











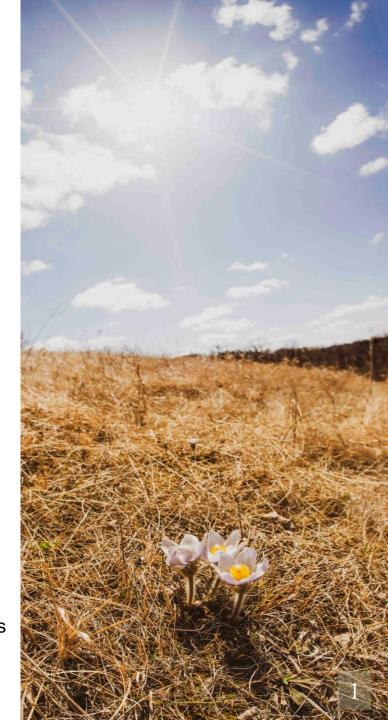
Report About this

The Stanley Trail Association initiated this report as part of a larger project supported by Manitoba's Heritage Grant Program in collaboration with Sputnik Architecture Inc. Through this collaboration, the report is accompanied by a short film "Trails Through Time", which documents landscapes around Lake Minnewasta, and its prehistoric heritage; placing this story within the lake's current context and community.

Shared here, is information about the Lake Minnewasta Trail and the landscapes that the trail runs through. In addition to the film "Trails Through Time", volunteers completed a trail user survey, a bird survey, and a plant inventory between 2020 - 2021. These results are summarized here.

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About The Lake Minnewasta Trail

In 2000, several Morden residents joined forces to build a short piece of single track at Lake Minnewasta. The trail was originally intended as an off-road single-track used for cycling, running and hiking. Two hundred meters in, STA members were invited to join them with hopes for building a longer trail that circumnavigated the lake. Many community work days were organized to finish the job.

Completing the trail took several years. The trails on the north side of the lake were completed first. These were followed by the trails on the south side that connect to Connor Hill Drive. For the first time, it became possible to bike, run, or hike to the trail from town and connect back to town without circling back.

Over time, the lake trail became a favorite destination for locals from Morden, Winkler and the RM of Stanley. Parts of its appeal were the views, the natural and varied terrain, plus it's nearness to population centers.

Today, the Lake Minnewasta Trail is a well used destination. The trail is popular with locals and draws regular visitors from as far away as Altona, Winnipeg and Morris. It is a multi-use trail used in a variety of ways: for mountain biking, fat biking, hiking and trail running, snowshoeing, birding and photography as well as a way to access the lake for fishing or picnic spots.

Maintenance of the Lake Minnewasta Trail continues to be headed up by a number of key local volunteers, STA board members and others. We work with the City of Morden to make the Lake Minnewasta Trail the amazing, year-round destination it is.

About the Stanley Trail Association

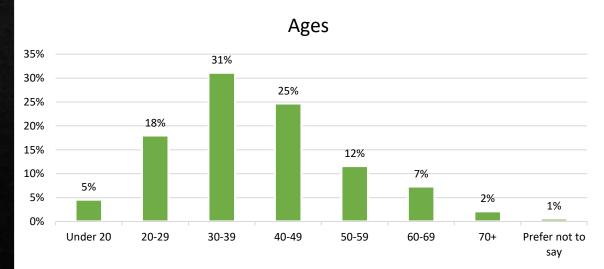
Since 2000, the Stanley Trail Association (STA) has led the effort to build, maintain, and advocate for trails in the Rural Municipality (RM) of Stanley in southern Manitoba. Our primary focus was to connect the Trans Canada Trail through the RM. Our current goal is to promote and encourage the development and use of recreational trails in our region in partnership with The Trans Canada Trail, Trails Manitoba, the RM of Stanley, the City of Morden and other supportive organizations and trail groups. With the assistance of many volunteers, donations, and grants, as well as the invaluable support of landowners who have generously allowed trail access, we have successfully expanded the trail network into some of the most scenic trails in the region. We believe the Stanley Trail system has added significant value to what the region has to offer.



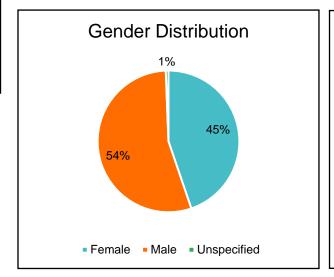
Trail User Survey Results

About the Survey

A survey of trail users at the Lake Minnewasta Trail was conducted from March to July 2021 by the STA. The survey questions can be found in appendix 1 (appendixes are a separate document). The survey was advertised on trail signs posted at trailheads and distributed on social media by the STA, City of Morden, RM of Stanley, Country Cycle, the Pembina Hills Arts Center and Explore Morden Winkler. We received great feedback from the community; in total 328 trail users responded. As an incentive, Stanley Trail Association and Country Cycle contributed funds for a \$75 prize as an incentive for the survey; it was received by Will Braun from the RM of Stanley.

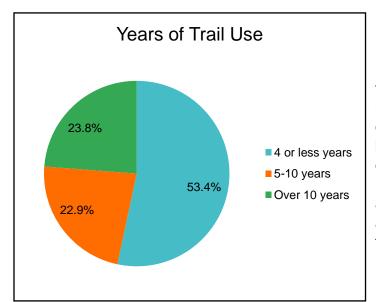


According to results, the trail is used by people of all ages with most falling within the 30-39 and 40-49 age categories. Fewer users were from earlier and later age categories. However, the youngest trail users may be underrepresented.



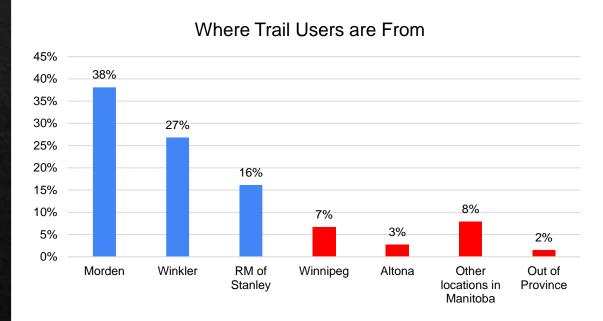


Additional demographic data show nearly equal numbers of male and female trail users, with slightly fewer women on the trail. Most respondents were Canadian citizens or Indigenous and 14.3 percent were either newcomers or permanent residents. A very small number of trail users were from international destinations including the U.S. and Germany. This number was likely affected by travel restrictions at the time of the survey.

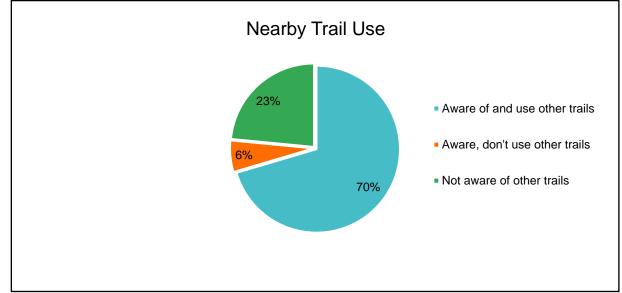


Most trail users who responded to the survey were new trail users, having used the trail for four years or less. However, nearly half have been using the trail for five years or more. The data suggest that many trail users continue to return and use the trail once they begin and that the overall number of trail users is increasing.

Trail User Survey Results



Eighty percent of trail users that responded to the survey were local, coming from Morden, Winkler and the RM of Stanley (shown in blue). Additionally, twenty percent of trail users were from other locations (shown in red). Of these, Winnipeg and Altona were the most notable. Other places of origin include: La Salle, Miami, Morris, Portage la Prairie, Roland, Carman, Darlingford, Headingly, Howden, Mitchell, Niverville, Rosetown, St. Andrews and Steinbach as well as visitors from the RMs of Dufferin, Montcalm, Pembina, Rhineland, Roland and Thompson. A few visitors came from out of province. These were from North Dakota, Saskatchewan and Germany. But, out of province visitors were likely limited by travel restrictions during 2021.

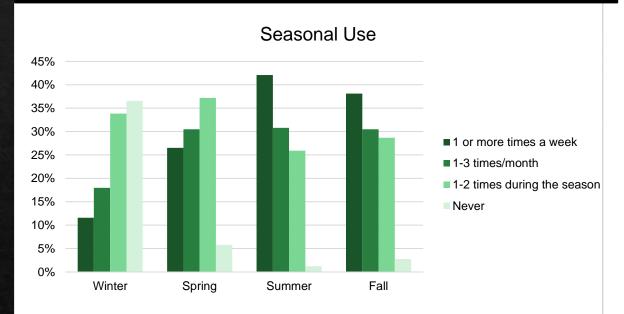


The Lake Minnewasta Trail is only one of a number of trail systems located in the RM of Stanley, most of which are part of the Trans Canada Trail network and are established through a partnership between private landowners and the STA. Most survey respondents were aware of and use these other trails. However, twenty-three percent were not aware of nearby trails. Six percent were aware of other trails but only use the Lake Minnewasta Trail.



Survey respondents expressed a strong desire for additional trails in the area, with 94% wanting more trails and 5% unsure. Only 1% of respondents did not want more trails in the area.

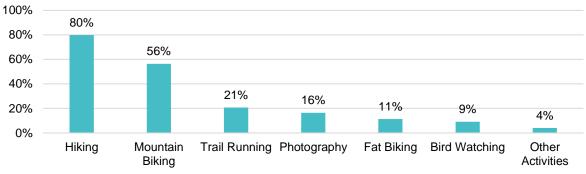
Trail User Survey Results



In the above graphic, darker green shows the percent of trail users who use the trail most frequently (one or more times per week) in each season. The lighter green portions of each column show the percentage of users who use the trail less frequently (either 1-3 times a month, 1-2 times in the season or never). These data suggest the intensity of traffic the trail receives in each season. User count data and data showing trail use intensity by day of week or time of day was not collected. Anecdotally from trail user observations, the trail is more intensely used on weekends, late afternoons and early evenings.

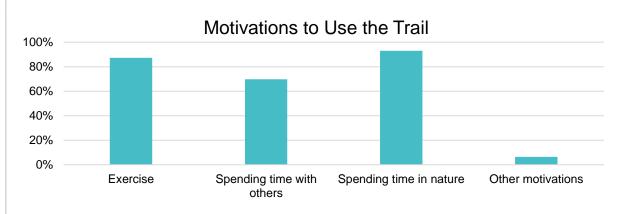
According to data available, a similar amount of visitors use the trail in spring, summer and fall. However, summer and fall receive more frequent visitors. Spring receives nearly the same amount of visitors as summer and fall but these visit the trail less often. Winter receives the least visitors. And most winter visitors only use the trail one or two times during winter.

Types of Trail Uses



According to the survey, trail visitors use the trail in many different ways and for a variety of reasons. Hiking, mountain biking, trail running, photography, fat biking and bird watching were listed as activities for respondents to select. Other data shows that most trail users (63%) use the trail in more than one way, for example biking, hiking and photography. Hiking is the most popular activity followed by mountain biking and trail running. Some respondents listed additional uses for the trail including access to the lake for fishing and picnic destinations, foraging and dog walking.

Spending time in nature, exercising and socializing are motivations for many trail users. Some listed these additional motivations: feeling alive, having fun, finding fishing locations, spending time with a pet, finding space for meditation and spiritual reflection, pursuing mental health, searching for geocaches, completing Strava segments and wanting to improve cycling skills.



Feedback from the Survey

In the survey, respondents shared comments on what they loved about the trail. These are summarized here.

What People Love About the Trail

"It opens up the world to us."

"It's a great trail for almost everyone, from beginners to fairly skilled riders; it's a lot of fun to ride."

"It's scenic and feels more 'untouched' than some other trails."

"The ability to spend time talking to God, heal, take time away from the world and being a mom."

"The feeling of connectedness to the land."

"The good mix of flow and technical sections on the trail. Also has a good mix of climbing and descending."

"I love walking in the trees and the beautiful views."

"Very nicely designed and maintained. Also great that it's multi-use."

Many survey respondents commented on something they loved about the trail. From the hundreds of comments, several themes emerged.

- **1. Socializing**: The trail is a good place to meet up with friends and socialize while being active.
- 2. Nature: The trail provides access to nature. Many respondents appreciated the diversity of forest and other habitats as well as chances for wildlife sightings. Some respondents appreciated that the area serves to conserve nature.
- **3. Diversity and Challenge**: The trail offers a variety of features and travels through a diverse landscape. The changes in elevation are a fun challenge.
- **4. Maintenance**: In general, respondents felt the trail was well maintained while built and maintained to fit the natural setting and not over-developed.
- **5. Nearness**: It is nearby and easy to access for many people in the region.
- **6. Exercise & Wellbeing**: The trail is an accessible location to exercise and promote mental and physical well-being, available for free and at any time.
- 7. Accessible & Multi-use: The trail is accessible to a wide range of ability and skill levels as well as available for a diversity of uses and at most times of year.
- **8. Signage**: The existing signage is helpful and in general most were appreciative of the new emergency signs.

"The fact that it's close enough to access but far enough out of town to feel that you're in nature, and walking past people from the community."

Feedback from the Survey

Respondents also shared recommendations to enhance the trail experience.

Recommendations for the Trail

Ten themes emerged from recommendations collected during the survey. These are summarized here:

- 1. Close the Loop: Many participants suggested closing the loop around the lake by building a bridge over or around the dam on the east side.
- 2. Signage: The existing signage is helpful but most felt that more is needed, especially for new users. Suggestions included adding maps with trail names and distances at all trailheads, putting more signage at intersections and better signage showing the route through town. Overall, most comments about the emergency signs were positive but some felt there are too many. Some suggested putting in several interpretive signs along the trail. Many felt that adding signs on trail safety & etiquette would be helpful; these recommended posting information about ticks, reminders that the trail is 2-way, to watch for blind corners, respect other trail users, and to pick up litter and dog poo.
- 3. **Trail Additions:** Many requests for additional trails were made. Ideas included adding hiking and biking specific trails and adding some easier and some more challenging trails to diversify the trail system. These included adding trails accessible for strollers or mobility aids in addition to trails with more features and challenge for mountain biking (a jump line, more berms, more features, and skinnys were listed). Some comments recommended adding one directional trails to improve safety.
- **4. Facilities & Infrastructure:** Year-round washrooms at trailheads were recommended plus places to fill up on water, more garbage cans, and improved fishing spots.
- **5. Maintenance**: Maintenance recommendations included repairing the bridge at the west end, planning litter pick-up days and addressing some erosion issues on the banks. Many comments were made about mud both keeping traffic off the trail when muddy and mitigating muddiness by adding boardwalks or wood chips to wetter sections.



Feedback from the Survey

Recommendations for the Trail (Continued)

- **6. Future Planning**: Respondents recommended planning ahead to accommodate growing trail use, to keep it open, free, natural, accessible to all and safe from development.
- 7. Traffic Management: Concerns were raised about the amount of traffic on the trail, especially during peak times on weekends and evenings during summer and fall and considering that the trail is 2-directional and multi-use. Suggestions to mitigate risk included: a) making some or all of the trail 1-directional or making the trail 1-directional during peak use times, b) extending the trail and making some segments biking or hiking only, c) promote trail etiquette through signage, social media or workshops, d) provide clear rules on right of way, e) recommending that bikers wear bells to give hikers more time to respond to their approach.
- **8. Indigenous Acknowledgement:** Representation and recognition of Indigenous land practices as the trail system is a great opportunity to acknowledge and respect the First Peoples of the area as well as the privilege to use the space. One respondent recommended that it is "important to recognize Indigenous people's rights, culture, sacrifices, and traditional uses of the space."
- **9. Information Sharing**: Some recommended posting updates on the trail condition and other trail information online. Others wanted more information on how to support the trail, make donations or get involved.
- 10. Other Concerns: Concern was raised about off leash dogs from nearby properties or other trail users. Other concerns raised were to reduce or eliminate motorized traffic at the lake including boats in summer and snowmobiles on the lake in winter. Snowmobiles were seen as especially hazardous mixed with foot traffic on the lake in winter.





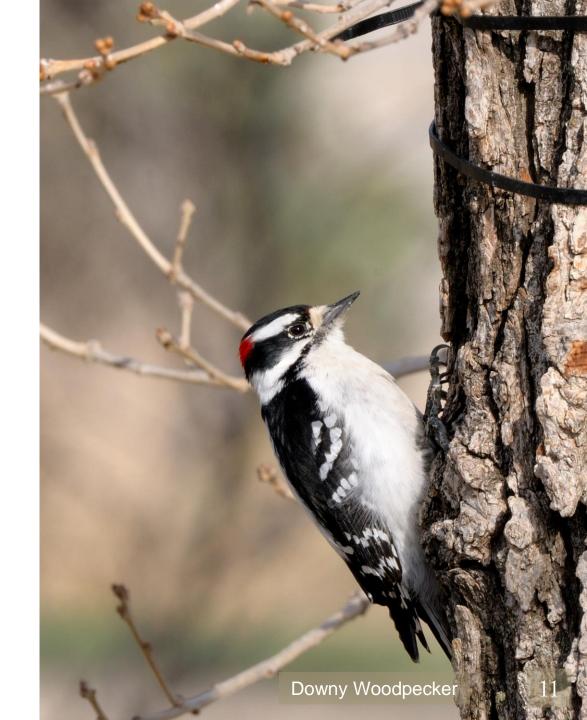
About the 2021 Bird Survey at Lake Minnewasta

Bird-watching is an excellent outdoor activity which introduces people to diverse habitats and promotes the exploration of areas outside their backyards or neighbourhoods. Birding, as it is commonly called, can be enjoyed by young and old, beginners and experts.

This bird survey was completed at the request of the STA to document birds and their habitats along Lake Minnewasta recreational trails as well as provide recommendations to protect and conserve adjacent habitats.

Three bird surveys were completed along recreational trails at Lake Minnewasta, Manitoba, in May and June 2021 by Paul Goossen, a local bird expert. In total, 80 species were recorded. Songbirds (55%) were the primary species identified followed by birds associated with water (33%).

Four species at risk were spotted. These are the Bank Swallow, Olive-sided Flycatcher, Eastern Wood Pewee and the Western Grebe. Redwinged Blackbirds, Yellow Warblers and Franklin Gulls were among the most common birds. For a complete list of birds recorded during this survey see appendix 2 (appendixes are a separate document). A report further detailing the 2021 Lake Minnewasta Bird Survey will be available on the STA website.

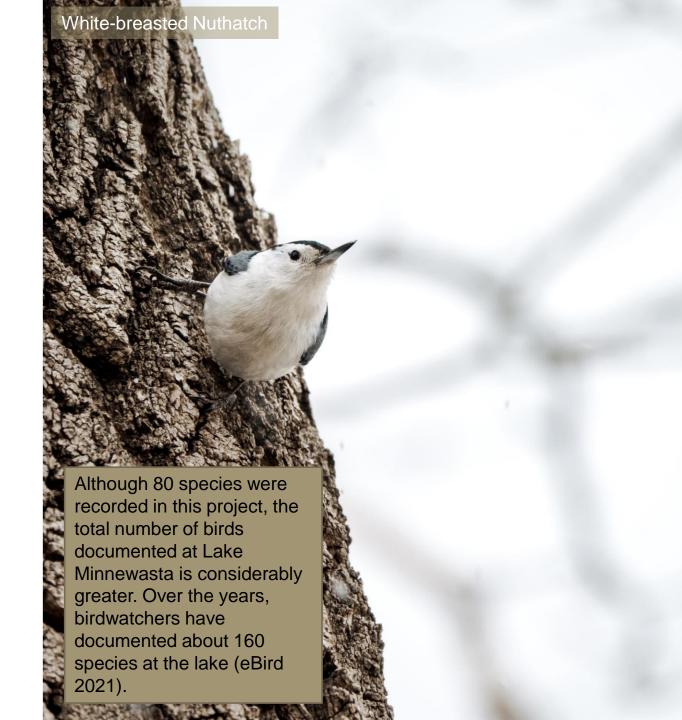


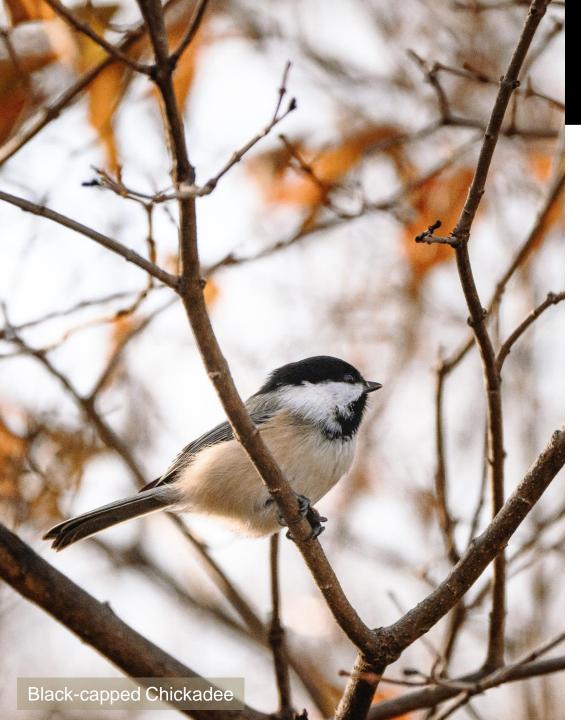
About Bird Habitats at Lake Minnewasta

Lake Minnewasta lies on the Pembina Escarpment, adjacent to the Red River Valley, and falls within the Prairies Ecozone and Aspen Parkland Ecoregion of Manitoba (Smith et al. 1998). This waterbody lies within the City of Morden, approximately 110 km southwest of Winnipeg. The lake is actually a reservoir, formed by damming the Dead Horse Creek in 1941 by the Prairie Farm Rehabilitation Administration to provide a source of water for Morden residents. The reservoir also provides recreational and camping opportunities for the residents of Morden and visitors to the area.

Lake Minnewasta trails lie adjacent to woodland, mixed woodland-grassland and wetland habitats. Which bird species visitors will encounter along the trails is largely dependent on the habitat visitors pass through. Birds select habitats which provide basic survival materials for food, shelter and nesting. Some species are highly selective and limit their activities to only a certain type of habitat(s) while others are generalists which are less tied to a specific habitat.

In addition to habitat selection, the time of year and weather conditions will also influence what species are present or observable. Since surveys for this project were carried out in spring and early summer, they do not reflect what bird species may be present along the trails in fall and winter.





Recommendations from the Bird Survey

Collaboration

Collaboration among municipalities, urban centres and environmental organizations is needed if they wish to bring awareness and knowledge of the region's natural heritage to the general public and promote conservation of wildlife habitats.

Habitat Protection

Many common bird species are in decline in North America. One of the greatest threats to birds is habitat loss. The protection of existing natural habitats is critical for birds. Additionally, birds provide a variety of beneficial ecosystem services including pollination, seed dispersal and pest control. It is important that Lake Minnewasta woodland and wetland ecosystems remain intact for wildlife as well as for visitors who value nature and outdoor experiences.

Habitat Restoration and Enhancement

As Lake Minnewasta has primarily native vegetation adjacent to its trails, it is important to protect and conserve this flora. Non-native and invasive species should not be introduced to this area and where found should be removed. Should bank stabilization above the shoreline be contemplated, officials should ensure that only native trees, shrubs, herbs and forbs are used. Planting non-native species can lead to competition with native plant species and contribute to habitat loss.

Interpretation

The protection of habitats not only provides spaces for birds but also for a host of other species which contribute to functioning biological communities. For these reasons, it is important to communicate the value of healthy ecosystems. The following are several proposed ideas:

- Local organizations and the City of Morden could produce educational materials like public brochures, short videos and school material resources.
- Interpretive signage about birds, their habitats and their value could be placed at strategic places along the trails.
- Organizing bird walks at Lake Minnewasta would provide an introduction to birds of the area and
 give opportunity to educate participants about the value of birds to society and their ecological role
 in the environment.



The 2021 Lake Minnewasta Plant Inventory

A diversity of habitats surround Lake Minnewasta, each made up of unique plant communities. These plants make up the foundation of the woodland, grassland and wetland habitats that provide a home for birds, insects and other wildlife at Lake Minnewasta. They also provide unique landscapes to travel through along the trail, enhancing the trail experience through offering shelter from wind and sun or by displaying showy flowers. Some trail users forage for different plant species like saskatoons, nanny berries or wild mint.

STA volunteers, Doug Kelso and Leanna Wiebe, completed several plant inventories along the Lake Minnewasta trails during June and July 2021. These were compiled to create a plant inventory and included in this report to enhance awareness of the Lake Minnewasta plant communities. In total, 18 tree species, 16 shrub species and 80 herbaceous species (plants with soft, green stems) were documented. For a complete list of all plant species found in 2021, see appendix 3 (appendixes are a separate document).

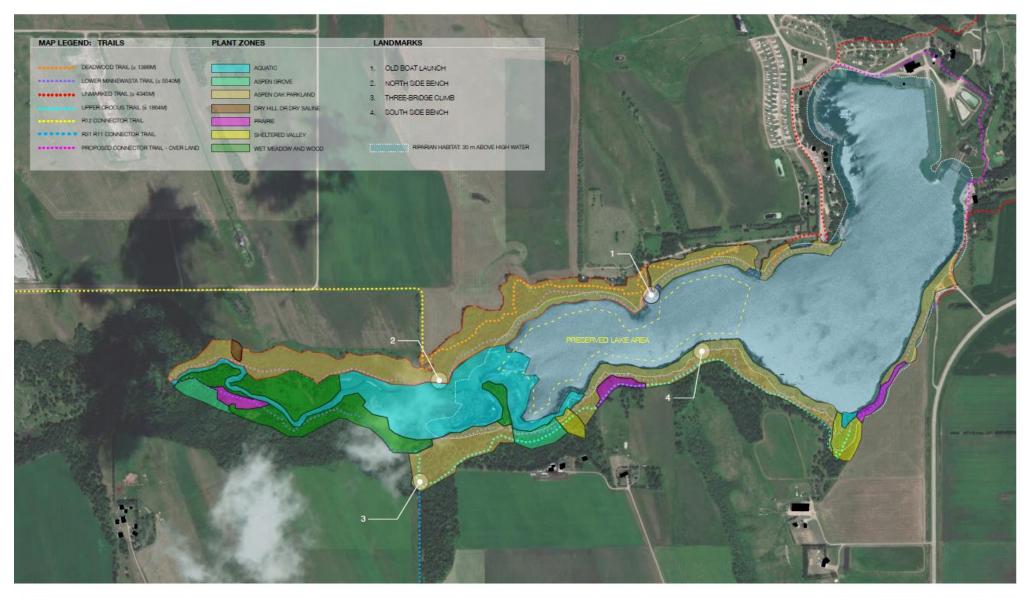
Of note, 2021 was an exceptional drought year which impacted plant diversity in the region. The surveys were also limited to June and July. Plants that "show up" or become more obvious at other times of year may have been missed. Despite these limitations, this inventory along with accompanying observations and recommendations provide insights into the plant species and their habitats at Lake Minnewasta.



About the Lake Minnewasta Plant Habitats

This map was created through collaboration between STA volunteers and Sputnik Architecture Inc. It shows 7 different plant zones, or unique plant communities around Lake Minnewasta in the spaces used for recreational trails. Zone boundaries are based on volunteer observations and habitat descriptions by H. H. Marshall, a local botanist, in his 1971 book, Pembina Hills Flora. Marshall's book details plant communities in the Pembina Hills region.

Aquatic zone boundaries shown here are affected by the 2021 drought conditions and record low levels at Lake Minnewasta. When lake levels are higher, this zone will be smaller.



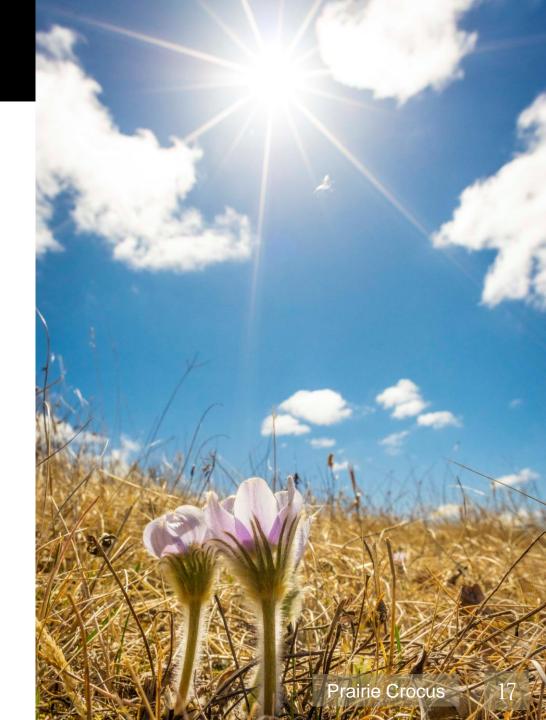


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Recommendations from the Plant Inventory

Recommendations from the plant inventory align closely with those included within the 2021 bird survey at Lake Minnewasta. This is not surprising as the health and survival of birds and their habitats are closely intertwined.

- **1. Collaboration** among municipalities, urban centres and environmental organizations is needed to bring awareness and knowledge of the region's natural heritage to the general public and promote conservation of local plant habitats.
- **2. Habitat Protection:** Plants in Lake Minnewasta woodland, prairie and wetland ecosystems provide a unique refuge for birds, pollinators and wildlife as well as enhance enjoyment for visitors using the recreational trails for these reasons they should be protected to keep them intact. These habitats also provide important ecosystem services such as carbon sequestration, erosion control, and surface water filtration. Protecting these habitats will help ensure these benefits are provided into the future.
- **3. Habitat Restoration and Enhancement:** Lake Minnewasta has primarily native vegetation adjacent to its trails. However, several non-native and invasive species have been introduced in the area. Of most concern, leafy spurge and European buckthorn were identified. Strategies to control these and other harmful invasives should be made such to help protect the intact native habitats and promote species diversity. Further introduction of harmful invasive species should be avoided. One way to do this is only using native trees, shrubs, herbs and forbs in plantings. Planting non-native species can contribute to habitat loss with cascade effects to other species.
- **4. Interpretation:** The protection of habitats not only provides spaces for birds but also for plant species which contribute to functioning biological communities. For these reasons, it is important to communicate the value of healthy ecosystems. The following are several proposed ideas:
- Local organizations and the City of Morden could produce educational materials like public brochures, short videos and school material resources.
- Interpretive signage about plants, their habitats and their value could be placed at strategic places along the trails or at trail heads.
- Organizing plant walks at Lake Minnewasta would provide participants with an introduction to local plant communities and would be a great opportunity to educate the public about the value of local plant communities.





Thank-you to the following organizations for their support:

- Government of Manitoba's Heritage Grant Program
- Sputnik Architecture Inc.
- Stanley Trail Association

Additional thanks to these volunteers and organizations for contributing to the contents of this report:

- Writing and Editing: Leanna Wiebe, Paul Goossen, Valorie Goossen,
 James Friesen
- Trail User Survey Distribution: Stanley Trail Association, Country Cycle, City of Morden, RM of Stanley, Explore Morden Winkler, Pembina Hills Arts Centre
- Bird Survey: Paul Goossen, Valorie Goossen
- Plant Inventory: Doug Kelso, Leanna Wiebe
- Lake Minnewasta Plant Zone Map: Leanna Wiebe, Sputnik Architecture
- Photography: Jeff Scott, Leanna Wiebe, Kristen McLean, Paul Goossen

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