



OUR MISSION -

“To ensure the preservation of the character and biological biodiversity of Wagner Natural Area for Educational, Scientific and Research purposes.”

Friends of the Fen



Morning sunbeams through the fog and conifers off Marl Pond Trail.

Photo courtesy of: Kiera Coleman

WAGNER NATURAL AREA SOCIETY NEWSLETTER

Upcoming Event

Wagner Weed Pull June 24 & 25

Help us preserve diversity at Wagner by stopping the spread of weeds!

Time: From 9 a.m. to 2 p.m.

Meet at Wagner parking lot.

Gloves and rubber boots recommended. Gardening tools will be available for those who don't bring their own. Dress for the weather!

Snacks and water provided. Let us know you are coming out by sending an email to info@wagnerfen.ca.

Further Events:

Week Before Father's Day

Orchid Walk

Time: June 11 10 a.m. to 2 p.m.

Browse the blooming orchids along Marl Pond Trail with a guide.

Weed Pulls Jul. 15&16; Aug. 5&6

All newsletter stories by WNAS Summer Student, Kiera Coleman, unless otherwise noted.

WNAS Summer Student 2023

Hello! I am Kiera Coleman, this year's summer student at Wagner. If you see me out on the trail, I will likely be staring at the ground or through a camera lens, but feel free to say "Hi" and ask what I am up to. I will warn you that I am probably just looking at bugs or unsuccessfully trying to spot a bird but ask nonetheless! Here is a bit about me so I am not quite as much of a stranger if you run into me.



*Summer student with WNA display at Lois Hole Centennial Provincial Park on World Migratory Bird Day.
Photo courtesy of: Dave Ealey*

School-wise, I have finished my second year of Conservation Biology at University of Alberta and look forward to learning much more in my next year. I think my favourite classes thus far have been plant and wildlife identification as well as soil science. Thankfully, working at WNA is turning out to be a great opportunity to finally apply some of what I have learned.

Before coming to Wagner, I worked a few jobs related to the environment. I was an assistant summer camp leader at a nature centre in Red Deer. The job focused a lot on environmental interpretation and science. That experience has been particularly helpful for leading the school groups around Wagner's Marl Pond Trail. It is always fun to get students outside and interested in their surroundings. Moreover, everyone invariably seems amazed when you show them a bucket full of unfamiliar pond-dwellers. Besides the education side of what I have done, I also volunteered at WILDNorth (a wildlife rescue here in Edmonton). If you are curious, I have lots of interesting stories from there!

Support Us!



*A Tree Swallow perched on one of the nest boxes along Atim Field.
Photo courtesy of: Kiera Coleman*

The Wagner Natural Area Society welcomes new supporters, volunteers, and all people interested in natural history and the preservation of the ecological integrity of this delightful natural area.

VOLUNTEERS / MEMBERS

People of all talents and interests are desired and welcomed to become more closely involved with the Natural Area and the Society.

Email: info@wagnerfen.ca

DONATIONS

All donations help maintain the integrity of the Natural Area and its surroundings, provide educational material, enhance visitor experiences, and support on-going research studies and surveys.

Please see page 9 for the donation/volunteer form.



A Yellow Lady's-Slipper orchid in bloom near the EW Road Allowance. Photo courtesy of: Kiera Coleman

I have already learned plenty in my first month at Wagner. On my first day, WNAS President Dave Ealey took me on a tour of the Natural Area. The only downside to that was I think I may have gotten whiplash from being told to look at a specific plant then immediately after at the bird above us then suddenly at a butterfly fluttering past. Despite that, I am glad Dave pointed out so many things. Now that I have started looking, there has yet to be a day where I have not stumbled across something new at WNA.

I was also taught the ropes on basic site management: clearing trees off the trail, deconstructing branch forts to keep the place looking natural, and putting signposts back in the ground when they mysteriously pop out. Furthermore, I have been informed that I get to write the newsletter and subject you all to my photography skills. I challenge you to tell the difference between phone photos and actual camera shots (it should be fairly easy!).

Overall, I think I am going to have a fantastic summer tackling the variety of tasks I have been assigned and, most of all, getting to observe and help protect all of the Natural Area's diversity.



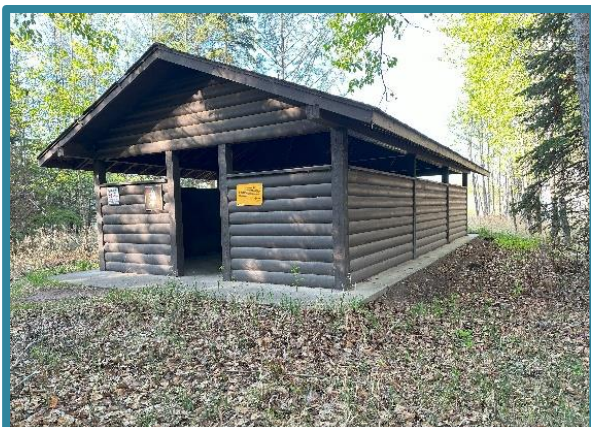
Four signposts along Marl Pond Trail that mysteriously worked themselves out of the ground overnight. Photos courtesy of: Kiera Coleman

Fire Safety

As anyone who has been out to the Natural Area, reading the news, or seeing the smoke in the air would note, it has been a very dry spring. The marl ponds along the trail are completely dry, even after some rain. With fire safety and the recent Alberta wildfires in mind, we have implemented some FireSmart practices at WNA. The foundational idea of FireSmart is to remove and reduce combustible materials (especially around structures) to lessen the risk of a fire starting and minimize fire intensity when it does occur.



*One of the marl "ponds" seen from the trail on May 3, 2023.
Photo courtesy of: Kiera Coleman*



*Above: Before (top) and after (bottom) raking away debris around the picnic shelter.
Photos courtesy of: Kiera Coleman*

*Right: Before (left) and after (right) sweeping debris off of the picnic shelter roof.
Photos courtesy of: Dave Ealey*

One critical recommendation is to create a non-combustible zone 0 - 1.5 metres around all structures. Clearing this zone to bare mineral soil (or other non-flammable surfaces) greatly reduces the likelihood of the structure catching fire. If you would like to learn more about FireSmart, visit <https://firesmart.ca> and complete their FireSmart 101 program or browse their other resources.

Here at WNA, we worked to clear the combustible debris from around the picnic shelter to create a 1.5-metre non-combustible buffer. We also swept debris off of the shelter's roof to reduce the risk of fire from floating embers. Further, any branches that overhung the picnic shelter were trimmed back. Even without the fire risk, it sure made the place look tidier!



Site Management: Canada Thistle



*A Canada Thistle gall. Note how the gall stopped this stem from flowering.
Photo courtesy of: Kiera Coleman*

The Canada thistle stem gall fly (*Urophora cardui*) was introduced to WNA as a bio-control method against Canada thistle (*Cirsium arvense*). *U. cardui* hinders thistle productivity by using up nutrients to form a gall and by reducing flowering on stems with galls. The female fly lays eggs in young thistle stems. When these eggs hatch, the larvae burrow into the stem and cause a gall to develop 10 - 16 days after the eggs were laid. Due to a chemical secretion from the larvae, the thistle's vascular system reverses, thus hampering the thistle's growth. The larvae overwinter in the gall. Spring moisture causes tissues in the gall to deteriorate, allowing air to reach the larvae. The dormant larvae then begin to pupate for 8-9 days. Starting in late May, adults emerge.

On its southern side, WNA has a relatively robust population of *U. cardui* in Osborne Field. Chris Saunders and I relocated 350 galls from Osborne and Spruce fields to various places around the Natural Area to hasten the spread of the flies. While doing so, we were pleasantly surprised to happen upon a small *U. cardui* population in the southeastern corner of Villeneuve Field alongside a booming strawberry patch. This Villeneuve fly population is likely the remainder of an original release site and is an exciting find given that the releases outside of Osborne and Spruce fields were previously deemed unsuccessful. May our new relocations also find success so we have one less weed species to worry about.

Spring Clean Up 2023 Thanks

A huge thank you to all the volunteers who braved the hot and smoky conditions to keep Wagner looking clean and garbage-free!

Despite the small turn-out, we covered a lot of ground and removed 20+ bags of trash, so a congratulations is well deserved!



*A purple flag marking the new location of moved thistle galls.
Photo courtesy of: Kiera Coleman*



*Summer student and trusty volunteer Brian Pratt with the amassed clean-up day bounty.
Photo courtesy of: Dave Ealey*

History of Wagner Natural Area

Given that this year marks our 40th anniversary, I have decided to delve into some of the history of Wagner Natural Area by including excerpts from past newsletters. The following May 1992 newsletter excerpt was written in memory of William “Bill” Wagner and provides a little insight into the name “Wagner”:

As the eldest son, Bill Wagner inherited both the home property where he was born, and the “Wagner Bog” property (N half of section 7) when his father Frederick died in 1946. Frederick Wagner had purchased the bog property in 1926 from the CPR [Canadian Pacific Railway], which in turn had been deeded the land by the Crown in 1901. Bill Wagner came to know the land that is now the Natural Area intimately as he cleared the central fields and the northeast field (west of the Villeneuve extension) and attempted, not always with success, to grow grain (the frosts often came too early) or hay, or to pasture his cattle on them. Sometime during Ernest Manning’s time as premier, Wagner became engaged in a legal battle with the CPR over mineral rights to the marl in the fen ponds, which was of commercial value as a constituent of cement. However, Wagner hired a lawyer who successfully argued that the marl deposits were on the surface and so belonged to him!

Knowing the area so well, and its general unsuitability for farming, Wagner was amenable to the influence of local naturalists such as Edgar Jones, who wanted the bog property preserved because of its immense value as wildlife habitat. In 1969 Wagner wrote to the Canadian Wildlife Federation (CWF) asking for financial help to defray the loss of keeping the land in a natural state. He noted that the “surplus glutted condition of agriculture and the virtual near extinction of such wooded marshy areas” made him reluctant to exploit the bog commercially. In actual fact, when the help came it was in the form of a direct purchase of his land, and the source was more local. Edgar Jones and Bill Morgan of the Alberta Wildlife Foundation spearheaded a fund-raising drive to which the Alberta Government contributed generously and the Nature Conservancy of

Canada made a significant donation. In 1971 the immediate goal of all parties was achieved: the 320-acre property was acquired by the Land Assembly Division of Alberta Environment and thus again became crown land.

Conversations with Wagner before his death, and with his sister Mary, clearly indicate the “multiple use”—to use a present-day term—to which the area has been put during the 20th century. Its natural history has also changed during this time, and some of these changes are clearly related to the human activities. Wagner recalled that mule deer once were numerous on the property, but have been replaced by white-tailed deer. He found evidence of elk and buffalo when he cleared a field just west of the Natural Area. The bird life has certainly changed over the years, probably in response to increased noise and disturbance from Highway 16X. Fewer owls are about these days and the Bonaparte’s Gull that Edgar Jones filmed in the ‘50s have not returned.

In contrast with the earlier decades of this century, use of the Area is more uniform now, with management by the Public Lands Division of Forestry, Lands & Wildlife, and the Wagner Society, as Volunteer Stewards, geared toward maintaining the water regime of the wetlands and the Area’s diversity of habitats, as well as promoting the human enjoyment of their natural bounty. The value of Wagner Natural Area as a wildlife preserve continues to be threatened because of its proximity to large centres of human settlement and development. Nevertheless, the status quo represents a significant achievement. In his 1969 letter to the CWF, Wagner expressed the wish that the bog “could be preserved as is, long into the future when it would become ever more appreciated.” It is certainly appreciated.



*A Savannah Sparrow (Passerculus sandwichensis) perched among the grasses in Centre Field.
Photo courtesy of: Kiera Coleman*

BOARD BULLETIN:

By Dave Ealey, President, Wagner Natural Area Society

Summer is a busy time for managing a natural area. The growing season is, of course, when we get more visitors, which brings challenges for dealing with numbers of people, and when we face the annual growth of invasive species.

The Board of the Wagner Natural Area Society is undertaking a number of projects this summer:

- Interviewing and hiring a summer student to help with the day-to-day chores, as well as learning the ropes about working with an environmental non-profit organization.
- Implementing our invasive species management strategy, for which we have scheduled four weekends (June 3/4, 24/25, July 15/16, August 5/6) of Weed Pulls. The first weekend has already been completed; we are looking for more volunteers to step up for our remaining Weed Pulls.
- Site Management tasks focused on clean-up days, as well as perimeter fence and infrastructure improvements. Volunteers wanted.
- Updating the Wagner Natural Area management plan, which involves engaging neighbours and long-term Friends of the Fen.
- Preparing for renewal of the Recreation Lease authorized under the Public Lands Division.
- Carrying out a Public Education and Outreach program with scheduled Citizen Science activities, presentations and field trips for school students, and guided tours for outdoor groups and regular visitors.
- Planning a FireSmart Community Day with neighbours and the local Parkland Fire Department; an important exercise in light of County fire issues this year.
- Exploring further opportunities for reestablishment of native vegetation on former hayfields within the natural area.

Let us know how you would like to be involved in taking care of Wagner Natural Area.

Send us an email at info@wagnerfen.ca.

President: Dave Ealey

Vice-President: Robert Holt

Treasurer: Melissa Chisholm

Secretary: Cheryl Johnson-Dempsey

Elected Directors: Beth Jenkins, Chris Saunders, Claudia Palylyk, Larissa Clayton.

Appointed Directors: Carolyn Vanderveen (liaison with Osborne Acres Residents Association), Eagle Willier (liaison with Nature Conservancy of Canada).

See you on the trail!

Quick Introduction to Keying Plants

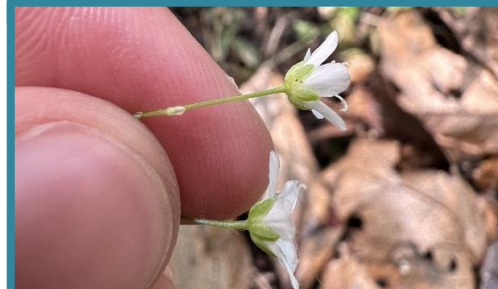
For the fellow plant enthusiasts who would like to get into keying plants, here is a quick beginner guide of what to look for. If you are like me, you would rather key out a plant in a mosquito-free environment and not have to lug around a large book. This preference means taking good pictures and/or notes on your plant of interest. The exact information you shall need will vary between keys, but the following is often important.

To start, I take a picture of the full plant and some of its habitat. This picture should show the leaf arrangement (opposite, alternate, basal, etc.) and inflorescence type (the branching pattern of the flowers). Get some pictures of the leaves and ensure you look at the leaf's underside as this is often important. Make note of any hairs or glands on the plant! The presence of hairs always seems to come up in keys.

Next, you want good photos of the flower(s). You need to know the number of petals, stamen, and pistils. Make note of whether the ovary is superior (set above the other floral parts) or inferior (often appearing as a lump below the flower's base). Just like with the leaves, look at the back of the flower. You are looking for the presence and form of the sepals.

My best tip is to look at a few specimens of the same plant if possible. Occasionally, plants will be deformed, which throws a wrench into keying if all you have is photos from that sole plant.

In terms of keying itself, it gets a lot easier with practice. Become familiar with the first families in the key as these are often highly unique. By knowing them, you can essentially skip those couplets and speed up your process. An illustrated book on plant jargon comes in handy, especially if your key does not have pictures. Simply work through the key while referring to your photos/notes. If you are uncertain of something, note which step you are on and follow one path of the couplet. If it ends up getting very confusing, go back to that step and take the other path. Finally, when you have determined the plant species, look it up! Does it match your plant? If not, restart and carefully reread each couplet to see if you made any mistakes or assumptions. With practice, keying can become quite easy. The white-flowered plant to the right I keyed as blunt-leaved sandwort (*Moehringia lateriflora*) using *Flora of Alberta* 2nd Edition by E. H. Moss. The sandwort's common name is from the Alberta Conservation Information Management System (ACIMS).



Top: Habitat and full plant photo. This is an unideal photo because the plant is not very visible, but it is workable.
 Upper Middle: Flower close-up. Note the superior ovary.
 Lower Middle: Back of flower shot. Again, unideal because the true number of sepals is not visible.
 Bottom: Example of an inferior ovary on Prickly Rose (*Rosa acicularis*).
 Photos courtesy of: Kiera Coleman

MEMBERSHIP – WAGNER NATURAL AREA SOCIETY

Support / Donate / Volunteer

For more Information about Wagner Natural Area or the Society and about field trips and other activities, go to wagnerfen.ca.

Wagner Natural Area is a Registered Charity. Donations will help maintain this very special area; \$20 or more are receipted for Income Tax purposes, CRA B/N119287522 RR 0001

Society's annual fee is \$10 for Supporting Members and \$15 for Voting Members. Voting Members are key to run WNAS; must qualify through nomination. See website. The Society's fiscal year is January 1 to December 31.

Annual fee (Supporting \$10/Voting 15): \$_____

Donation: \$_____

TOTAL: \$_____

May the Society CONTACT you by: **EMAIL: Yes /No**

PHONE: Yes / No

Email Address: _____

Phone: _____

If you can VOLUNTEER to help with the Society with maintenance of the Natural Area (circle): **Yes**

Name(s): _____

Mailing Address: _____

Mail this form with cheque/money order, payable to Wagner Natural Area Society, to:
Treasurer, Wagner Natural Area Society, 30531-118 Ave., Acheson, AB T7X 6M5

Or scan the completed form and pay online. Submit your membership/donation by Interac bank transfer to treasurer@wagnerfen.ca [May 2023]

Small Spring Blooms



A few flowers found in Wagner's coniferous areas.
Top: *Kidney-leaved Violet* (*Viola renifolia*)
Middle: *Moschatel* (*Adoxa moschatellina*) next to the edge of a dime for scale.
Bottom: *Bastard Toad-flax* (*Geocaulon lividum*) also next to a dime for scale.

Photos courtesy of: Kiera Coleman
Identified using *Flora of Alberta 2nd Edition* by E. H. Moss.