. Minnow traps were placed in the south beaver pond, the flooded culvert by the parking lot, and in Jones's Pond. The traps were set overnight twice in each area. Only two species were found, the brook stickleback and the fat-head minnow. Both are expected species in Wagner. The brook stickleback is by far the more abundant species judging from the amount caught (one trap had well over 100 brook stickleback with only a few fat-heads). Some samples of the minnows were taken to Wayne Roberts at the University.

Amphibians at Wagner had a very good summer with the majority of the tadpoles making it out of the marl ponds before they dried up. Boreal toads and wood frogs were the only amphibians seen. The periodic rains came at the right times for the tadpoles, the majority of those

in the ponds along the Marl Pond Trail being toad tadpoles. Wayne Roberts commented that a transect survey is also possible with frogs and toads and this may be of interest to future students.

Beavers were fairly active at Wagner this summer. Besides activity in the the two beaver ponds in the area, a beaver tried to make the flooded culvert by the parking lot home. Bill Richards from Natural Areas came out to assess the situation and together we pulled apart the dam that was in place in the northernmost marl pond. Several attempts were made by the beaver to dam the culvert as well but we cleared it out each time. Bill Richards suspects this beaver is either a young one or may even be one of a series of transient beavers trying to find their own territory. In any case, he recommended the lodge be destroyed to discourage beavers from settling in that area.

I had intended to provide a more recent map of Wagner that would incorporate the whole area as well as the new road. Unfortunately, I was unable to find a good base map to copy from and then I simply ran out of time. Future students may want to tackle this as it would be helpful.

The battle with the thistles was lost this summer. I did make attempts to pull them but then resigned myself to simply cutting the flower heads off and even that did not seem to have too much effect. The thistles along the Marl Pond Trail are easier to manage, but they are becoming quite numerous in the fields. More intensive methods may be needed to control them.

Overall, the maintenance of the area was not too demanding. Besides the deer stands which had to be taken down, there was only garbage to contend with (usually fast food garbage in the parking lot) and cleaning of the picnic shelter and bathrooms. There was no vandalism evident in the area. Two loads of garbage were dumped along the entrance road but the County of Parkland was quick to clean it up. The County had to be shown where the tires in the south road allowance were but they also were eventually cleaned out.

Thirty slides were converted to prints for the Wagner Natural Area display. The selection of slides was left to me and I chose them with the general public in mind (meaning a little bit of everything and most of the "people" pictures to give an idea of what the area is like and that people go there!). Some of these pictures can be reduced to focus in on the subject as well as to vary the sizes of the pictures on the board.

This summer has been a great learning experience for me, giving me the opportunity to learn about a wide variety of subjects, from birds to butterflies, fish to spiders. I would like to thank the Wagner Natural Area Society for providing this opportunity to students. The experience from Wagner will be valuable in my future career and I hope I was able to make a contribution as well.



Edmonton Plant Study Group — Upcoming Meetings

(Contact person: Patsy Cottrell, 481-1525)

Saturday, November 5, 1994. Workshop at the U of A herbarium, 10 a.m. to 3 p.m. Meet in the main (2nd floor) lounge in the Bio Sciences Bldg at the U of A.

Monday, November 14, 1994. Dan McIsaac, forest ecologist with the Canadian Forest Service, will speak on biodiversity and forest management in Alberta's boreal forests. Meet 7:30 p.m. in the ground floor lecture room of the Provincial Museum.

Thursday, December 1, 1994. "In Praise of Plants," an evening celebrating plants with slides, pictures, readings, crafts, baking, etc. Meet at 7:30 p.m. in the ground floor lecture room of the Provincial Museum.

Saturday, December 10, 1994. Second workshop at the U of A herbarium. Arrangements as for November 5.

Plant Highlights, 1994

by Patsy Cotterill



Yellow Lady's-slipper (*Cypripedium calceolus*) bloomed in profusion in June.

Photo: J.D. Johnson, courtesy of Federation of Alberta Naturalists

May Count

The annual Wagner May Count took place on May 29 this year with eight people taking part—Diana Barager, Pat Clayton, Patsy Cotterill, Rae Ermine, Claire Radke, Frank Rusconi, Jennifer Thompson and Sandra Tober—to record a total of 68 species. (Actually 64 on the 29th, and an additional four during a visit to the northeast part of Wagner the following day.) This compares with 80 recorded for 1993, and 52 for 1992. Alice Hendry was unfortunately out of town for this year's May Count weekend, and we missed her sharp eyes and intimate familiarity with the Natural Area.

Phenological variation or observer error or bias? When you don't find some of the inconspicuous graminoids it's difficult to know whether you didn't see them because they weren't in flower or because you haven't looked hard enough. A big problem (or a continuing challenge) is that many members of the sedge family don't become conspicuous until after fruit set is well advanced. I was disappointed not to be able to find any few-flowered spike-rush (*Eleocharis quinqueflora*), Alpine Cotton-grass (*Scirpus hudsonianus*) and Dwarf Bulrush (*Scirpus pumilus*) in the southeast fens on the May Count this year. Perhaps the only way to get a proper handle on the flowering dates of these species is to mark appropriate populations of them permanently and then be sure to reconnoitre them weeks and days

before the May Count. Other disappointments included Swamp Currant (*Ribes lacustre*)—no specimens located though we found several last year—and Purple Avens (*Geum rivale*)—not a common plant but we usually manage to come across a few. Nor was there any sign again this year of Calypso orchid (*Calypso bulbosa*) before, during or after the May Count. Our group found Yellow Lady's-slipper close to flowering—close, but no cigar. (It was unfortunate that we did not look in the Villeneuve field, because there on a return visit to Wagner the following day I ran into a couple of clumps brilliantly and unmistakably in flower.) On the other hand, we did find our Northern Valerian (*Valeriana dioica*), a western plant that is always a thrill to find in flower. One or two buck-beans (*Menyanthes trifoliata*) were in flower in the usual place (the watercourse east of Jones's pond), and we spotted Heart-leaved Twayblade (*Listera cordata*), another species we always hold our breath and hope to find. Of special interest was a new record and new plant for the Wagner checklist, Meadow Foxtail (*Alopecurus pratensis*), which appeared in a patch just outside the main gate (and later on in the season in scattered locations elsewhere on the property). Derek Johnson thinks this early-flowering grass may have been present last year and the source of the record of Timothy (*Phleum pratense*), which it closely resembles. The origin of the Meadow Foxtail population is intriguing. Derek notes that it is relatively common in the south of the province as a result of sowings, but agriculturalists have denied deliberately planting it this far north.

The day after the May Count I located the site (I think) where two weeks earlier Derek had led us to a photogenic display of Long-spurred Violet (*Viola selkirkii*), but not one flower remained in good enough shape to be included in the May Count. I did, however, find some Marsh Violets (*Viola palustris*) still in flower by Morgan Creek, and noted, as I was clambering about, some superb specimens of Narrow Spinulose Shield Fern (*Dryopteris carthusiana*) and Oak Fern (*Gymnocarpium dryopteris*).

Perhaps I'm getting old but it now occurs to me that there may be better ways to conduct the May Count in Wagner than cramming it into a seven- or eight-hour marathon on the Sunday. We could divide the area up, for example into east, west and central

sectors, the east including Morgan Creek, the poplar woods (where, incidentally, Purple Avens can invariably be found provided we have the time to look), beaver pond and dam, Villeneuve extension and south fens, the central portion including Jones's pond, the central woods and the Cabin Trail, and the west including the dugout, western woods and the Marl Pond Trail. These sectors could be tackled at different times during the May Count weekend or else we could employ division of labour to cover them simultaneously. Moreover, if we had a special custom-made May Count checklist for Wagner, containing only relevant species and several years' worth of records at a time for quick comparison, we could perhaps make our check marks more quickly and also be alerted to what we are missing.

Orchids Galore!

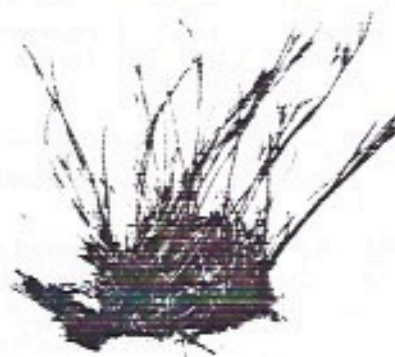
By all accounts, with the exception of the missing Calypso orchids, this has been a great year for orchids in Wagner. Alice reported Heart-leaved Twayblade in bloom early in the south-east fens and muskegs. By the time of the Orchid Walk on June 12, Yellow Lady's-slipper was out in profusion at multiple sites around Wagner, including the Marl Pond Trail, the mixedwoods alongside old 118 Avenue east of the marl pond, the Villeneuve extension and the Cabin Trail. (The Orchid Walk was so popular, by the way, with 33 participants, that two groups were formed, with Derek and Irl Miller as leaders.) During June, too, Alice found Round-leaved Bog Orchid (*Habenaria orbiculata*) again on the Cabin Trail, south of the cabin site. She is not sure that this is the same plant that was found the previous year but the location is pretty close. And on July 7, the evening of the Mushroom Walk, Pat Clayton drew our attention to a beautiful specimen of Bracted Bog Orchid, *Habenaria viridis*, growing in scrub close to the end of the Marl Pond trail. It soon became the object of much photography.

On July 21, Alice and summer student Sandra Tober spent the day doing a comprehensive search for Bog Adder's-mouth orchid (*Malaxis paludosa*) in the southeast and south-central parts of the property. By the time I joined them in mid-afternoon (after wading through head-high Yellow Sweet-clover along the east-west access road and negotiating a muddy beaver dam), they were already well on their way to reaching their final total of 23 plants! Clearly this diminutive rare orchid is holding its own in Wagner. There were fewer individuals in the original clump (at the Tall White Bog Orchid site)

and this high total derives from scattered individuals or clusters of two or three. Almost all were growing in *Tomenthypnum nitens* moss at the edge of muskeg.

Moving south-east from the large marl pond on the Villeneuve extension south of the fence line, we came across a good patch of Blunt-leaved Bog Orchid (*Habenaria obtusata*), along with scattered *M. paludosa* and White Adder's-mouth (*Malaxis monophylla*), this last species also being dispersed throughout the southeast (and elsewhere). Counting also Northern Green Bog Orchid (*Habenaria hyperborea*), Tall White Bog Orchid (*Habenaria dilatata*) and Hooded Ladies'-tresses (*Spiranthes romanoffiana*), we observed six species of orchid in flower that day. Among the numerous other plants in flower at this time, incidentally, were both Sundew species (*Drosera rotundifolia* and *D. anglica*) and Intermediate Bladderwort (*Utricularia intermedia*). We also noted two colonies of the rare Flat-topped White Aster (*Aster umbellatus*), with no flower buds yet in evidence.

Stalking the Rarities



Slender Beak-rush, *Rhynchospora capillacea*.
Photo: P. Cotterill

On July 25 I was walking south on the Villeneuve extension in the company of Sandra Tober and Robin Bovey when I came across two patches of Long-styled Rush (*Juncus longistylis*) just south of the long-standing patch of Joe-pye Weed (*Eupatorium maculatum*). (This last species, incidentally, continues to flourish but does not seem inclined to expand or reproduce its kind.) In my experience this is an uncommon rush in this region and, although it is on the Wagner checklist, I personally hadn't seen it here before. On September 24 I found another specimen, on the Cabin Trail at

the cabin site, clearly growing in a similar habitat to the Villeneuve extension, a wet but trodden track.

Later on the afternoon of July 25 I proceeded (rather late in the year) to check on our two graminoid rarities in the southeast, Slender Spike-rush (*Eleocharis elliptica* = *E. tenuis* var. *borealis*) and Slender Beak-rush (*Rhynchospora capillacea*), the latter "re-discovered" last year. Once I had got my eye in, the *Rhynchospora* proved to be relatively common in the fens at the southeast corner (including inside the fence line). Where it existed as isolated tufts in the fens it was easier to spot, although after a while I could distinguish it even when it merged into the other fen vegetation. The leaf tufts were bright green with a whitish look produced by dead leaves at the base and, at least for the less well developed plants, looking for these tufts proved more helpful than looking for the very inconspicuous inflorescences. The species was also common in the flooded ruts of fens west of the Villeneuve extension opening (rutting caused by ATVs several years ago). I did not check the large marl pond further south where we found Slender Beak-rush last year, but likely it was present there too. Further investigations in subsequent years should shed some light on why this species has suddenly become prominent again after an absence

of about 18 years. Has it been overlooked or does it mysteriously wax and wane? The *Eleocharis* was more difficult to find inside the fence line, although I did eventually come across some in the southeast fens in roughly the same area as the *Rhynchospora*. It was relatively abundant in the rutted fens south of the fence line, however, co-occurring there with *Rhynchospora*. However, its absence from the fens and the Villeneuve extension where it was found in 1990 and 1991 suggests that it has somehow lost its aggressive streak. To what extent do both these calcium-loving plants also like disturbance?

That afternoon I also took a moment to examine the patch of Meadow Foxtail alongside the main gate that had first drawn our attention during the May Count. The spikes were a dark colour now, and the spikelets coming away cleanly from the stalk of the spike to leave a naked rachis. This contrasted with the look-alike spike of Timothy grass which flowers later and remains green in July, and in which the spikelets will fall away (disarticulate) only in part, leaving behind the glumes. An easier way to tell the two species apart, however, is probably the "touch test." Meadow Foxtail spikes feel much softer because the glumes lack spiky awns as in Timothy and are beset with soft hairs.

Membership in Wagner Natural Area Society

The membership year runs from January 1 to December 31. Please consider renewing promptly to continue your support of the Society and Wagner Natural Area. Fill out the membership/renewal form below and mail it with a cheque to Wagner Natural Area Society. Do the same thing if you are joining the Society for the first time. As a member, you will receive free copies of the newsletter (2 per year) and an invitation to the Annual Members' Night in October. Field trips and other activities are organized from time to time. Donations are tax deductible. For more information, contact Janice Cantafio at 963-3938 (evenings).

Please include me as a member of the Wagner Natural Area Society!

_____ Family \$12 _____ Individual/Institution \$10
 _____ Student/Senior \$ 8

Besides my membership fee, I enclose a gift to support the activities of the Wagner Natural Area Society: _____

Name _____

Address _____

Telephone No. _____

**Mail to: Janice Cantafio, Treasurer/Membership Director, Wagner Natural Area Society,
 Box 3100, Stony Plain, Alberta T7Z 1Y4**



The Wagner Grapevine



Bouquets, Many Bouquets!

To **Sandra Tober**, our summer employee, who developed a mean sweep with a butterfly net, for her thoughtful, intelligent approach to her work. We have printed her report in full because it gives Society members a good idea of what goes on in Wagner in the summer, provides executive with necessary feedback, and will be useful to potential students as something of a job description. Sandra already has a degree in biology but is currently pursuing art studies at a college in Calgary, possibly with a view to working in biological illustration. We'd be happy to publish some of her artwork in future Wagner newsletters and that probably goes for most of the natural history publications around town, too.

To **John Acorn, Eddie Jones, Terry Thormin, Alice Hendry and Derek Johnson** for assisting Sandra in the field. No doubt it was a case of virtue being its own reward—they all love an excuse to get out in Wagner in the summertime! Still, their efforts and expertise were welcome.

To the **Neil M. Ross Community School's Environment Club**, supervised by Grade 3 teacher Judith Victoor, in St. Albert, for a donation of \$275. And to **all our other donors** who have made gifts to Wagner during the past year.

To **Marcel's Handie Printing and Rescue Appliances** of Stony Plain for donating printing and materials for our new receipt books featuring the Wagner logo.

To **Dave Ealey and Peter Lee**, for seeing it through with the Management Plan, and to **Alice** for her critical review of their draft.

To **Bill Richards** for guidance on beaver matters and on hunting issues

To **Derek Johnson**, for indefatigable field-guiding during June, and to **Pat Clayton** for promoting Wagner to a large public at short notice during Environment Week.

To **Grace Hill-Rackette**, of the Devonian Botanic Garden, who stood in for a sick Sean Abbott on the evening of the Mushroom Walk, July 7. We missed Sean but we had a good time anyway, getting up close to mushrooms and slime molds and other fascinabilia that often get overlooked!

To treasurer **Janice Cantafio**, for again being payroll clerk to our SEED student.

Brickbats?

Not very many at all though we got a little concerned about ATV tracks at one point and tired of seeing toilet rolls thrown down the biffies!

Hunting came up as an issue again. Sandra dismantled two deer platforms from near the Cabin Trail in the course of the summer at the Society's request. Apparently the hunter who put them up was angered by their removal and complained to a Fish and Wildlife officer. Admittedly, hunting is commonly permitted on Crown land. The fact is, however, that in the case of Wagner Natural Area, the Society is a lessee of the Crown land and thus is at liberty to specify no hunting on the site. Our lease clearly states that no hunting is allowed. Moreover, Wagner is among the exceptions mentioned as being off-limits in the Alberta Guide to Hunting. Our position is based on the idea that Wagner is a sanctuary, not just for wildlife but for people. Our wish is to avoid accidents, higher insurance premiums and any further public liability.



Wildflowers of Wagner (6)

Droseraceae Sundew Family

Drosera rotundifolia L.

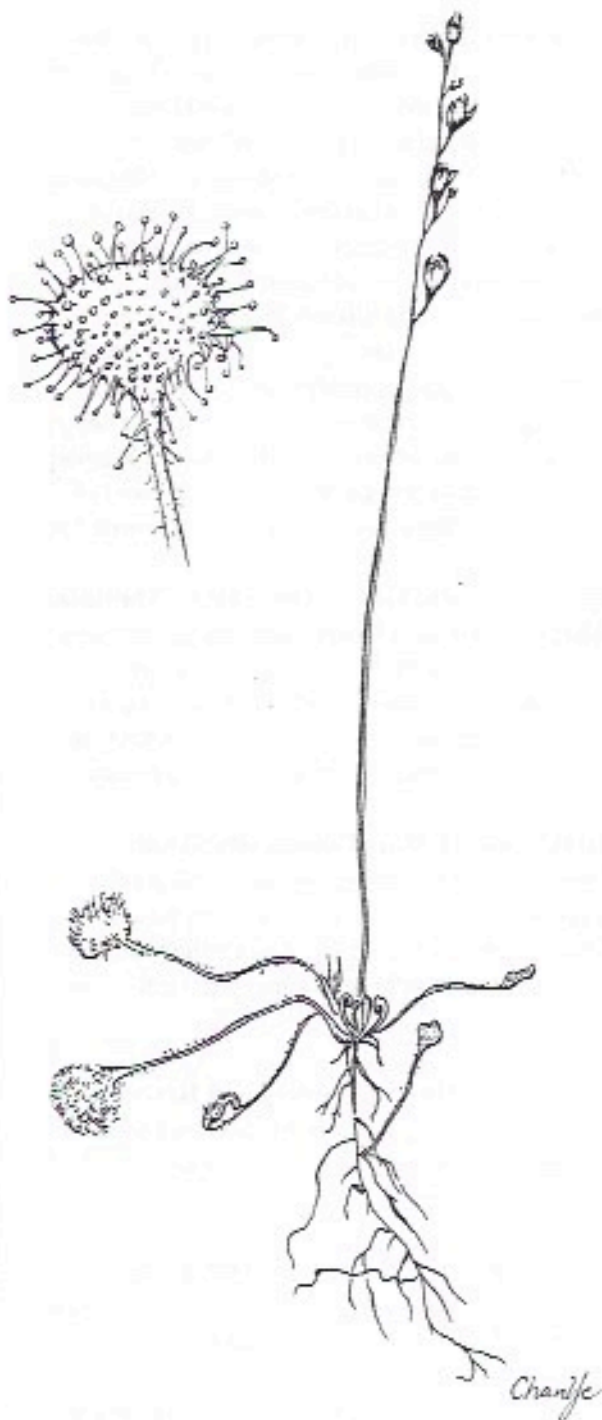
Round-leaved Sundew

Examine any healthy-looking hummock of sphagnum moss in Wagner and the chances are high that you will find in it a cluster (rosette) of spoon-shaped leaves covered in long red hairs. These are the leaves of the Round-leaved Sundew, one of Wagner's several carnivorous plant species.

You can also spot the plant by scanning the sphagnum for Sundew's wiry dark brown flower stalks (scapes) bearing small brown many-seeded fruit-capsules, which persist throughout the winter. The flowers, (3)-5-(10) at the end of the nodding scape, are produced in mid to late July, seem to open only in full sunlight and do not last long. Each flower is small, usually with five petals about 4 mm long and thus slightly longer than the lobed, bright green calyx. In the centre of the flower are five white stamens and a pistil consisting of a cylindrical green ovary and three white stigmas, each two-cleft.

Observers usually find the leaves of Sundew of more interest than the flowers. Long stalks (petioles) up to 4.5 cm long bring the broad blades (about 1 cm across) to the surface of the sphagnum. Long red hairs with red knobs on the end cover the leaf blade and extend a little way down the petiole. Shorter knobbed hairs occupy the centre of the leaf, which is smooth and hairless below. These are the stalked glands which secrete mucilage that traps insects attracted to the leaves by their colour, odour, or perhaps by the glistening drops of mucilage which, incidentally, give the plant its name. After an insect has become stuck these glandular hairs bend over to trap it more securely. Minute stalkless glands also present on the leaf may assist with this movement. The stalked glands secrete digestive enzymes to break down the soft-bodied parts of the insect and then resorb the products of digestion, the indigestible exoskeleton of the insect eventually drying and blowing away. Carnivorous plants use this highly unusual method of eating (for plants) to obtain nitrogen, deficient in the habitats in which they live.

A similar species, Oblong-leaved Sundew (*D. anglica*) grows in the southeast part of Wagner and flowers at the same time. It can be distinguished by its more elongate leaves and its habitat preference. It does not usually grow in sphagnum but prefers the wetter location of fen edges and islands.



Drawings by Yuet Chan