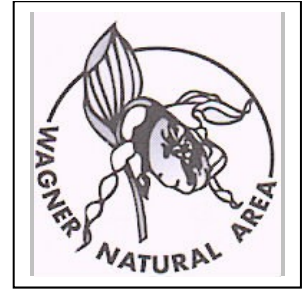


# WAGNER NATURAL AREA NEWSLETTER

Volume 23 Number 2 October 2009

Newsletter of the Wagner Natural Area Society, and Volunteer Stewards  
of Wagner Natural Area, Parkland County, Alberta



Wagner Natural Area Society is pleased to invite you to its **Annual Open House**, to be held on Thursday, **November 12, 2009** at St. Paul's United Church Lower Hall, 11526-76 Avenue, Edmonton. The doors will open at 7.00 p.m. and presentations begin at 7:30 p.m.

Our **keynote speaker** is **Dr. Anne Naeth**, PAg, PBIol, FCSSS, FSTLHE, Professor of Ecology and Land Reclamation, Department of Renewable Resources, University of Alberta. Dr. Naeth will speak on:

### **Getting Back to Nature: Restoring Degraded Ecosystems, Large and Small**

"Dr. Naeth's research program in land reclamation and ecological restoration is both theoretical and

applied, focusing on lands impacted by natural resource development such as pipelines, mines, well sites, quarries and roadways; lands used for agriculture, grazing, forestry and recreation; national parks and protected areas; contaminated and abandoned lands. Her work includes remediation, revegetation and soil reconstruction using waste materials with a specific focus on accelerating soil-plant community development. In this presentation Dr. Naeth will highlight restoration projects ranging in scale from large disturbances such as the oil sands to small protected or special interest areas. She will discuss some of her methods for successful restoration, the challenges inherent in ecological restoration, and some of the current issues associated with ecological restoration."



This is a formerly cultivated field in the south-east portion of the property that the Wagner Society is attempting

President **Pat Clayton** will present the highlights of Wagner Society's year. In addition, there will be two displays, one by **The Wildlife Rehabilitation Society of Edmonton**, and the other of paintings of Wagner Natural Area by Spruce Grove artist **Judy Martin**. Admission is free and open to everyone, and refreshments will be served. Memberships in Wagner Society can be purchased.

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**Development in Acheson**

Wagner Society has had two meetings with industry representatives recently concerning land development in the Acheson-Spruce Grove area. On September 8 the Society met with Nelson Environmental Remediation Ltd at their request to hear their plans for stormwater management on their site west of Acheson Industrial Area. On October 6 representatives from Select Engineering Ltd met with us to discuss our Statement of Concern filed with Alberta Environment Regulatory Approvals. This was regarding an application by Consor Developments Inc. to build two stormwater lakes located between Spruce Valley Road and Acheson. As always, our concerns with development are reduced infiltration and replenishment of the aquifer feeding our springs, and increased flows and erosion in Morgan Creek. Alberta Environment will make the final decision on the development design.

**Annual Alberta Parks Volunteer Conference**

Several Wagner Society members took advantage of Alberta Parks' annual thank-you to its volunteers by attending this conference, held this year in Lethbridge, September 18-20. A highlight of the weekend was the Saturday field trips within and around Writing-on-Stone Provincial Park, where afternoon temperatures exceeded 40°C! Another highlight was the

presentation by **Colin Weir** of his work at the Alberta Birds of Prey Centre in Coaldale, "a 25-year case history of volunteerism", complete with live examples of rescued birds! Sunday morning indoor sessions included topics such as eco-based partnerships and weed management, along with a workshop on steward issues and a "Host Chat" for campground hosts. Parks staff did a great job of organizing a pleasurable weekend; they even got the weather right!

**Bouquets**

Bouquets to **Pat and Dick Clayton** for going beyond the bounds of duty with a summer of monitoring and maintenance volunteering in Wagner.

Another bouquet to a neighbour of the Claytons, **Tony Sneep**, for helping out so enthusiastically on Fall Clean-up Day, October 3.

More bouquets....to **Robin McLeod** and **Alissa Wilson**, the coordinators of the NCC conservation volunteers, as well as to **Irl Miller**, for organizing and executing the productive volunteer day of September 26, and to the volunteers themselves, of course.

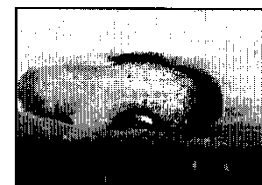
Finally, a bouquet also to **Cathy Mowat** for developing our creative new "scoop the poop" signs!



From left: Tony Sneep, Dick Clayton and Mike Jenkins install a new donation box at the kiosk along the Marl Pond Trail, October 3, 2009.  
Photo: P. Cotterill

**Nature Nugget**

Ever noticed the stems of willows lying on the grounds, seemingly broken off at the base? This signals the work of a European weevil (a type of beetle with a long snout) called the willow and poplar borer (*Cryptorhynchus lapathi*). The adult weevil lays an egg under the bark of the bush or tree and the emerging grub or larva (white with a brown head) burrows into the inner bark and then into the wood, creating tunnels that weaken the stem of the host making it liable to break. Hence the prostrated stems with dead or dying leaves. These weevils are difficult to control artificially but nature has its methods. Daryl Williams, a scientist at the Northern Forestry Centre in Edmonton, examining a larval specimen from a willow in the river valley, found that it was being parasitized by a fly, later identified by a colleague as a syrphid fly, *Ferdinandea buccata*.



Left, adult weevil; right, larva (not to the same scale).  
Photos by G. Csoka from the Internet.

## Tangle Trap Teardown! Project

On Saturday, September 26<sup>th</sup> Wagner Natural Area was the beneficiary of a huge volunteer stewardship effort, masterminded by **Robin McLeod** and **Alissa Wilson** of the Nature Conservancy of Canada (NCC)'s volunteers program and **Irl Miller** of Wagner Natural Area Society. It was creatively dubbed the Tangle Trap Teardown event by the NCC coordinators, in reference to the main objective of the day which was to remove old fences from various stretches along the southern parts of the property. No longer serving any purpose, rusty and in many cases barely visible amid the tangled growth, these barbed wire fences present a hazard to wildlife. Also removed were two old deer-hunting platforms, 20-foot high up in trees. Two brave women, Connie and Heike, volunteered to clamber up and dismantle these under the guidance of Irl, who had thoughtfully provided them with safety ropes in case of sudden descents, of platforms or personnel!

Other teams, guided to their destinations by Wagner Society board members, unstapled wire from posts and trees and rolled it up. Despite the stiffness and intractability of the wire, and its snagging, tetanus-threatening barbs (of course we had good gloves and goggles), many volunteers managed to coil their lengths into perfect circles, ready for easy pick-up later on.

By the early afternoon, according to NCC calculations approximately 1.25 miles of 3-strand barbed wire fencing, for a total of 3.75 miles, had been removed and rolled, and the two hunting platforms had been safely demolished.

Unfortunately, the day was not without drama of the medical kind, however. Pat Clayton, President of Wagner Society, suffered an allergic reaction to a wasp sting and had to be evacuated by an emergency response team, for a sojourn in hospital emergency. Pat, one of our most hardworking field volunteers, is now equipped with an EpiPen against future onslaughts!

Wagner Society was highly impressed by the number of people who turned out to volunteer, including a heartening number of young people. If anyone would like to do further volunteering in the Natural Area (not necessarily fence removal, although there is still some fence left), please feel free to do so. Please visit the Society's website at

<http://wagner.fanweb.ca/> to keep abreast of opportunities. The NCC will of course continue to run its conservation volunteer events program in 2010, for which information can be obtained at

[www.conservationvolunteers.ca](http://www.conservationvolunteers.ca).

In the meantime, Wagner Society would like to say a hearty thank-you to the NCC and all the hard-working and enthusiastic volunteers it corralled! We hope you will come back often, even if only to take *leisurely* strolls along the Marl Pond Trail, just to enjoy the nature!



Connie and Heike get high for Wagner! as they dismantle an old deer-hunting stand.

*Photo: Nature Conservancy of Canada*



Volunteers and Wagner Board members assemble before heading off for a day of demolition in Wagner Natural Area.

*Photo: Nature Conservancy of Canada*

## Harvesting in Natural Areas – Should It Be Allowed?

By Patsy Cotterill

During this past summer one of our Wagner board members confronted a visitor who was entering Wagner Natural Area with bucket in hand. She asked him what this bucket was for, and he replied that he was planning to pick mushrooms. When she suggested that this might not be such a good idea, things escalated into an argument that ended with the would-be mushroom picker stomping out of the Natural Area, declaring that although he had been a regular visitor to and supporter of Wagner for many years he would not be returning. This was a most unfortunate outcome indeed, for the Wagner Society, the stewards of the Natural Area, do not want to discourage the public's enjoyment of the site, and especially not that of a faithful supporter.



Shaggy Parasol mushroom, *Macrolepiota rhacodes*, growing in a roadside ditch alongside Wagner Natural Area. Photo: P. Cotterill

I can have some sympathy with the visitor, reflecting that it is only human nature to react negatively when one's seemingly innocent actions are called into question. And harvesting, whether of mushrooms or berries or plant material for wildcrafting, is part of one's experience of nature, a natural human hunter-gatherer instinct.

It is of course useful and often necessary to collect scientific specimens from protected areas, as this is the only way they can be properly identified, catalogued and preserved as a permanent record for study. This applies particularly to plants, fungi and insects, although our knowledge of birds and mammals has of course been built up on study specimens collected in the past. Protected areas are often the only places where such activities can be carried out.

On the specific matter of mushroom collecting, I decided to consult Dr. Markus Thormann, wetland ecologist, mycologist, and former president of the Edmonton Mycological Society, for his thoughts on picking mushrooms in Wagner Natural Area. He and his fellow fungi-fanciers collect mushrooms annually in Poplar Lake Natural Area southwest of Edmonton. Thormann likens picking a mushroom to picking the fruit off a tree. The mushroom is the fruiting body and removing it still leaves

most of the fungal biomass (the white fungal threads constituting the mycelium) below ground or in whatever substrate (log, stump, etc.) the mushroom has grown in. If the picking is done on a small scale and the mushroom is cut with a knife so the mycelium is not damaged, there is little impact. Thormann recommends using a basket so any spores that drop from the mushroom cap fall to the ground and are not lost to the ecosystem. However, he notes that where there are large numbers of mushroom pickers and tools such as rakes are used, as in some European countries, sufficient mycelial damage may result that fruiting is reduced in subsequent years.

Nevertheless, Thormann does not recommend mushroom picking in Wagner Natural Area. Visitors are pretty much confined to a single path, the Marl Pond Trail, so removing mushrooms will likely reduce the opportunity for other visitors to appreciate them. It may also reduce our ability to catalogue them scientifically. Bill Richards, of Alberta Parks, and also a keen mycologist and mushroom picker, concurs. Unlike Poplar Lake Natural Area, Wagner is very popular, with many more visitors, so the detrimental effects of mushroom harvesting are likely to be greater in several respects. Richards notes that while it is not illegal to pick in provincial protected areas, the Wagner Society leases Wagner Natural Area and so can put more stringent regulations in place, if it wishes to.

Mike Jenkins, an entomologist with the City of Edmonton and also a Wagner Board member, points out that squirrels use mushrooms for their winter caches, and mushrooms provide food for many insects.

So it seems that our Board member was well justified in discouraging our visitor from his intended harvest. Does this mean we should deny our harvesting instinct on public land, then, and be content only to look and take photos? Are there simply too many people in the world now and too few wild places to allow wild harvesting? On a commercial scale, likely yes. But what about for personal bounty or as a hobbyist?

I have a few suggestions to make in this respect. We need to appreciate all land that it is naturally vegetated for its true value as a scarce resource, both for human activities and for wildlife (though these two uses may remain separate. We need less of the government's "multiple use" concept, designed to maximize the amount of land in economic use.). This means the Provincial Government should never again sell off any land that is wild or semi-wild. Likewise, municipalities, rural and urban, should recognize that areas of wild, unkempt land for people, including children, to hang out in – as opposed to concrete jungles and manicured landscaping – are important for the proper well-being of their citizenry. Hence they should retain or restore them. There *should* be places where one can pick mushrooms, or blueberries – it is just that Wagner is not one of them!

## Regional Planning and the Conservation and Stewardship of Natural Lands... A Heads-up!

The **Land-use Framework (LUF)** is the Alberta government's new program of province-wide regional planning. Its stated purpose is "to manage growth, not stop it, and to sustain our growing economy, but balance this with Albertans' social and environmental goals." Well, it's lost me, right there. I don't believe it's possible to use the words "growth" and "sustain" credibly in the same sentence. If we are to preserve a reasonably good standard of living and above all the rich heritage of landscape and biological diversity that Alberta has been endowed with, we need a steady-state economy and a stable population to match.

That being said, the LUF nevertheless has a good deal to commend it. Even if Alberta's population does not increase beyond its present 3.7 million, it makes good sense to use (and obversely, not to use) land and other resources such as water, efficiently and harmoniously in a coordinated manner. As the government's LUF document observes, "There are more and more people doing more and more activities on the same piece of land," and there is a need for "making the right choices now."

At present, the province is divided into two regions, the settled White Area, about 39% of the Province, with about 75% of the land in private ownership, and containing most of the population, and the Green Area, primarily forested land, Crown owned, making up about 61% of the land base. The new Framework, officially launched December 2008, will see the Province divided into seven regions based on the major watersheds, but with boundaries aligned to fit with existing municipal boundaries and the Natural Regions delineated by ecologists. Plans that cross regional boundaries will also be accommodated. A **Land-use Secretariat** has been established to develop the regional plans and will work with government departments and the **Regional Advisory Councils** (one for each region), with **Cabinet** giving final approval to the plans. Plans are already in progress for the Lower Athabasca and South Saskatchewan Regions – not surprisingly, as these are the two areas with the biggest issues, the oilsands in the former, and high populations but scarce water supplies in the latter. Work is also under way on the Capital Region Growth Plan for the Edmonton area, which will become a sub-plan of the North Saskatchewan Regional Plan, and for the Calgary region, which will be included in the South Saskatchewan Regional Plan. New legislation in the form of the **Alberta Land Stewardship Act (ALSA)**, which has resulted in the amending of many existing acts, will enable the regional plans to be approved and implemented.

For nature-loving Albertans, much of their interest in the LUF will centre on what it can do to preserve, and possibly even expand and increase in number, open spaces and natural habitats. Indeed, one of the seven strategies accompanying the LUF is a **conservation and**

**stewardship strategy** for private and public lands, for which the government will soon be requesting public input. The tools that the government has already identified for this include:

- transfer of development credits (TDCs)
- conservation easements
- conservation directives
- tax credits for ecological gifts
- land conservation offsets
- tradeable disturbance permits (TDPs)
- lease swapping credits and other incentives

Most of us are familiar with **conservation easements**, whereby landowners retain ownership of their land, but legal constraints to promote conservation are placed on the land which remain in effect if the land is sold. However, interestingly, the government proposes to move the legislation governing easements from the *Environmental Protection and Enhancement Act* into *ALSA* and at the same time extend it to conserve agricultural land also. (Apart from being a good in itself, the conservation of agricultural land also holds promise for preserving wildlife habitat.) The **conservation directive** is a new tool that would allow land of conservation value or agricultural land to be set aside in a regional plan, with compensation for the landowner. An example of a **conservation offset** would be a company preserving an environmentally significant area to compensate for its industrial activity elsewhere. **Transfer of development credits** allows development activity to be directed away from environmentally sensitive areas into more appropriate areas.

A **conservation exchange**, enabled through *ALSA*, would track the use of market-based conservation instruments such as conservation offsets and TDCs. It should be noted that conservation areas could be of any kind and might not be the same as current protected area designations.

Which brings us to the Plan for Parks. Although much emphasis is being placed on provision of better services in Alberta's Parks, this plan shares similar conservation objectives to LUF and is designed to align with it. A new **Parks Conservation Foundation** will be established to foster stewardship and receive donations of land, money and in-kind gifts to the parks system. Management and other activities will be informed by a Parks Science Strategy, which meshes with another major strategy of the LUF, the development of an "**information, monitoring and knowledge system**" that will inform the planning process and monitor and improve upon its results. Information gathering and sharing systems such as GeoDiscover (a mapping project) and the Alberta Biodiversity Monitoring Institute are part of this and are already in place.

While the prospect of new conservation areas and new tools to achieve them is inspiring, those of us already encumbered with stewardship duties and the knowledge that far more is needed can't help but wonder how well the government is going to care for these putative new lands. Ensuring the legislation is enforced will help, as will presumably the Parks Conservation Foundation, but where there is public access to wild lands there will be a need for paid staff stewards, as well as more volunteers. A thrust for more environmental and nature education in the schools, matched by more "environmental" jobs for those who go on to pursue careers in these fields, would go some way towards producing a cultural ethic of stewardship.

In the meantime, what can we do? The government will be holding public consultations on the LUF. So stewards and the public in general should take this opportunity to get and stay informed, and be prepared to share this information with others. And it is particularly important that we communicate our views on the importance of land conservation and stewardship to our MLAs and local politicians.

For further information:

On LUF: [www.landuse.alberta.ca](http://www.landuse.alberta.ca)

On the Plan for Parks: [www.albertaparks.ca](http://www.albertaparks.ca)

On stewardship: [www.stewardship2009.ca](http://www.stewardship2009.ca), which provides a link to the draft Stewardship Road Map for Canada. (Also see Cathy Mowat's article on page 7).

Doug Marvin, Head of Stewardship Services with Alberta Parks, believes stewardship encompasses "knowledge, caring and action." His aim is to create an organizational culture of stewardship with Alberta Parks.



Cardinal Divide in Whitehorse Creek Wildland Park. This very large Park (175 km<sup>2</sup>) has only two stewards to look after it. *Photos: P. Cotterill*



Nature Conservancy volunteers Larry, Emily and Kasarah removing old fence in Wagner Natural Area (2009-09-26).

### Wagner Natural Area Society Board 2009-2011

26519 Highway16, Spruce Grove, AB T7X 3L4

Visit our website at <http://www.wagner.fanweb.ca>

#### Executive:

President	Pat Clayton (456-9046)
Past President	Ben Rostron (434-3839)
Vice-President/Webmaster	Mike Jenkins (481-8695)
Treasurer/Webmaster	Pat Webb (458-3477)
Secretary/Editor	Patsy Cotterill (481-1525)

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Derek Johnson (Science Director) (436-8231)

#### Directors:

Executive, together with Alice Hendry (962-4836)  
Beth Jenkins (458-1794), Irl Miller (455-3866);  
Cathy Mowat (439-1694)

All telephone numbers are preceded by 780-.

## National Stewardship & Conservation Conference, Calgary, July 8-11, 2009

By Cathy Mowat

Alberta has been very fortunate to host two Stewardship conferences this year: the National Stewardship & Conservation Conference, in July, and the 2009 Alberta Parks Volunteer Conference in September (see Grapevine, page 2), both of which had stewardship of lands of conservation value as their theme.

Luckily, the Wagner Natural Area Society was able to send a representative to attend the National Stewardship & Conservation Conference with funding from an Alberta Parks program for volunteer stewards. The conference is the only national conference of its type to bring together Canada's stewards to discuss emerging issues and solutions for strengthening stewardship across Canada.<sup>1</sup>

The National Stewardship & Conservation Conference, July 8-11, proved to be an eye-opener for many of its participants. Held at the University of Calgary, the conference was attended by people from many different walks of life: a mix of young and old, women and men, farmers and agri-businessmen, researchers, and representatives from industry and community-based stewardship organizations from across Canada. As well, there were delegates from municipal, provincial and federal governments, First Nations, and conservation-oriented land trusts.

The conference looked at the wide range of very real challenges faced by individuals and organizations working in land stewardship. Topics included (just as a sample):

- the need for stronger connections between all stakeholders, and the role of land stewardship in developing stronger connections within communities
- the need for action . . . now ! (we have enough research to act)
- how to get from "promise" to "practice" in terms of public policy
- the prime significance of individual actions as the foundation for change
- the need to creatively seek and develop partnerships of all kinds

- creating longevity-of-effort-and-result within the conservation movement and within stewardship organizations, at all levels (local to national)
- critical funding needs
- how to sell ideas and develop issues campaigns
- models for conservation/conservation approaches in other parts of the world
- the economic liabilities of traditional land use practices (which are not widely discussed within the public domain/media)

Much more was discussed, and if only one statement could be used to sum up the message of all the voices at the conference, I would choose to say it would be "***how much more we can achieve through broad and inclusive partnerships, how important each person's freely-given efforts are, and how much stronger we can be through joint action.***"

Ultimately, many communities, individuals, and stewardship organizations will benefit as all of our actions, collectively, move us towards solutions to our land conservation and stewardship concerns.

For those who are interested, video and text copies of many of the conference presentations are now available on the post-conference website. (See the "Strengthening Stewardship - Investing in Every Step" footnote listed below).<sup>2</sup>

Footnotes:

1. ***2009 Stewardship Conference***. Wetlands Alberta website, June, 2009. Available at: <http://wetlandsalberta.ca/news/2009/jun/11/2009-national-stewardship-conference>
2. ***Strengthening Stewardship - Investing in Every Step, Stewardship & Conservation in Canada 2009, July 8 to 11, Calgary, 2009: Presentations by Theme***. Post-conference (followup) website. Available at: <http://www.stewardship2009.ca/default.cfm>

*Cathy Mowat joined the Wagner Society Board of Directors relatively recently and has become one of our most active executive members. She developed a management plan for Wagner Natural Area as her Master's thesis in Environmental Design (Environmental Science) – now called Ecosystem Management – from the Faculty of Environmental Design, University of Calgary. Professionally, Cathy's focus is on the integration of conservation with development, and she has considerable experience with conservation easements.*

## Plants of Wagner No. 32

### *Juncus longistylis*

(Family Juncaceae)

Longstyled Rush is a tall, perennial member of the rush family. While perhaps most commonly seen in the Rocky Mountains it also occurs in the lowlands of Alberta, in meadows, fens, swales and cutlines where there is influence of calcareous groundwater. In Wagner Natural Area this rush can usually be seen after mid-summer in some of the cutlines and open fen areas, particularly in the south-east part of the property.

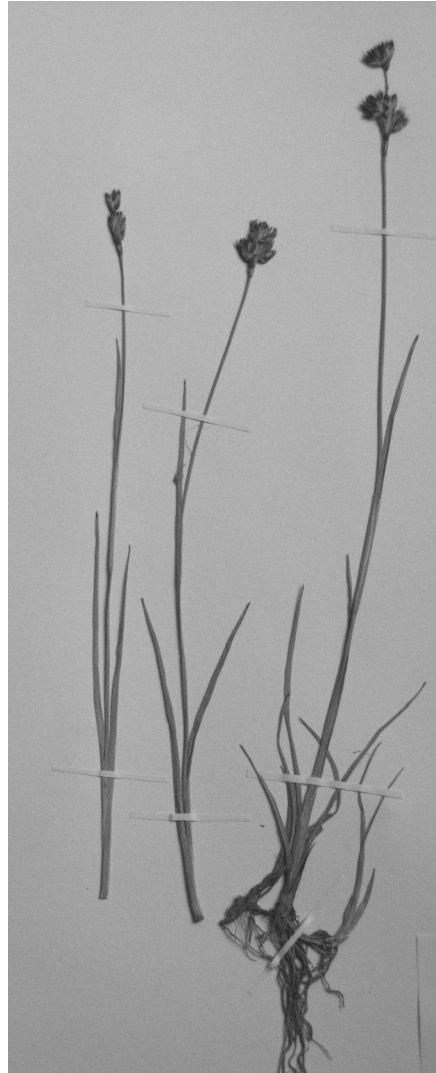
The stems can reach 60 cm in height, and are somewhat compressed, giving them a slightly angular look on close examination. They usually occur singly, spreading by means of creeping rhizomes throughout the vegetation mat. The leaves are flat and about 2 mm wide; the basal leaves number 2 to 5, while there may be 1 to 3 shorter leaves along the stems.

The flower cluster or inflorescence forms a narrow, branched head at the top of the stem. The flower stalks (peduncles) of varying sizes bear flowers in short-stalked clusters (glomerules) of 2 to 4. Each flower is about 5 mm long and has the structure typical of rushes. There are no distinct rings of sepals and colourful petals; instead 6 greenish or brownish tepals arranged in two close-set series perform the function of protecting the male and female parts of the flower. The tepals are brown with a wide green stripe that becomes deep brown as the plant progresses towards maturity, and clear, papery edges. Enclosed within the tepals are 6 stamens, whose white filaments are about equal to or slightly shorter than the yellow anthers atop them. In the centre is the pistil consisting of an ovary, a style and a 3-branched stigma which is pink when ready to receive pollen. When the flowers are fully open with the tepals widespread, they are very attractive. However, people are most likely to notice this rush when the fertilized ovary has developed into a shining brown capsule about the same length as the tepals. Abruptly narrowed at the top, the 3-chambered capsule contains numerous, tiny (less than 0.5 mm), sculptured seeds which cling to central placentae. They lack the obvious white "tails" that are present in some species of rush.

Other rushes that commonly occur in Wagner Natural Area are Dudley's Rush, *Juncus dudleyi*, which grows about as tall as Longstyled Rush, and the low, sprawling Toad Rush, *J. bufonius*. These grow along muddy shores such as those of the creek and beaver pond in the south-east part of the site. Wire rush, *J. balticus*, found along the Marl Pond Trail, is tolerant of salts and so is generally common in both saline and calcareous meadows; it is also resistant to trampling.

### Longstyled Rush

(Rush Family)



Herbarium specimen showing the whole plant at the fruiting stage.



Close-up of flowers showing tepals surrounding immature capsules, and transparent, papery bracts surrounding the flower cluster.