

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



Last evening of July welcomed Toad, Moth and Bat fans to Wagner Fen. Thanks to hosts: Alberta Lepidopterists' Guild, Alberta Amphibian and Reptile Conservancy and the Alberta Community Bat Program. Photo courtesy of Xander Dlouhy.

End of Summer Blues

Take a moment to visit the Fen.

Come take a look at the incredibly lush vegetation growth, due to the extra moisture this summer. See it before the leaves fall.

Witness the rewetting of the ponds along the Marl Pond Trail.

2026 Activities

**Weed Pulls: on Sat./Sun. 9 a.m. - 2 p.m.
August 8—9**

Fall Clean-up Day: Sat. Sept. 26, from 9 a.m. to 2 p.m.

For every activity, plan to meet at the Wagner parking lot. RSVP at info@wagnerfen.ca

Summer Student 2026

By Xander Dlouhy

About me!

Hello fen friends! I am one of the three summer students at Wagner Natural Area! I am the Natural Area Specialist for this 2026 season. I am a proud Edmonton resident and have lived here my whole life. Being Alberta born, I feel it's only natural that I go to the University of Alberta, where I will be returning this fall for my second year in forestry. Edmonton is such an amazing city and there are so many hidden gems in and around the city just like Wagner!



Xander holding a Polyphemus Moth. Photo courtesy of Lauren Schollie.



One type of bug gall. Photo courtesy of Xander Dlouhy.

One of my duties as a summer student at the natural area is to choose a personal project to study. The one I have chosen is to figure out which environments within the natural area have certain bug galls and figuring out the frequency of bugs to see

if the frequency of bug galls can help us accurately identify the



White Adder's-Mouth (*Malaxis monophyllos*). Photo courtesy of Xander Dlouhy.

Support Us!

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 ongoing research studies and surveys.

Visit our [website](#) for donation/member form.

insects in the natural area. I'm measuring the bug frequency with one of my harmless homemade bug traps, made from whittled sticks and thrifted fabric.

My dad has really been the main person in my life who's inspired me to become an outdoorsy person by taking me backcountry camping with him, teaching me how to create fires, cook good food in the middle of nowhere, and even learn decision-making skills through the stories he's taught me. I feel like I've carried this outdoorsy personality with me and with it I've done some fun things of my own including going out to Jasper on weekends to climb mountains like Hawk Mountain (before a storm came my way, forcing me to turn around two-thirds of the way up this summer). Taking courses for certifications like the PAL (Possession and Acquisition Licence) or getting a canoeing or radio operating certificate.



Photo courtesy of Xander Dlouhy.

This summer job is amazing. And Dave is kind enough to not work us down to the bone meaning we have flexible time for our days off allowing me to do some things that I enjoy such as embroidering various things like the natural area's logo on my hat, taking a weekend to go to Jasper, waking up at 4 a.m. just to go to Elk Island for a hike in my rubber boots, and even taking a motorcycling course.

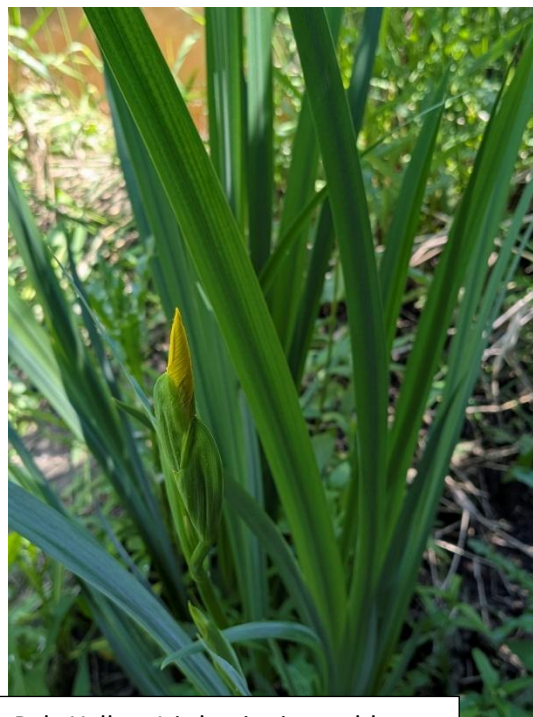
I am so incredibly lucky to have this job. The people and the job itself have taught me so much more than I ever could have imagined at a first glance and it's not even done yet. I'm excited to see what the last month of this job has in

store for me before I end my last day of work on my birthday, August 20th!

WEED OF THE MONTH: Pale Yellow Iris (*Iris pseudacorus*).

By Xander Dlouhy

Pale yellow iris is one of Alberta's regulated weeds. It's classified in the highest tier of weed in the "Prohibited Noxious" category of Alberta's *Weed Act*, making it our duty to try our best to eradicate it and stop it from spreading in the natural area. Pale yellow iris is a noxious weed that is poisonous if consumed by humans or animals. It has highly invasive tendencies, outcompeting native plants and potentially harming the ecosystem.



Pale Yellow Iris beginning to bloom.
Photo courtesy of Xander Dlouhy.

Pale yellow iris features include large, flat, deep green leaves arranged in a fan at the base. It grows using a rhizome root system, which spreads horizontally underground taking nutrients from the mother plant until it sprouts as a completely new independent plant, both growing and sharing nutrients from the same root system. Most rhizomatous plants tend to grow very quickly, meaning a lot of them are invasive, just like pale yellow iris.



Exposed rhizomes of Pale Yellow Iris showing growth form. Photo courtesy of Xander Dlouhy.

This is not the only way that the iris spreads, as it uses any water movement to spread seeds, however far that water source goes. When in bloom, it has large yellow oval flowers arranged in a triangle formation, commonly with a little brown patterning near the base of the petals, with three more smaller, upright petals on top of the larger base petals.

A lookalike of pale yellow iris is the common

cattail (*Typha latifolia*). Cattails are another water-based species that spreads through rhizomes with flat, dark green leaves. At the base of this plant, leaves aren't arranged in a fan like the iris; cattail leaves are overlapping each other in an oval shape, which is how you can tell the difference between a cattail and a pale yellow iris when they are not in flower.

Pale yellow iris is a weed that Wagner has been battling for a long time. It was first spotted in Wagner in 2012, and we've been focusing our efforts for the past month on getting rid of it along Morgan Creek. This creek flows through the east side of the natural area where the iris first became an issue after spreading from a private aquatic garden upstream of the natural area.

We've been targetting this prohibited noxious weed since 2018, getting crews of paid workers and volunteers to aid us in getting rid of this weed. For the past month we have also been weed-whacking reed canary grass (*Phalaris arundinacea*), which is an invasive species of grass that the pale yellow iris tends to hide behind.

We've been flagging as many pale yellow iris as we could in preparation for another season's weed pull with the Nature Conservancy of Canada (NCC) to hopefully slow down and maybe even stop this weed from spreading past the natural area. Last summer, in July, the NCC was able to get a whole crew of people down to the natural area to pull most of the pale yellow iris from the same section of the creek that we went to this year and thanks to their efforts last year we are able to take the battle even further beyond the old beaver dam on Morgan Creek.

Extremely wet wetland!

By Xander Dlouhy

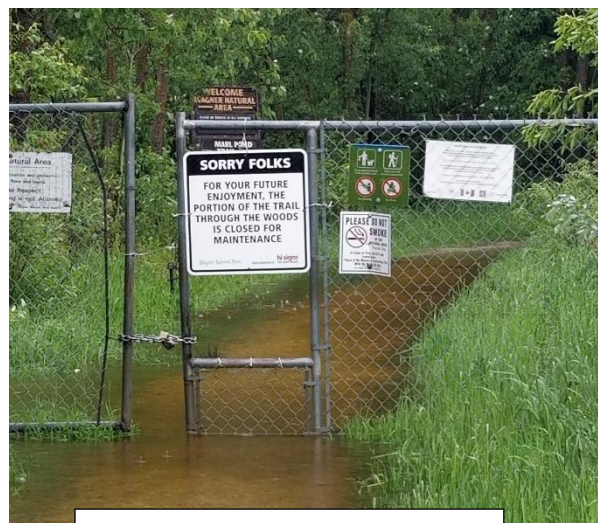
Wagner Natural Area is a fen: a wetland that “is a type of peat-accumulating wetland fed by mineral-rich ground or surface water.” (“Fen”, Wikipedia, n.d.). Peat is just the accumulation of decaying plant matter that forms in waterlogged areas such as Wagner, which means that Wagner is already very saturated.

The Edmonton area got 263.9 mm in the month of June (weatherstats.ca, n.d.), which broke a record that had been standing since 1914—long before Wagner’s official existence as a natural area. Consequently, this is easily the most rain that Wagner Natural Area has ever seen. Because of all of this rain we had to close down the trail for 18 days, from our Father’s Day Orchid Walk, which had to be cancelled as that was the big day of rain that started the torrential downpour for the next couple weeks up until the evening of June 8th when most of the water had drained out making the trail walkable again.

This big rainstorm cancelled one and moved another one of Wagner’s beloved events, the Father’s Day Orchid Walk and the Toad, Moth and Bat Night. The Father’s Day Orchid walk was the day we closed Wagner as the front entrance to the natural area flooded over, which made the natural area unsafe to enter. Because of this safety hazard we installed signs throughout the trail and at the entranceway to the natural area to close it down while the rain calmed down. We allowed the flooded areas to slowly drain out. The Toad, Moth and Bat Night was moved from the 4th to the 31st of July.

While the trail was closed, we did a few things. I’m sure you may have seen planks around the trail where Wagner was the wettest. Something else we did while waiting for some spots to drain out naturally was to create small drainage paths along the trail to help the water flow out of some places where it had accumulated and had trouble flowing out.

The last thing we did was repair part of the boardwalk near the South Marl Pond. That boardwalk used to have old stumps in the ground holding the boardwalk up. Not all of those stumps were removed when they were replaced with newer wooden and metal posts with brackets and a supporting beam going across the boardwalk. One of these older stumps had lifted from seasonal freezing and thawing, pushing itself into the boardwalk and pushing the whole boardwalk up, breaking out some screws and making it uneven to walk on. We took out that stump that was pushing up the boardwalk, added another plank to the frame to make the boardwalk more secure and replaced dislodged screws.



Trail closed sign at flooded gate.
Photo courtesy of Dave Ealey.

Species highlight, Ladybeetle or ladybug?

By Xander Dlouhy

You might be thinking, what's the difference? Really, there is no difference, they're just two ways of talking about the same type of insect belonging to the taxonomic family Coccinellidae. Ladybug seems to be the more frequently used, common name, while lady beetle is more accurate in identifying that this pretty insect is a beetle.

There are plenty of naming issues in modern biology where one plant has many common names. One that confused us summer students was at the start of the season was arctic butterbur and coltsfoot. They're the same plant with the same scientific name, just multiple common names.

The most common type of lady beetle is the 7-spotted lady beetle. These little guys are red and appropriately named, having 7 spots on their elytron, the hard shell on their back that encases their wings. These guys are most active during the day in the warm sun as they, quite literally, need to warm up to move. Lady beetles are cold-blooded, meaning they can't warm up the way we can; they need the sun or something warm to kickstart their day full of munching on plenty of smaller bugs like aphids or mites.

Aphids and mites are something many gardeners would consider pests, so some gardeners regularly buy lady beetles to release in their garden to get rid of these minuscule defoliating insects to protect their crops and plants. During transport of lady beetles, they take advantage of the lady beetles' need for warmth by keeping them in a cold place like a fridge for varying periods

of time before waking them up by taking them out of the cold fridge and releasing them into the garden.

There are many kinds of lady beetles that you may not even give a second glance at just because the 7-spotted lady beetle is so common, but if you stop to look you might just find a rarer kind of lady beetle like I have in Wagner Natural Area. The lady beetle I was able to find was a 13-spotted lady beetle; these cute guys are orange instead of red and have 13 spots as the name suggests.



Thirteen-spotted Lady Beetle.
Photo courtesy of Xander Dlouhy.

There are plenty of types of lady beetles you can come across, even different colours, like yellow or even white! One of the more common yellow lady beetles you can find in Alberta is the 14-spotted ladybug. These guys have a yellow elytron with black, square-looking spots across the elytron.



Fourteen-spotted Lady Beetle.
Photo courtesy berkshirenaturalist, iNaturalist (2015).

Lady beetles start their life cycle as an egg in a group of around 25 yellow-, orange- or tan-coloured eggs, on the underside of a leaf, somewhere near prey like aphids. After 2 to 10 days, they hatch out and start to feed on aphids. They look nothing like what you would expect them to. They have the shape of long, creepy-crawly insects. They stay in

this stage for around a month before attaching their long tail to a stem or leaf and beginning pupating, completely metamorphosing just like a butterfly. They stay in that pupa stage for around 1–2 weeks before crawling out with a soft yellow wing cover that hardens within a day, and they become a full adult lady beetle just like the ones you see flying around. They can stay as an adult for quite a long time, compared to most bugs. Lady beetles can stay as an adult for up to 2 years before meeting their end and becoming one with the earth again.



Lady Beetle larva.
Photo courtesy of Xander Dlouhy.

Mini Bug Gallery from Xander



Green Comma (*Polygonia faunus*)



Giant Birch Sawfly
(*Trichiosoma triangulum*)



Common Alpine (*Erebia epipsodea*)

Blowdown trees in Wagner Natural Area

By Xander Dlouhy



One of my projects is to measure various qualities of trees at blowdown sites. Measures include how long ago the tree fell, based on an educated guess (figuring out if there is any bark, foliage, the order of fallen logs on top of each other, etc.); the DBH (diameter at breast height) of the tree which I've been measuring with a steel circumference tape; and the length of the fallen log, measured with a modified 2-m stick along the stem.

One interesting thing I've found is the average cardinal direction that each tree has fallen. Most trees I have measured have fallen southeast at every site (Figure 1).

Each season has a predominant wind direction due to the different temperatures and pressures associated with that season such as cold fronts we get in winter or convective weather that occurs in summer giving us intense thunderstorms. According to Environment and Climate Change Canada (2024), the season with the greatest extreme wind gust speed is January and the direction of that wind comes from the NW, which

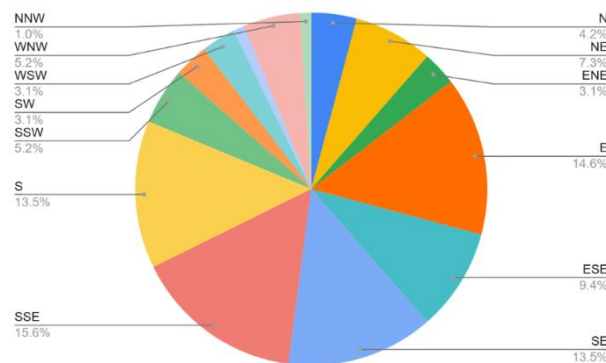


Figure 1. Proportion of direction trees fell.

would align with the data I've extracted from each blowdown site direction. However, in winter, most of the ground is frozen which could act like an anchor when compared to summer, when we tend to get a lot of rain, especially this year, which saturates the soil and makes it soft so the roots don't have anything too solid to anchor onto. Another thing that happens in the winter is deciduous trees lose their leaves, which greatly improves their aerodynamics allowing them to not get pushed around as easily and it makes them lighter to help decrease the chances of being blown down.

Downbursts happen more often in summer because excess moisture gets evaporated into the atmosphere due to summer's heat and the intensification of temperature due to a thunderstorm. Downbursts happen because the heat evaporates moisture, putting the moisture into the air. This warm air, which is better at holding moisture, lifts high up in the troposphere where it then gets decently cold. Then with a thunderstorm happening to quickly cool down the air through the precipitation-evaporating leaves, it triggers a whole bunch of really cold air falling rapidly toward the earth.

More analysis may clarify seasonal effect regarding blowdowns.

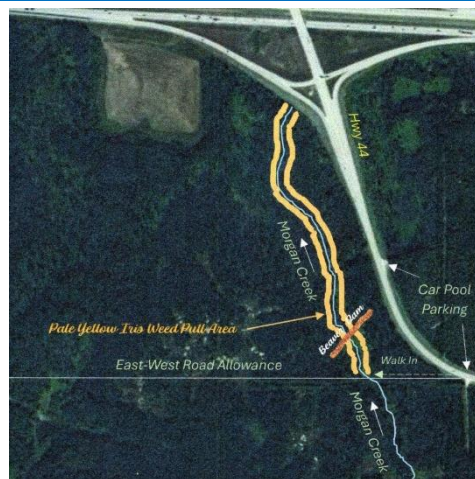
Nature Conservancy of Canada comes to the rescue!

By Xander Dlouhy

The NCC pale yellow iris weed pull was a volunteer weed pull organized by the Nature Conservancy of Canada (NCC) that took place Wednesday, July 15th. The goal was removing this noxious and invasive plant down through Morgan Creek. We were able to successfully remove plenty of pale yellow iris and their pink rhizomes before bagging up all of the roots and hauling them out in garbage bags.

In preparation for this day, we have spent a few days of work consistently weed whacking all the invasive reed canary grass around the old beaver dam part of Morgan Creek, which the pale yellow iris tends to hide within. There were a few decently wet days before this event, which made the creek much higher than it usually is. It was quite a hazard, although we were lucky to have very competent workers and volunteers that ensured no one got swept away by the, more appropriately called, river, at that time. We were able to safely remove plenty of pale yellow iris. Consequently, Chris, myself, and the other two summer students, Lauren and Sierra, couldn't find a single iris in flower throughout the whole creek just the next day!

We are so lucky to have the NCC organize this event, come out and help us for our sake. I want to give a massive thank you to the workers and volunteers of NCC who came out to help us play in the mud, remove some noxious weeds, and get plenty dirty!



Weed pull zone along Morgan Creek (in orange), east Wagner Natural Area.



Photos of working crew (above), NCC staff (to the right), and all weed pull volunteers (below). Photos courtesy of Franc Grove (NCC).

