

APPENDIX

D

DETAILS OF
ENVIRONMENTAL
REGULATORY
REQUIREMENTS

REGULATORY REQUIREMENTS – ADDITIONAL INFORMATION

1.1 FEDERAL

1.1.1 *MIGRATORY BIRDS CONVENTION ACT, 1994 (S.C. 1994, C.22)*

The *Migratory Birds Convention Act* (MBCA) was implemented in 1917 after the signing of the Migratory Bird Convention treaty between Canada and the United States and was designed to protect migratory birds and their nests, and established the Canadian government with jurisdiction over coastal and inland bird habitats (Government of Canada, 2016). The Act is regulated by Environment and Climate Change Canada and is applicable to all activities associated with organizations, industries and individuals and to all lands and water bodies in Canada.

Under Section 2 of the Act “migratory bird” means a migratory bird referred to in the Convention, and includes the sperm, eggs, embryos, tissue cultures and parts of the bird (Government of Canada, 2016). Under Article V of the Act “the taking of nests or eggs of migratory game or insectivorous or nongame birds shall be prohibited, except for scientific or propagating purposes under such laws or regulations as the High Contracting Powers may severely deem appropriate” (Government of Canada, 2016). The “taking” of nests or eggs from a site during the avian breeding season, is generally prohibited from early April until late August in Canada for most species; however, removal of nests for species that reuse the same nests in subsequent years should be avoided and nests of species listed under the *Species at Risk Act* are protected at all times when the species usually reuses its nest (Note: proponents should refer to the Government of Canada website to determine breeding bird nesting calendars in their area). Activities which may disturb nests and nesting birds include:

- Land disturbance (i.e., building roads, clearing trees and vegetation).
- Infrastructure rehabilitation and decommissioning disturbances (i.e., bridge replacement, building removal).
- Sensory disturbance (i.e., noises, lights, and other human activities).
- Emergency incidents (i.e., fires, spills, hazardous materials).

It is the responsibility of a project proponent to ensure compliance with the MBCA through demonstration and documentation of a due diligence approach. The Government of Canada has also published “avoidance guidelines” to aid proponents in project planning to reduce detrimental effects to migratory birds, and their nests and eggs. If there is to be risk of non-compliance to the MBCA, a project specific assessment and mitigation approach must be developed by a professional avian biologist or other qualified professional. It is not recommended that pre-clearing nest searches be conducted as means of demonstration for compliance of the Act.

1.1.2 *SPECIES AT RISK ACT (S.C. 2002, C.29)*

The *Species at Risk Act* (SARA) was proclaimed in June 2003 to prevent Canadian indigenous species, subspecies, and distinct populations from becoming extirpated or extinct, to provide for the recovery of endangered or threatened species, and encourage the management of other species to prevent them from becoming at risk (Government of Canada, 2016[b]). This applies to all species on the List of Wildlife Species at Risk, Schedule 1 of the Act. Essentially SARA protects species and their residences making it an offense to kill, harm, harass, capture, collect, possess, buy, etc., an individual of a listed endangered, threatened or extirpated species or damage or destroy its residence (Government of Canada, 2016 [b]).

In most cases, SARA does not apply on private land. SARA prohibitions apply to all species on federal land (e.g. National Parks), all aquatic species everywhere in Canada, and all migratory birds listed under the *Migratory Bird Convention Act* everywhere in Canada (Manitoba Conservation and Climate, n.d.[d]); however, all Canadian Provinces and territories have signed an Accord for the Protection of Species at Risk in Canada. The Accord fosters co-operations between the federal, provincial and territorial governments to ensure that species at risk are protected throughout Canada (Manitoba Conservation and Climate, n.d.[d]). In addition, SARA applies automatically on provincial/territorial lands and waters for species covered under the *Migratory Bird Convention Act* or the federal *Fisheries Act*. Generally, provinces and territories work in-conjunction with the federal government and SARA to

protect species and critical habitat on non-federal lands. Often a species protected under SARA is likely protected under provincial legislation as well. For example, the Baird's sparrow (*Ammodramus bairdii*) is protected under both SARA and Manitoba's *Endangered Species and Ecosystems Act*.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) constitutes a group of academics, consultants and non-governmental organization biologists, and biologists from federal, provincial, and territorial governments that was created in 1977 to develop a single, official, scientifically sound, national classification of species at risk in Canada and to assess and designate Canadian wildlife species based on this classification system. In June 2003, the SARA established COSEWIC as an advisory body to provide the federal Minister of Environment and Climate Change Canada (ECCC) with recommendations regarding the status of species at risk extinction in Canada and the threats that they face in order to assist with establishing the legal list of species at risk (Schedule 1) (Government of Canada, 2016). Status categories established by COSEWIC are provided in the Table 1 below.

Table 1. COSEWIC Status Categories

Category	Definition
Wildlife Species	A species, subspecies, variety, or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus, that is wild by nature and it is either native to Canada or has extended its range into Canada without human intervention and has been present in Canada for at least 50 years.
Data Deficient	A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.
Not at Risk	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
Special Concern	A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
Threatened	A wildlife species likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
Endangered	A wildlife species facing imminent extirpation or extinction.
Extirpated	A wildlife species no longer existing in the wild in Canada but exists elsewhere.
Extinct	A wildlife species that no longer exists.

¹Taken from: Government of Canada, COSEWIC, Wildlife Species Status Categories and Definitions Website. 2016-09-14. Retrieved from: <https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife/wildlife-species-status-categories-definition.html>. Retrieved on: September 10, 2019.

If future SOCC assessment(s) are completed or mitigations measures are implemented in support of the Project that require disturbance, capture or handling of a SOCC, a permit from ECCC and / or the Wildlife and Fisheries Branch of Manitoba Agriculture and Resource Development Manitoba (MARD) (if species is listed under Manitoba Endangered Species and Ecosystems Act) may be required.

1.1.3 FISHERIES ACT (R.S.C., 1985, C. F-14) & 2012/2013 AMENDMENTS

On June 21, 2019, the modernized federal *Fisheries Act* received royal assent and became law and on August 28, 2019, the new regulations came into force. The modernized *Fisheries Act* includes the fisheries protection prohibition against causing death to fish, or the harmful alteration, disruption or destruction (HADD) of fish habitat. Projects that will result in the death of fish or a HADD, require Authorization under sections 34.4(2)(b) and 35(2)(b)

of the *Fisheries Act*. The Department of Fisheries and Oceans (DFO) interprets HADD as “any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat’s capacity to support one or more life processes of fish” (Government of Canada, 2020).

Fish, as defined in the *Fisheries Act* (Sec 2), includes “shellfish, crustaceans, marine animals, the eggs, sperm, spat and juvenile stages of fish, shellfish, crustaceans, and marine animals.” Fish habitat is defined (subsection 2[1]) as “all waters frequented by fish and any other areas upon which fish depend directly or indirectly to carry out their life processes. This includes spawning grounds and nursery, rearing, food supply and migration areas”.

If a proponent is able to incorporate project design and planning activities that incorporate measures to protect fish and fish habitat, a proponent does not need to request a project review by DFO. If measures cannot be undertaken to protect fish and fish habitat, a request for project review or authorization under the Act may be required whereby DFO will provide terms and conditions a proponent must follow for avoiding, mitigation, offsetting and monitoring the serious harm to fish resulting from the project (Government of Canada, 2019).

For projects or activities that occur, in or near water (i.e. addition of rip rap; removal of riparian vegetation) and have the potential to impact fish or fish habitat, the *Fisheries Act* is applicable.

1.2 PROVINCIAL

1.2.1 THE ENVIRONMENT ACT (C.C.S.M C.E125)

In Manitoba, proposed projects or “developments” are regulated under The Environment Act and as per Section 1(1) (b) of the Act, developments that are likely to have significant effects on the environment require an Environment Act Licence (EAL) issued by the Environmental Approvals Branch (EAB) of Manitoba Conservation and Climate (Manitoba Laws, 2016). Three levels or “classes” of development are defined by the Act under the Classes of Development Regulation that lists the type of development projects that require an EAL. Class I developments include projects/developments that are more routine and common in occurrence, progressing to Class 3 developments which include projects that are generally more complex and less common in occurrence.

1.2.2 THE WILDLIFE ACT (C.C.S.M. C.W130)

In Manitoba, protection of wildlife and their habitat is covered under The Wildlife Act, the scope of which includes the management of wildlife, wildlife research and the protection of property and persons. This is achieved through the regulating/restricting/permitting/licensing of activities such as hunting and trapping, importing/exporting and buying/selling of wildlife and the enforcement of regulations/restrictions pertaining to these activities (Manitoba Conservation and Climate, n.d. [e]).

1.2.3 ENDANGERED SPECIES AND ECOSYSTEMS ACT (C.C.S.M. C. E111)

The *Endangered Species and Ecosystem Act* of Manitoba (ESEA) was enacted in 1990 and is administered by the Wildlife and Fisheries Branch of MARD. The purposes of the ESEA “are to ensure the protection and enhance the survival of threatened and endangered species as well as species of special concern in Manitoba. This Act is to aid in enabling the reintroduction of provincially extirpated species and to protect endangered and threatened ecosystems in the province along with the recovery of those ecosystems. Under the Act, a species is protected once it has been declared by regulation to be threatened, endangered, extirpated or extinct (Manitoba Conservation and Climate (2), n.d.). Once a species has been declared by regulation, “it is unlawful to kill, injure, possess, disturb or interfere with the species; destroy, disturb or interfere with the habitat of the species; or damage, destroy, obstruct or remove a natural resource on which the species depends for its life and propagation” (Government of Manitoba, n.d.). The Act applies to all lands in Manitoba for species listed under the Act, and only on Crown lands for ecosystems listed under the Act.

This Act is applicable to any mammal, bird, reptile, amphibian, fish, or plant, living or dead and to any ecosystem described in the regulation. Several historical sightings for SOCC have been recorded within the PSA that would be

subject to this Act and may require special mitigation measures to be included. If future SOCC assessment(s) are completed or mitigations measures are implemented in support of the Project that require disturbance, capture or handling of a SOCC, a permit from ECCC and / or MARD (if species is listed under Manitoba Endangered Species and Ecosystems Act) may be required.

Manitoba Conservation Data Centre

The Manitoba Conservation Data Centre (MB CDC) maintains information on Manitoba’s biodiversity including plant and animal species and natural plant communities. The MB CDC is part of a network of biodiversity centers across Canada, the United States and Latin America known as NatureServe (NatureServe Canada). The MB CDC has developed a list of plant and animal species also known as elements of diversity found in Manitoba. Each of these elements is assigned a conservation status rank endorsed by NatureServe based on how rare the species or community is in Manitoba. The MB CDC database contains information on the status, location (by Ecoregion) and ecology of species with a focus on those deemed to be at risk (Manitoba Conservation and Climate (2), n.d.). Conservation status ranks measure extinction or extirpation risk of species/communities at three geographic scales including: global (G-rank), national (N-rank) and subnational (S-rank) (NatureServe, n.d.). The MB CDC provides G-ranks, N-ranks and S-ranks. Details on the S-rank species ranking system utilized by the MB CDC for species of conservation concern is provided below in Table 2.

Table 2. Subnational Conservation Status Rank for MB CDC Listed Species¹

Subnational Conservation Status Rank	
Rank	Definition
S1	Critically imperiled – At a very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats or other factors.
S2	Imperiled – At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, very steep declines, severe threats or other factors.
S3	Vulnerable - At a moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats or other factors
S4	Apparently Secure - At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats or other factors.
S5	Secure - At a very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.
SU	Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SX	Presumed Extirpated—Species or ecosystem is believed to be extirpated from the jurisdiction (i.e., nation, or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. [equivalent to “Regionally Extinct” in IUCN Red List terminology].
SH	Possibly Extirpated – Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.

Subnational Conservation Status Rank	
Rank	Definition
SNR	Unranked – National or subnational conservation status not yet assessed.
SNA	Not Applicable - A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., long distance aerial and aquatic migrants, hybrids without conservation value, and non-native species or ecosystems (see Master et al. 2012, Appendix A, pg. 70 for further details).
Breeding Status Qualifiers	
B	Breeding - Conservation status refers to the breeding population of the species in the nation or state/province.
N	Non-breeding - Conservation status refers to the non-breeding population of the species in the nation or state/province.
M	Migrant - Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province.

Taken From: NatureServe. n.d. Conservation Status Assessment Website. Retrieved from: <https://www.natureserve.org/conservation-tools/conservation-status-assessment>. Retrieved on: September 10, 2019.

1.2.4 WATER PROTECTION ACT (S.M. 2005, C. 26)

The *Water Protection Act* of Manitoba regulates water quality standards including regulation of invasive and non-native species. The Provincial aquatic invasive species legislation under The Water Protection Act and Aquatic Invasive Species (AIS) Regulations came into force in November 2015. The AIS Regulations were amended and came into effect on May 24, 2017.

The Act states mitigation measures to reduce potential for migration of aquatic invasive species. Water-related equipment (includes anchors, buoys, ropes/cables, sonar equipment, scientific equipment, towels/cloths/rags, any type of pump used to remove or move water, construction equipment and industrial equipment that is used in a water body) must be inspected to ensure that it is free of aquatic invasive species, aquatic plants and mud and remove any standing water from the equipment and dispose on land so it does not drain into a water body before it is placed into a water body. When water-related equipment is removed from a water body it must be inspected and all aquatic invasive species and aquatic plants be removed and all water drained before being transported away from the shore of the water body (Manitoba Justice, n.d.).

During all Project stages (pre-construction, construction and maintenance and operation) any water-related equipment must not be placed into another water body unless the equipment is completely dry (no detectable water on equipment and no dampness felt), and has been decontaminated according to Schedule C of the legislation.

1.2.5 NOXIOUS WEEDS ACT (C.C.S.M. C. N110) AND REGULATIONS

The purpose of the *Noxious Weed Act* is to aid in controlling the spread of noxious weeds in Manitoba. Under the Act, occupants or owners of lands are required to destroy all noxious weeds growing on their land as often as necessary to prevent the growth, maturing and dispersion of weeds or weed seeds (Government of Manitoba (3), n.d.).

As the owner of the land upon which the roadway is to be constructed, MI will be responsible for the control of noxious weeds within the project footprint. A weed management plan will likely be required for the Project at the time of the construction.

1.2.6 THE HERITAGE RESOURCES ACT, 1986 (C.C.S.M. C. H391)

The Heritage Resources Act, 1986, Section 12(2) made mandate by the Province of Manitoba stipulates that any activity that may result in the damage, alteration or destruction of a heritage property may be subject to an archaeological investigation. Deemed Crown property, heritage resources include but are not limited to archaeological sites, built heritage sites, structures of historical or architectural significance and paleontological sites (Manitoba Laws, n.d.[a]); (Manitoba Culture, Heritage and Citizenship, 1993).

The Act provides for Heritage Resource Impact Assessments (HRIA) which are studies that are intended to reduce the risk of last minute discovery and potential destruction of heritage resource and human remains during land development activities. With the exception of buildings or structures, heritage resources are usually associated with particular types of landscapes including prominent hills or knolls, the ancient shorelines (usually beach ridges) of glacial Lake Agassiz, deltas and eskers created by retreating glaciers, and lands located near water sources (Manitoba Culture, Heritage and Citizenship, 1993). The Act is administered by the Manitoba Historic Resources Branch (HRB).

Two archaeological sites have been identified by the HRB and is situated in terrain with a high potential for Pre-Contact archaeological sites. As such, A pre-construction HRIA will be conducted for the summer of 2021.

1.2.7 DANGEROUS GOODS HANDLING AND TRANSPORTATION ACT (C.C.S.M. C. D12)

The *Dangerous Goods Handling and Transportation Act* sets out requirements for the handling and transportation of dangerous goods and hazardous waste. This Act enables the provincial government to establish standards pertaining to the generation, storage, transportation and disposal of hazardous waste. The Act sets out specific requirements relating to hazardous waste through five regulations. The regulations include determining what is regulated as a hazardous waste, the transportation of dangerous goods, storage and handling of petroleum products and allied products, registration for waste generators and transporters, procedures to be used for completing and distributing the hazardous waste shipping document, and regulation of PCB site storage (Manitoba Laws, n.d.[b]).

This Act may be applicable to the Project during the construction stage for the transportation and handling of dangerous goods including fuels, oil and lubricants, etc., to/from the Project site.

1.2.8 ENVIRONMENTAL ACCIDENT REPORTING REGULATIONS 439/87

This regulation ensures that the responsible party of a spilled contaminant listed in *Schedule, Reportable Quantities*, reports the accident/spill immediately to the Manitoba Department of Environment and Workplace Safety and Health and to the local police or fire department.

This regulation may be applicable to the Project during the construction and O&M stages.

1.2.9 WASTE REDUCTION AND PREVENTION ACT AND APPLICABLE REGULATIONS (C.C.S.M. C. W40)

The *Waste Reduction and Prevention Act* allows the Minister of Conservation and Climate to designate materials with the potential to become waste in order to reduce and prevent the production and disposal of waste in the province consistent with the principles of sustainable development (Manitoba Laws, n.d.[c]).

This Act may be applicable during construction of the Project in order to reduce and recycle construction waste as applicable.

1.2.10 CONTAMINATED SITES REMEDIATION ACT (C.C.S.M C. C205)

Contaminated site issues in Manitoba are governed by *The Contaminated Sites Remediation Act* (CSRA) (C.C.S.M c. C205), and its amendment *The Contaminated Sites Remediation Amendment Act* (MCWS, 1996, amended 2014) and administered by MCC. Under the CSRA, it is prohibited to discharge any substance(s) to the environment,

which by their quantity, concentration or characteristics, are harmful to the health of humans or the environment. The intent of the CSRA is to protect human health and the environmental resources (air, land and water) of Manitoba. Where an unlicensed or unpermitted release of material has occurred, the CSRA requires the affected area be remediated to mitigate the risk to human health and/or the environment. Section 3.1 of the CSRA states that the owner or occupier of a site must notify MCC in writing when they become aware of information that indicates that the site has been contaminated at a level that exceeds a standard established or adopted by regulation (CSRA) and provide MCC with all reports and any other documentation in their possession respecting the contamination at the site.

1.3 MUNICIPAL

1.3.1 CITY OF WINNIPEG DEVELOPMENT PLAN

The City of Winnipeg's Development Plan, titled OurWinnipeg, presents a high-level framework for land use planning in the city. OurWinnipeg is supported by the Complete Communities Direction Strategy, which provides policy direction for growth and development in the city. Complete Communities generally supports the integration of land use and transportation, a range of transportation options and alternative modes of transportation (City of Winnipeg, 2011b). Additional direction for New Communities, Recent Communities and Rural and Agricultural areas identified in OurWinnipeg is further detailed in Complete Communities.

Key Directions from OurWinnipeg for land use, transportation and the Capital Region that are applicable to this project include:

- Key Directions for New Communities land use policy areas within OurWinnipeg are:
 - New Communities will continue to play an important role in accommodating the city's projected population growth. These New Communities will be planned as complete from the outset and will continue to achieve a high standard of sustainability in planning, design, construction and management; and
 - Additional direction for land use for New Communities, Recent Communities and Rural and Agricultural areas can also be found in the City's Complete Communities Direction Strategy, which is a supporting policy document to OurWinnipeg.
 - Key Directions for Connecting and Expanding Our Sustainable Transportation and Infrastructure Network within OurWinnipeg are as follows:
 - Create a safe, efficient and equitable transportation system for people, goods and services;
 - Create a transportation system that supports active, accessible and healthy lifestyle options;
 - Invest strategically in new...transportation infrastructure;
 - Support the role of the James Armstrong Richardson International Airport as a major transportation hub for passengers and cargo; and
 - Dynamically integrate transportation with land use.
 - Key Direction on the Capital Region within OurWinnipeg is as follows:
 - Acknowledging that mutual success will come from thinking and acting as a region, the City of Winnipeg will collaborate with the municipalities comprising the Capital Region to plan for a sustainable, vibrant and growing region.
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1.3.2 CITY OF WINNIPEG WATERWAY BY-LAW NO. 5888/92

The Waterway By-law (No. 5888/92) identifies regulated waterway areas with the City and under the By-law it is prohibited to conduct work in regulated areas without first obtaining a Waterway Permit (City of Winnipeg, 2016). The regulated area is defined as the riverbed and lands extending 350 feet on each side from the summer water level of the Red, Assiniboine, Seine and LaSalle rivers.

A City of Winnipeg Waterway Permit may be required for any Project works completed along the Red River.

1.4 OTHER

Additional guidelines that should be considered as part of the Project include:

- Motor Vehicle Noise and Policies and Guidelines (City of Winnipeg, 1984).

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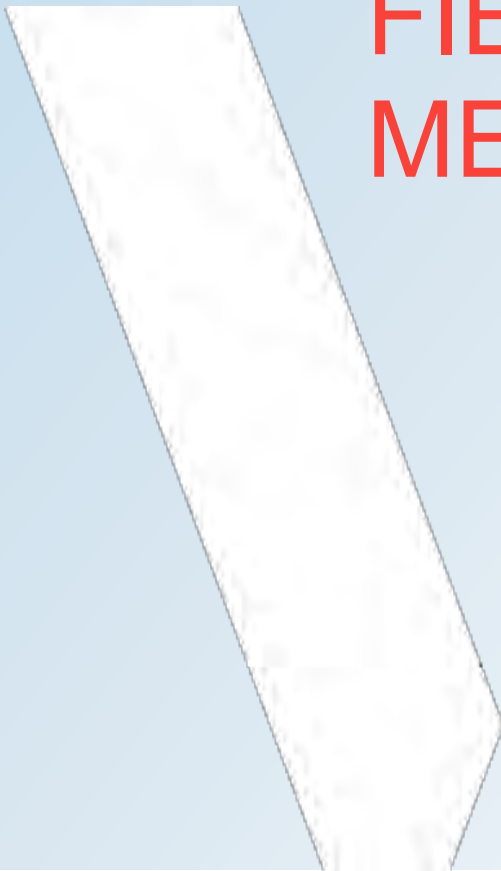
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APPENDIX

E

SUMMARY OF
FIELD SURVEY
METHODOLOGIES





ECOLOGICAL SURVEY METHODOLOGIES UTILIZED FOR SOUTH PERIMETER HIGHWAY DESIGN STUDY (2018-2019)

PLANT SPECIES OF CONSERVATION CONCERN (SOCC)

During the South Perimeter Highway Design Study (SPHDS), only publicly accessible sites were assessed as part of this survey as land owner permission to access private property was not obtained. This information, as well as information obtained from the desktop review, were utilized to characterize the current vegetation cover within the PSA. The cover types assessed included:

- Disturbed areas within the existing PTH 100 ROW including mowed RoW that consists of herbaceous/grass vegetation cover and low, wet depression areas associated with existing interchange areas;
- River bottom forest along the Red, Assiniboine and Seine Rivers;
- Deciduous forest that consisted of both bur oak dominant and trembling aspen dominant types adjacent to the existing RoW; and,
- Naturalized wetland at the PTH 1E and PTH 100 interchange.

At each pre-determined site, a meandering pedestrian survey was carried out to capture early flowering and later flowering plant species and therefore targeted two assessment periods: spring (June 12, 2018) and summer (July 26, 2018) within the identified RoW and publicly accessible natural areas for the PSA. In addition, publicly accessible areas within the project footprint where historical sightings of plant species at risk were recorded (refer to Section 8.10.2 of EAP report) were also revisited to assess for the presence of these species. During the surveys, plant species present were recorded to characterize the vegetation for a given habitat type and to assess these areas for plant SOCC. Only new species were identified at each sample location until there were no longer any new species left to identify. Surveys were not conducted during heavy rains, strong winds or when snow was greater than a dusting on plants.

Within the Project footprint, a waypoint was located in Natural Area #395 to the south of the existing intersection.

AUDITORY AMPHIBIAN SURVEY

During the SPHDS, in order to assess the presence of amphibian species inhabiting natural areas within the project footprint, an amphibian auditory call survey was completed in April of 2018, following the survey protocols adapted from the Saskatchewan Ministry of Environment, Fish and Wildlife Branch (SK MOE) (Saskatchewan Ministry of Environment, 2014) as the Government of Manitoba does not have standardized protocols for amphibian auditory detection surveys. Sampling stations were established approximately 800 metres (m) apart with 20 stations being established in order to be inclusive of the PSA. Stations were adjusted slightly to target areas that were better suited to leopard frog habitat. Four stations were not surveyed due to traffic safety concerns. Amphibian species present, and general population size were recorded at each survey location based on the Amphibian Calling Index (Saskatchewan Ministry of Environment, 2014). Weather and environmental conditions recorded included ambient temperature, wind speed, cloud cover, precipitation, and ambient noise (based on an ambient noise index for amphibians, published by the [Saskatchewan Ministry of Environment, 2014]). Amphibian surveys were not carried out under conditions $<0^{\circ}\text{C}$, wind speed >20 km/hr, a precipitation event, or when background noise inhibited the accurate detection of amphibians.

Due to significant noise from PTH 100, a survey was not conducted in the Project footprint for the PTH 100 / PR 200 interchange project.

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VISUAL TURTLE SURVEYS

During the SPHDS, at each of the vegetation survey locations that were located along the Red, Assiniboine and Seine Rivers, a limited observation was made for the presence of turtles with a focus on snapping turtles (*Chelydra serpentina*), a SOCC known to be present in the PSA. These surveys were modified from the Ontario Ministry of Natural Resources and Forestry (MNRF) survey protocol for Blanding's Turtle (OMNRF, 2015). Observations were made using binoculars and scanning the waters surface at each site for visual confirmation of swimming or basking turtles. In addition, due to lower water levels present at the time of the surveys, observations were made along the sediment on the banks of the rivers for any visual evidence of tracks. No detections of turtles were made at any location. As well, no other incidental sighting of turtles or other reptile species were made during the vegetation field surveys.

VISUAL BIRD NESTING SURVEYS

During the SPHDS, a visual survey for any birds using bridge structures, metal culverts or box culverts were made where accessible and any incidental flushing of nesting birds were made. During a February 2021 site visit of the historic dairy farm located at 2344 St. Mary's Road, a visual survey for barn swallow nests was conducted for accessible portions of the outbuildings. Within the natural areas, any nesting structures were identified including possible stick nests used by raptor species.

REFERENCES

- Ontario Ministry of Natural Resources and Forestry (OMNRF). 2015. Survey Protocol for Blanding's Turtle (*Emydoidea blandingii*) in Ontario. Species Conservation Policy Branch. Peterborough, Ontario. ii + 16 pp.
- Saskatchewan Ministry of Environment. 2014. Species Detection Survey Protocols, Amphibian Auditory Surveys. Fish and Wildlife Branch Technical Report No. 2014-1.0.

APPENDIX

F

CITY OF
WINNIPEG NSB –
NATURAL AREAS
REPORTS



City of Winnipeg, Naturalist Services

Report For Habitat Site

St. Norbert 7



Location

North of Frobisher Rd., South of Gobert Cresc.,
East of St. Mary's Rd.

Site Description

This seven acre site is classified as aspen forest habitat and contains some oak forest and wetland habitats. The site has very little disturbance and only a few weed species. This site contained the largest number of tree species and had the greatest overall diversity of the aspen forest sites inventoried.

Site Name

St. Norbert 7

Site

395

Habitat Information and Plants Found at the Site:

Grade B

Habitat Types Oak Forest

Area in Hectares 5.09

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Acer negundo	Manitoba maple	01/07/1995	N
Achillea millefolium	Yarrow	30/07/2002	N
Amelanchier alnifolia	Saskatoon	01/07/1995	N
Amphicarpa bracteata	Hog-peanut	30/07/2002	N
Arctium minus	Lesser burdock	01/07/1995	I
Arctium spp.	Burdock	30/07/2002	I
Artemisia ludoviciana	Prairie sage	30/07/2002	N
Asclepias spp.	Milkweed	30/07/2002	
Asparagus officinalis	Garden asparagus	30/07/2002	I
Aster ciliolatus	Lindleys aster	01/07/1995	N
Aster spp.	Aster	30/07/2002	
Bromus inermis	Smooth brome	30/07/2002	I
Calamagrostis canadensis	Marsh reed grass	01/07/1995	N
Carex praegracilis	Graceful sedge	01/07/1995	N
Carex spp.	Sedge	01/07/1995	N
Cirsium arvense	Canada thistle	01/07/1995	I
Cornus stolonifera	Red osier dogwood	01/07/1995	N
Corylus americana	American hazelnut	01/07/1995	N
Corylus spp.	Hazelnut	30/07/2002	
Crataegus rotundifolia	Round-leaved hawthorn	01/07/1995	N
Crataegus spp.	Hawthorn	30/07/2002	
Elymus spp.	Wild rye	30/07/2002	
Equisetum arvense	Common horsetail	30/07/2002	N
Fragaria virginiana	Smooth wild strawberry	01/07/1995	N
Fraxinus pennsylvanica	Green ash	01/07/1995	N
Galium boreale	Northern bedstraw	01/07/1995	N
Geum alleppicum	Yellow avens	30/07/2002	N
Hackelia deflexa var.	Nodding stickseed	01/07/1995	N
Lemna minor	Lesser duckweed	01/07/1995	N
Lysimachia ciliata	Fringed loosestrife	01/07/1995	N
Maianthemum canadense	Two-leaved Solomon's-seal, Wild lilly of the valley	01/07/1995	N
Melilotus officinalis	Yellow sweet-clover	30/07/2002	I
Melilotus spp.	Sweet clover	30/07/2002	I

<i>Poa pratensis</i>	Kentucky blue grass	01/07/1995	N/I
<i>Populus deltoides</i>	Cottonwood	30/07/2002	N
<i>Populus tremuloides</i>	Trembling aspen	01/07/1995	N
<i>Prunus virginiana</i>	Red-fruited choke cherry	01/07/1995	N
<i>Pyrola asarifolia</i>	Pink wintergreen	01/07/1995	N
<i>Quercus macrocarpa</i>	Bur oak	01/07/1995	N
<i>Rhus radicans</i> var. <i>rydbergii</i>	Poison ivy	01/07/1995	
<i>Ribes americanum</i>	Wild black currant	01/07/1995	N
<i>Ribes oxycanthoides</i>	Bristly wild gooseberry	01/07/1995	N
<i>Rosa acicularis</i>	Prickly rose	01/07/1995	N
<i>Rosa</i> spp.	Rose	30/07/2002	
<i>Rubus idaeus</i>	Wild red raspberry	01/07/1995	N
<i>Rubus pubescens</i>	Dewberry	01/07/1995	N
<i>Salix exigua</i>	Sandbar willow	30/07/2002	N
<i>Sanicula marilandica</i>	Snakeroot	01/07/1995	N
<i>Smilacina stellata</i>	Star-flowered Solomon's-seal	01/07/1995	N
<i>Smilax herbacea</i>	Carrionflower	01/07/1995	N
<i>Solidago canadensis</i>	Canada goldenrod	01/07/1995	N
<i>Solidago rigida</i>	Stiff goldenrod	30/07/2002	N
<i>Spiraea alba</i>	Narrow-leaved meadowsweet	30/07/2002	N
<i>Symphoricarpos occidentalis</i>	Western snowberry	01/07/1995	N
<i>Taraxacum officinale</i>	Dandelion	01/07/1995	I
<i>Taraxacum</i> spp.	Dandelion	30/07/2002	
<i>Thalictrum dasycarpum</i>	Tall meadow-rue	01/07/1995	N
<i>Thalictrum venulosum</i>	Veiny meadow-rue	01/07/1995	N
<i>Ulmus americana</i>	American elm	01/07/1995	N
<i>Viburnum lentago</i>	Nannyberry	01/07/1995	N
<i>Viburnum opulus</i>	High bush-cranberry	01/07/1995	N
<i>Viburnum rafinesquianum</i>	Downy arrow-wood	01/07/1995	N
<i>Vicia cracca</i>	Tufted vetch	30/07/2002	I
<i>Viola pubescens</i>	Downy yellow violet	01/07/1995	N

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Maple Grove Park



Location

North of Frobisher Road, South and West bank of the Red River, East of St. Mary's Road at the Perimeter

Site Description

This park is classified as riverbottom forest. The park has many sports fields surrounded by riverbottom forest. The area along the river, at the time of the inventory, had a great deal of sediment accumulation from the spring flooding. There was little understorey growth in this area and most of the understorey species were found further up the bank. There is a large section of the park that is mowed grass and planted with ornamental and native species. Along the east side of the park near the Red River, the open area has an extensive cover of dandelions.

Site Name

Maple Grove Park

Site

410

Habitat Information and Plants Found at the Site:

Grade B/C/D

Habitat Types Riverbottom Forest Oak Forest

Area in Hectares 12.76

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Acer negundo	Manitoba maple	09/08/1996	N
Agropyron repens	Quack- grass, Couch-grass	09/08/1996	I
Ambrosia spp.	Ragweed	30/07/2002	
Amelanchier alnifolia	Saskatoon	30/07/2002	N
Amphicarpa bracteata	Hog-peanut	30/07/2002	N
Anemone canadensis	Canada anemone	30/07/2002	N
Anemone cylindrica	Long-fruited anemone	30/07/2002	N
Anemone virginiana	Tall anemone	30/07/2002	N
Apocynum androsaemifolium	Spreading dogbane	30/07/2002	N
Arctium lappa	Common burdock	09/08/1996	I
Arctium spp.	Burdock	30/07/2002	I
Artemisia ludoviciana	Prairie sage	09/08/1996	N
Asclepias ovalifolia	Dwarf milkweed	09/08/1996	N
Asclepias speciosa	Showy milkweed	09/08/1996	N
Aster spp.	Aster	30/07/2002	
Astragalus danicus	Purple milk-vetch	09/08/1996	
Bromus inermis	Smooth brome	09/08/1996	I
Campanula rapunculoides	Creeping bluebell	30/07/2002	I
Carex spp.	Sedge	30/07/2002	N
Cirsium arvense	Canada thistle	09/08/1996	I
Convolvulus sepium	Hedge bindweed, Wild morning-glory	09/08/1996	N
Cornus spp.	Dogwood	30/07/2002	
Cornus stolonifera	Red osier dogwood	09/08/1996	N
Corylus spp.	Hazelnut	30/07/2002	
Crataegus spp.	Hawthorn	30/07/2002	
Crataegus succulenta	Long-spined hawthorn	09/08/1996	N
Dactylis glomerata	Orchard grass	09/08/1996	I
Daucus carota	Wild carrot, Queen Annes-lace	09/08/1996	I
Equisetum arvense	Common horsetail	09/08/1996	N
Erigeron glabellus	Smooth fleabane	09/08/1996	N
Fragaria virginiana	Smooth wild strawberry	30/07/2002	N
Fraxinus nigra	Black ash	30/07/2002	N
Fraxinus pennsylvanica	Green ash	09/08/1996	N
Galium boreale	Northern bedstraw	09/08/1996	N
Geum allepicum	Yellow avens	30/07/2002	N

<i>Helianthus pauciflorus</i>	Stiff sunflower	30/07/2002	N
<i>Helianthus</i> spp.	Sunflower	30/07/2002	
<i>Laportea canadensis</i>	Wood nettle	30/07/2002	N
<i>Lappula occidentalis</i>	Western stitchtight	31/07/2002	
<i>Lathyrus ochroleucus</i>	Pale vetchling	30/07/2002	N
<i>Lonicera tatarica</i>	Tartarian honesuckle	30/07/2002	I
<i>Lysimachia ciliata</i>	Fringed loosestrife	30/07/2002	N
<i>Maianthemum canadense</i>	Two-leaved Solomon's-seal, Wild lilly of the valley	30/07/2002	N
<i>Matteuccia struthiopteris</i>	Ostrich fern	30/07/2002	N
<i>Medicago sativa</i>	Alfalfa	09/08/1996	I
<i>Melilotus alba</i>	White sweet-clover	09/08/1996	I
<i>Melilotus indica</i>	Yellow sweet-clover	09/08/1996	I
<i>Menispermum canadense</i>	Yellow parilla	09/08/1996	N
<i>Mentha arvensis</i>	Field mint	09/08/1996	N
<i>Osmorhiza depauperata</i>	Blunt-fruited sweet cicely	30/07/2002	N
<i>Parthenocissus quinquefolia</i>	Virginia creeper	30/07/2002	N
<i>Phalaris arundinacea</i>	Reed canary grass	30/07/2002	N
<i>Phalaris minor</i>	Little seed canary grass	09/08/1996	
<i>Phleum pratense</i>	Timothy	30/07/2002	I
<i>Plantago major</i>	Common plantain	09/08/1996	I
<i>Poa pratensis</i>	Kentucky blue grass	09/08/1996	N/I
<i>Polygonatum canaliculatum</i>	Common solomons-seal	09/08/1996	
<i>Populus deltoides</i>	Cottonwood	30/07/2002	N
<i>Prunus nigra</i>	Canada plum	30/07/2002	N
<i>Prunus virginiana</i>	Red-fruited choke cherry	30/07/2002	N
<i>Quercus macrocarpa</i>	Bur oak	30/07/2002	N
<i>Rhamnus alnifolia</i>	Alder-leaved buckthorn	30/07/2002	N
<i>Rhus radicans</i> var. <i>rydbergii</i>	Poison ivy	30/07/2002	
<i>Ribes americanum</i>	Wild black currant	09/08/1996	N
<i>Ribes hudsonianum</i>	Northern wild black currant	30/07/2002	N
<i>Rosa</i> spp.	Rose	30/07/2002	
<i>Rosa woodsii</i>	Wood rose	09/08/1996	N
<i>Rubus idaeus</i>	Wild red raspberry	09/08/1996	N
<i>Rubus pubescens</i>	Dewberry	30/07/2002	N
<i>Rumex crispus</i>	Curled dock	09/08/1996	I
<i>Rumex</i> spp.	Wild rhubarb	30/07/2002	
<i>Salix exigua</i>	Sandbar willow	30/07/2002	N
<i>Salix</i> spp.	Willow	09/08/1996	
<i>Smilacina stellata</i>	Star-flowered Solomon's-seal	30/07/2002	N
<i>Smilax herbacea</i>	Carrionflower	30/07/2002	N
<i>Solidago canadensis</i>	Canada goldenrod	30/07/2002	N
<i>Solidago</i> spp.	Goldenrod	09/08/1996	
<i>Sonchus arvensis</i>	Perennial sow-thistle	09/08/1996	I
<i>Spiraea alba</i>	Narrow-leaved meadowsweet	30/07/2002	N
<i>Stachys palustris</i>	Marsh hedge-nettle	30/07/2002	N
<i>Symphoricarpos occidentalis</i>	Western snowberry	09/08/1996	N
<i>Taraxacum officinale</i>	Dandelion	09/08/1996	I
<i>Taraxacum</i> spp.	Dandelion	30/07/2002	
<i>Thalictrum dasycarpum</i>	Tall meadow-rue	09/08/1996	N
<i>Thalictrum venulosum</i>	Veiny meadow-rue	30/07/2002	N
<i>Tragopogon pratensis</i>	Goats-beard	09/08/1996	I
<i>Trifolium pratense</i>	Red clover	09/08/1996	I
<i>Ulmus americana</i>	American elm	09/08/1996	N
<i>Ulmus pumila</i>	Siberian elm	30/07/2002	I
<i>Urtica dioica</i>	Stinging nettle	30/07/2002	N
<i>Urtica dioica</i> var. <i>procera</i>	Stinging nettle	09/08/1996	
<i>Viburnum rafinesquianum</i>	Downy arrow-wood	30/07/2002	N

Vicia spp.	Vetch	30/07/2002	
Vitis riparia	Riverbank grape	30/07/2002	N

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Normand Park



Location

East bank of the Red River in the Normand Park subdivision, West of Redview Drive

Site Description

This park, located behind the Normand Park subdivision, is used mainly by the surrounding residents. There are planted trees behind the houses but towards the river lies a good example of riverbottom forest with a diverse understory community. The riverbottom forest is B-B+ quality habitat while the areas behind the houses is C--C quality habitat. The riverbank is quite steep and inaccessible.

Site Name

Normand Park

Site

411

Habitat Information and Plants Found at the Site:

Grade C

Habitat Types Riverbottom Forest

Area in Hectares 4.24

Species Name	Common Name	Date Sp. added to list	Native/Introduced
<i>Acer negundo</i>	Manitoba maple	30/07/1996	N
<i>Acer rubrum</i>	Red maple	30/07/1996	
<i>Achillea millefolium</i>	Yarrow	31/07/2002	N
<i>Agropyron repens</i>	Quack- grass, Couch-grass	30/07/1996	I
<i>Agrostis stolonifera</i>	Redtop	31/07/2002	I
<i>Amorpha fruticosa</i>	False indigo	30/07/1996	N
<i>Amphicarpa bracteata</i>	Hog-peanut	30/07/1996	N
<i>Andropogon gerardii</i>	Big bluestem	31/07/2002	N
<i>Andropogon scoparius</i>	Little bluestem	31/07/2002	N
<i>Anemone canadensis</i>	Canada anemone	30/07/1996	N
<i>Arctium lappa</i>	Common burdock	30/07/1996	I
<i>Arnica cordifolia</i>	Heart-leaf arnica	31/07/2002	N
<i>Artemisia absinthium</i>	Absinthe	31/07/2002	I
<i>Artemisia ludoviciana</i>	Prairie sage	30/07/1996	N
<i>Asclepias speciosa</i>	Showy milkweed	30/07/1996	N
<i>Asclepias</i> spp.	Milkweed	31/07/2002	
<i>Asparagus officinalis</i>	Garden asparagus	30/07/1996	I
<i>Aster ericoides</i>	Many flowered aster	31/07/2002	N
<i>Aster laevis</i>	Smooth aster	30/07/1996	N
<i>Aster</i> spp.	Aster	31/07/2002	
<i>Astragalus danicus</i>	Purple milk-vetch	30/07/1996	
<i>Barbarea orthoceras</i>	Winter cress	30/07/1996	N
<i>Brassica kaber</i>	Wild mustard	30/07/1996	I
<i>Bromus inermis</i>	Smooth brome	30/07/1996	I
<i>Caragana arborescens</i>	Common caragana	30/07/1996	I
<i>Cirsium arvense</i>	Canada thistle	30/07/1996	I
<i>Cornus</i> spp.	Dogwood	31/07/2002	
<i>Cornus stolonifera</i>	Red osier dogwood	30/07/1996	N
<i>Corylus</i> spp.	Hazelnut	31/07/2002	
<i>Crataegus</i> spp.	Hawthorn	31/07/2002	
<i>Dactylis glomerata</i>	Orchard grass	30/07/1996	I
<i>Echinocystis lobata</i>	Wild cucumber	30/07/1996	N
<i>Elaeagnus angustifolia</i>	Russian olive	31/07/2002	I
<i>Elaeagnus commutata</i>	Silverberry, Wolf-willow	30/07/1996	N
<i>Equisetum arvense</i>	Common horsetail	30/07/1996	N
<i>Erigeron philadelphicus</i>	Philadelphia fleabane	31/07/2002	N
<i>Fraxinus pennsylvanica</i>	Green ash	30/07/1996	N
<i>Galium boreale</i>	Northern bedstraw	30/07/1996	N

<i>Glycyrrhiza lepidota</i>	Wild licorice	31/07/2002	N
<i>Helianthus</i> spp.	Sunflower	30/07/1996	
<i>Hesperis matronalis</i>	Dame's rocket, Dame's-violet	30/07/1996	I
<i>Leonurus</i> spp.	Motherwort	31/07/2002	
<i>Liatris</i> spp.	Blazingstar	31/07/2002	
<i>Lonicera</i> spp.	Honeysuckle	30/07/1996	
<i>Lonicera tatarica</i>	Tartarian honeysuckle	31/07/2002	I
<i>Malus</i> spp.	Apple tree	31/07/2002	
<i>Malva neglecta</i>	Common mallow	30/07/1996	I
<i>Matteuccia struthiopteris</i>	Ostrich fern	30/07/1996	N
<i>Medicago sativa</i>	Alfalfa	30/07/1996	I
<i>Melilotus alba</i>	White sweet-clover	30/07/1996	I
<i>Melilotus indica</i>	Yellow sweet-clover	30/07/1996	I
<i>Melilotus officinalis</i>	Yellow sweet-clover	31/07/2002	I
<i>Melilotus</i> spp.	Sweet clover	31/07/2002	I
<i>Menispermum canadense</i>	Yellow parilla	30/07/1996	N
<i>Mentha arvensis</i>	Field mint	30/07/1996	N
<i>Monarda fistulosa</i>	Wild bergamont	30/07/1996	N
<i>Osmorhiza</i> spp.	Sweet cicely	31/07/2002	
<i>Oxalis stricta</i>	Yellow wood-sorrel	30/07/1996	N
<i>Panicum virgatum</i>	Switch grass	31/07/2002	N
<i>Parthenocissus quinquefolia</i>	Virginia creeper	30/07/1996	N
<i>Phalaris arundinacea</i>	Reed canary grass	31/07/2002	N
<i>Phalaris minor</i>	Little seed canary grass	30/07/1996	
<i>Picea</i> spp.	Spruce	31/07/2002	
<i>Pinus</i> spp.	Pine	31/07/2002	
<i>Plantago major</i>	Common plantain	30/07/1996	I
<i>Poa pratensis</i>	Kentucky blue grass	30/07/1996	N/I
<i>Polygonum amphibium</i>	Water smartweed	30/07/1996	N
<i>Populus balsamifera</i>	Balsam poplar	31/07/2002	N
<i>Populus deltoides</i>	Cottonwood	30/07/1996	N
<i>Populus tremuloides</i>	Trembling aspen	30/07/1996	N
<i>Potentilla anserina</i>	Silverweed	30/07/1996	N
<i>Potentilla arguta</i>	White cinquefoil, Tall	31/07/2002	N
<i>Prunus nigra</i>	Canada plum	31/07/2002	N
<i>Prunus pensylvanica</i>	Pin cherry	31/07/2002	N
<i>Prunus tomentosa</i>	Nanking cherry	31/07/2002	
<i>Prunus virginiana</i>	Red-fruited choke cherry	31/07/2002	N
<i>Quercus macrocarpa</i>	Bur oak	31/07/2002	N
<i>Raphanus sativus</i>	Radish	30/07/1996	I
<i>Ratibida columnifera</i>	Long-headed coneflower	31/07/2002	N
<i>Rhamnus cathartica</i>	Buckthorn	31/07/2002	I
<i>Rhus radicans</i> var. <i>rydbergii</i>	Poison ivy	30/07/1996	
<i>Ribes americanum</i>	Wild black currant	30/07/1996	N
<i>Ribes oxycanthoides</i>	Bristly wild gooseberry	31/07/2002	N
<i>Rosa arkansana</i>	Low prairie rose	30/07/1996	N
<i>Rosa</i> spp.	Rose	31/07/2002	
<i>Rosa woodsii</i>	Wood rose	30/07/1996	N
<i>Rudbeckia hirta</i>	Black-eyed susan	31/07/2002	I
<i>Rumex crispus</i>	Curled dock	30/07/1996	I
<i>Rumex</i> spp.	Wild rhubarb	30/07/1996	
<i>Salix exigua</i>	Sandbar willow	31/07/2002	N
<i>Salix</i> spp.	Willow	30/07/1996	
<i>Setaria</i> spp.	Foxtail	30/07/1996	
<i>Smilacina stellata</i>	Star-flowered Solomon's-seal	30/07/1996	N
<i>Solanum dulcamara</i>	Bittersweet	30/07/1996	I
<i>Solidago canadensis</i>	Canada goldenrod	31/07/2002	N
<i>Solidago graminifolia</i>	Flat-topped goldenrod	31/07/2002	N
<i>Solidago rigida</i>	Stiff goldenrod	31/07/2002	N

<i>Solidago</i> spp.	Goldenrod	30/07/1996	
<i>Sonchus arvensis</i>	Perennial sow-thistle	30/07/1996	I
<i>Sonchus</i> spp.	Sow thistle	31/07/2002	I
<i>Spartina pectinata</i>	Prairie cord grass	31/07/2002	N
<i>Spiraea alba</i>	Narrow-leaved meadowsweet	31/07/2002	N
<i>Stachys palustris</i>	Marsh hedge-nettle	30/07/1996	N
<i>Stipa spartea</i>	Spear grass	31/07/2002	N
<i>Symphoricarpos occidentalis</i>	Western snowberry	30/07/1996	N
<i>Syringa vulgaris</i>	Lilac	30/07/1996	I
<i>Tanacetum vulgare</i>	Tansy	30/07/1996	I
<i>Taraxacum officinale</i>	Dandelion	30/07/1996	I
<i>Taraxacum</i> spp.	Dandelion	31/07/2002	
<i>Thalictrum dasycarpum</i>	Tall meadow-rue	30/07/1996	N
<i>Thermopsis rhombifolia</i>	Golden bean	31/07/2002	N
<i>Thlaspi arvense</i>	Stinkweed, Field pennycress	30/07/1996	I
<i>Tilia americana</i>	Basswood	30/07/1996	N
<i>Tragopogon pratensis</i>	Goats-beard	30/07/1996	I
<i>Trifolium hybridum</i>	Alsike clover	31/07/2002	I
<i>Ulmus americana</i>	American elm	30/07/1996	N
<i>Ulmus pumila</i>	Siberian elm	31/07/2002	I
<i>Urtica dioica</i>	Stinging nettle	31/07/2002	N
<i>Urtica dioica</i> var. <i>procera</i>	Stinging nettle	30/07/1996	
<i>Viburnum opulus</i>	High bush-cranberry	31/07/2002	N
<i>Vicia cracca</i>	Tufted vetch	31/07/2002	I
<i>Vicia villosa</i>	Hairy vetch, Winter vetch	30/07/1996	I
<i>Vitis riparia</i>	Riverbank grape	30/07/1996	N
<i>Zizia aptera</i>	Heart-leaved alexanders	31/07/2002	N

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

St. Norbert 10



Location

North of Brentwood, South of Perimeter Hwy.,
West of St. Mary's Rd.

Site Description

This site is classified as oak forest and riverbottom forest habitats. There were 14 species of shrubs observed at the time of inventory. However, the density of the shrubs was quite low. The area of riverbottom forest habitat contains some American basswood trees. This site has had minimal disturbance.

Site Name

St. Norbert 10

Site

544

Habitat Information and Plants Found at the Site:

Grade A/B

Habitat Types Oak Forest

Riverbottom Forest

Area in Hectares 17.42

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Acer ginnala	Amur maple	30/07/2002	I
Acer negundo	Manitoba maple	01/07/1995	N
Achillea millefolium	Yarrow	30/07/2002	N
Agropyron repens	Quack- grass, Couch-grass	30/07/2002	I
Alisma plantago-aquatica	Common water-plantain	01/07/1995	N
Amelanchier alnifolia	Saskatoon	01/07/1995	N
Amorpha fruticosa	False indigo	30/07/2002	N
Amphicarpa bracteata	Hog-peanut	01/07/1995	N
Anemone canadensis	Canada anemone	01/07/1995	N
Apocynum androsaemifolium	Spreading dogbane	01/07/1995	N
Aralia nudicaulis	Wild sarsparilla	30/07/2002	N
Arctium spp.	Burdock	30/07/2002	I
Asclepias speciosa	Showy milkweed	30/07/2002	N
Asparagus officinalis	Garden asparagus	30/07/2002	I
Aster ciliolatus	Lindleys aster	01/07/1995	N
Aster spp.	Aster	30/07/2002	
Bidens frondosa	Common beggarticks	01/07/1995	N
Bromus inermis	Smooth brome	01/07/1995	I
Campanula rapunculoides	Creeping bluebell	30/07/2002	I
Carex assiniboinensis	Assiniboia sedge	01/07/1995	N
Carex spp.	Sedge	30/07/2002	N
Carex tenera	Sedge	01/07/1995	N
Celastrus scandens	Climbing bittersweet	30/07/2002	N
Cirsium arvense	Canada thistle	30/07/2002	I
Cornus stolonifera	Red osier dogwood	01/07/1995	N
Corylus americana	American hazelnut	01/07/1995	N
Corylus cornuta	Beaked hazelnut	01/07/1995	N
Corylus spp.	Hazelnut	30/07/2002	
Crataegus rotundifolia	Round-leaved hawthorn	01/07/1995	N
Crataegus succulenta	Long-spined hawthorn	01/07/1995	N
Elymus canadensis	Canada wild rye	30/07/2002	N
Equisetum spp.	Horse-tail	30/07/2002	
Fragaria virginiana	Smooth wild strawberry	01/07/1995	N

<i>Fraxinus pennsylvanica</i>	Green ash	01/07/1995	N
<i>Galium boreale</i>	Northern bedstraw	01/07/1995	N
<i>Galium triflorum</i>	Sweet-scented bedstraw	30/07/2002	N
<i>Glyceria pulchella</i>	Graceful manna grass	01/07/1995	N
<i>Glycyrrhiza lepidota</i>	Wild licorice	30/07/2002	N
<i>Hordeum jubatum</i>	Foxtail barley	30/07/2002	N
<i>Lactuca tatarica</i> var. <i>pulchella</i>	Blue lettuce	30/07/2002	
<i>Lathyrus ochroleucus</i>	Pale vetchling	01/07/1995	N
<i>Lathyrus</i> spp.	Peavine	30/07/2002	
<i>Lathyrus venosus</i>	Wild peavine	01/07/1995	N
<i>Lonicera tatarica</i>	Tartarian honeysuckle	30/07/2002	I
<i>Lysimachia ciliata</i>	Fringed loosestrife	30/07/2002	N
<i>Maianthemum canadense</i>	Two-leaved Solomon's- seal, Wild lilly of the valley	01/07/1995	N
<i>Matteuccia struthiopteris</i>	Ostrich fern	30/07/2002	N
<i>Medicago sativa</i>	Alfalfa	30/07/2002	I
<i>Melilotus alba</i>	White sweet-clover	30/07/2002	I
<i>Melilotus officinalis</i>	Yellow sweet-clover	30/07/2002	I
<i>Mentha arvensis</i>	Field mint	01/07/1995	N
<i>Phalaris arundinacea</i>	Reed canary grass	30/07/2002	N
<i>Phleum pratense</i>	Timothy	30/07/2002	I
<i>Poa pratensis</i>	Kentucky blue grass	01/07/1995	N/I
<i>Populus balsamifera</i>	Balsam poplar	30/07/2002	N
<i>Populus tremuloides</i>	Trembling aspen	01/07/1995	N
<i>Potentilla anserina</i>	Silverweed	30/07/2002	N
<i>Prunus pensylvanica</i>	Pin cherry	01/07/1995	N
<i>Prunus virginiana</i>	Red-fruited choke cherry	30/07/2002	N
<i>Quercus macrocarpa</i>	Bur oak	01/07/1995	N
<i>Rhamnus alnifolia</i>	Alder-leaved buckthorn	01/07/1995	N
<i>Rhus radicans</i> var. <i>rydbergii</i>	Poison ivy	01/07/1995	
<i>Ribes americanum</i>	Wild black currant	01/07/1995	N
<i>Ribes</i> spp.	Currant	30/07/2002	
<i>Rosa acicularis</i>	Prickly rose	01/07/1995	N
<i>Rosa arkansana</i>	Low prairie rose	01/07/1995	N
<i>Rosa</i> spp.	Rose	30/07/2002	
<i>Rubus idaeus</i>	Wild red raspberry	30/07/2002	N
<i>Rubus pubescens</i>	Dewberry	01/07/1995	N
<i>Rumex</i> spp.	Wild rhubarb	30/07/2002	
<i>Salix</i> spp.	Willow	30/07/2002	
<i>Sanicula marilandica</i>	Snakeroot	01/07/1995	N
<i>Smilacina stellata</i>	Star-flowered Solomon's-seal	01/07/1995	N
<i>Smilax herbacea</i>	Carrionflower	01/07/1995	N
<i>Solidago</i> spp.	Goldenrod	30/07/2002	
<i>Sonchus arvensis</i>	Perennial sow-thistle	30/07/2002	I
<i>Spartina pectinata</i>	Prairie cord grass	30/07/2002	N
<i>Spiraea alba</i>	Narrow-leaved meadowsweet	30/07/2002	N
<i>Stachys palustris</i>	Marsh hedge-nettle	30/07/2002	N
<i>Symphoricarpos occidentalis</i>	Western snowberry	01/07/1995	N
<i>Tanacetum vulgare</i>	Tansy	30/07/2002	I
<i>Taraxacum officinale</i>	Dandelion	30/07/2002	I
<i>Thalictrum dasycarpum</i>	Tall meadow-rue	01/07/1995	N

<i>Thalictrum venulosum</i>	Veiny meadow-rue	01/07/1995	N
<i>Tilia americana</i>	Basswood	01/07/1995	N
<i>Typha angustifolia</i>	Narrow-leaved cat-tail	30/07/2002	N
<i>Ulmus americana</i>	American elm	01/07/1995	N
<i>Urtica dioica</i>	Stinging nettle	01/07/1995	N
<i>Viburnum lentago</i>	Nannyberry	01/07/1995	N
<i>Viburnum opulus</i>	High bush-cranberry	30/07/2002	N
<i>Viburnum rafinesquianum</i>	Downy arrow-wood	01/07/1995	N
<i>Vicia americana</i>	Common vetch	30/07/2002	N
<i>Vicia cracca</i>	Tufted vetch	30/07/2002	I
<i>Viola pubescens</i>	Downy yellow violet	30/07/2002	N

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Maple Grove Park Grassland



Location

North of Perimeter Hwy, West of St. Mary's Rd,
Southeast of the Red River

Site Description

A no-mow grassland area. The area is dominated by non-native species and has very few native species present.

Site Name

Maple Grove Park

Site

955

Habitat Information and Plants Found at the Site:

Grade D

Habitat Types Prairie

Area in Hectares 11.56

Species Name

Common Name

Date Sp. added to list

Native/Introduced

Arctium spp.	Burdock	10/1/2004	I
Arnica cordifolia	Heart-leaf arnica	10/1/2004	N
Artemisia spp.	Sage	10/1/2004	
Bromus inermis	Smooth brome	10/1/2004	I
Cirsium arvense	Canada thistle	10/1/2004	I
Medicago sativa	Alfalfa	10/1/2004	I
Melilotus alba	White sweet-clover	10/1/2004	I
Melilotus officinalis	Yellow sweet-clover	10/1/2004	I
Phalaris arundinacea	Reed canary grass	10/1/2004	N
Phleum pratense	Timothy	10/1/2004	I
Poa pratensis	Kentucky blue grass	10/1/2004	N/I
Sonchus arvensis	Perennial sow-thistle	10/1/2004	I
Trifolium spp.	Clover	10/1/2004	
Vicia cracca	Tufted vetch	10/1/2004	I

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Maple Grove Park Fence row



Location

North of Perimeter Hwy, West of St. Mary's Rd,
Southeast of the Red River

Site Description

This site consists of a number of former fence rows and some areas of disturbed woods found in the park. These woods consist of a mixture of habitat types but are primarily riverbottom forest.

Site Name

Maple Grove Park Fence

Site

956

Habitat Information and Plants Found at the Site:

Grade C

Habitat Types Riverbottom Forest

Area in Hectares 3.94

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Acer negundo	Manitoba maple	01/10/2004	N
Amelanchier alnifolia	Saskatoon	01/10/2004	N
Aster spp.	Aster	01/10/2004	
Bromus inermis	Smooth brome	01/10/2004	I
Cirsium arvense	Canada thistle	01/10/2004	I
Cornus stolonifera	Red osier dogwood	01/10/2004	N
Crataegus spp.	Hawthorn	01/10/2004	
Populus tremuloides	Trembling aspen	01/10/2004	N
Prunus virginiana	Red-fruited choke cherry	01/10/2004	N
Quercus macrocarpa	Bur oak	01/10/2004	N
Ribes americanum	Wild black currant	01/10/2004	N
Rosa spp.	Rose	01/10/2004	
Smilacina stellata	Star-flowered Solomon's-seal	01/10/2004	N
Smilax herbacea	Carrionflower	01/10/2004	N
Symphoricarpos occidentalis	Western snowberry	01/10/2004	N
Taraxacum officinale	Dandelion	01/10/2004	I
Ulmus americana	American elm	01/10/2004	N
Vicia cracca	Tufted vetch	01/10/2004	I

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Maple Grove Park Oak



Location

North of Perimeter Hwy, West of St. Mary's Rd,
Southeast of the Red River

Site Description

A band of oak forest that is crossed twice by the road to the rugby fields. This oak forest is mostly intact and in good condition. It joins a former fencerow that extends down to the river.

Site Name

Maple Grove Park Oak

Site

957

Habitat Information and Plants Found at the Site:

Grade B

Habitat Types Oak Forest

Area in Hectares 0.95

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Amelanchier alnifolia	Saskatoon	01/10/2004	N
Anemone canadensis	Canada anemone	01/10/2004	N
Anemone virginiana	Tall anemone	01/10/2004	N
Bromus inermis	Smooth brome	01/10/2004	I
Cornus stolonifera	Red osier dogwood	01/10/2004	N
Corylus spp.	Hazelnut	01/10/2004	
Crataegus spp.	Hawthorn	01/10/2004	
Fragaria virginiana	Smooth wild strawberry	01/10/2004	N
Lonicera tatarica	Tartarian honeysuckle	01/10/2004	I
Medicago sativa	Alfalfa	01/10/2004	I
Melilotus alba	White sweet-clover	01/10/2004	I
Melilotus officinalis	Yellow sweet-clover	01/10/2004	I
Osmorhiza depauperata	Blunt-fruited sweet cicely	01/10/2004	N
Phalaris arundinacea	Reed canary grass	01/10/2004	N
Picea spp.	Spruce	01/10/2004	
Populus spp.	Poplar	01/10/2004	
Populus tremuloides	Trembling aspen	01/10/2004	N
Prunus virginiana	Red-fruited choke cherry	01/10/2004	N
Quercus macrocarpa	Bur oak	01/10/2004	N
Ribes americanum	Wild black currant	01/10/2004	N
Rosa spp.	Rose	01/10/2004	
Rumex crispus	Curled dock	01/10/2004	I
Salix spp.	Willow	01/10/2004	
Smilacina stellata	Star-flowered Solomon's-seal	01/10/2004	N
Solidago canadensis	Canada goldenrod	01/10/2004	N
Spiraea alba	Narrow-leaved meadowsweet	01/10/2004	N
Taraxacum officinale	Dandelion	01/10/2004	I
Thalictrum venulosum	Veiny meadow-rue	01/10/2004	N
Ulmus americana	American elm	01/10/2004	N

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Maple Grove Park Woods



Location

North of Perimeter Hwy, West of St. Mary's Rd,
Southeast of the Red River

Site Description

A forested area with a formerly mowed understory, now being naturalized as a no-mow area. The site has a mature tree canopy virtually no shrubs and a primarily non-native, grassy understory.

Site Name

Maple Grove Park Woods

Site

954

Habitat Information and Plants Found at the Site:

Grade C

Habitat Types Riverbottom Forest

Area in Hectares 2.59

Species Name

Common Name

Date Sp. added to list

Native/Introduced

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Agropyron repens	Quack- grass, Couch-grass	01/10/2004	I
Amphicarpa bracteata	Hog-peanut	01/10/2004	N
Anemone canadensis	Canada anemone	01/10/2004	N
Arctium spp.	Burdock	01/10/2004	I
Aster spp.	Aster	01/10/2004	
Bromus inermis	Smooth brome	01/10/2004	I
Cirsium arvense	Canada thistle	01/10/2004	I
Elymus spp.	Wild rye	01/10/2004	
Fraxinus pennsylvanica	Green ash	01/10/2004	N
Lonicera tatarica	Tartarian honeysuckle	01/10/2004	I
Lysimachia ciliata	Fringed loosestrife	01/10/2004	N
Melilotus alba	White sweet-clover	01/10/2004	I
Melilotus officinalis	Yellow sweet-clover	01/10/2004	I
Poa pratensis	Kentucky blue grass	01/10/2004	N/I
Quercus macrocarpa	Bur oak	01/10/2004	N
Smilacina stellata	Star-flowered Solomon's-seal	01/10/2004	N
Smilax herbacea	Carrionflower	01/10/2004	N
Sonchus arvensis	Perennial sow-thistle	01/10/2004	I
Stachys palustris	Marsh hedge-nettle	01/10/2004	N
Symphoricarpos occidentalis	Western snowberry	01/10/2004	N
Taraxacum officinale	Dandelion	01/10/2004	I
Thalictrum dasycarpum	Tall meadow-rue	01/10/2004	N
Ulmus americana	American elm	01/10/2004	N
Viola pubescens	Downy yellow violet	01/10/2004	N

[Back to map](#)

City of Winnipeg, Naturalist Services

Report For Habitat Site

Christie Rd



Location

North and south of Christie Rd, west of St. Mary's Rd

Site Description

Naturalized ditch with trees and wetland species. The riverbottom forest is well developed in places. There is also a cul-de-sac with a natural riverbottom forest center.

Site Name

Christie Rd

Site

1062

An unidentified orchid was found growing on the north side of the cul-de-sac park.

Habitat Information and Plants Found at the Site:

Grade

B

Habitat Types

Riverbottom Forest Wetland

Area in Hectares

3.47

Species Name

Common Name

Date Sp. added to list

Native/Introduced

Species Name	Common Name	Date Sp. added to list	Native/Introduced
Acer negundo	Manitoba maple	14/07/2006	N
Actaea pachypoda	White baneberry	14/07/2006	
Agropyron repens	Quack- grass, Couch-grass	14/07/2006	I
Agrostis stolonifera	Redtop	14/07/2006	I
Ambrosia spp.	Ragweed	14/07/2006	
Amphicarpa bracteata	Hog-peanut	14/07/2006	N
Anemone canadensis	Canada anemone	14/07/2006	N
Anemone cylindrica	Long-fruited anemone	14/07/2006	N
Arctium spp.	Burdock	14/07/2006	I
Asclepias speciosa	Showy milkweed	14/07/2006	N
Aster spp.	Aster	14/07/2006	
Bromus inermis	Smooth brome	14/07/2006	I
Calamagrostis canadensis	Marsh reed grass	14/07/2006	N
Campanula rapunculoides	Creeping bluebell	14/07/2006	I
Cirsium arvense	Canada thistle	14/07/2006	I
Cornus stolonifera	Red osier dogwood	14/07/2006	N
Corylus spp.	Hazelnut	14/07/2006	
Dracocephalum spp.	Dragonhead	14/07/2006	
Elymus canadensis	Canada wild rye	14/07/2006	N
Fraxinus pennsylvanica	Green ash	14/07/2006	N
Glechoma hederacea	Gill-over-the-ground	14/07/2006	I
Laportea canadensis	Wood nettle	14/07/2006	N
Lappula echinata	Bluebur	14/07/2006	
Lonicera tatarica	Tartarian honeysuckle	14/07/2006	I
Lythrum salicaria	Purple loosestrife	14/07/2006	I
Matteuccia struthiopteris	Ostrich fern	14/07/2006	N
Melilotus alba	White sweet-clover	14/07/2006	I
Menispermum canadense	Yellow parilla	14/07/2006	N
Osmorhiza spp.	Sweet cicely	14/07/2006	
Parthenocissus quinquefolia	Virginia creeper	14/07/2006	N
Phalaris arundinacea	Reed canary grass	14/07/2006	N
Poa pratensis	Kentucky blue grass	14/07/2006	N/I
Populus deltoides	Cottonwood	14/07/2006	N
Populus tremuloides	Trembling aspen	14/07/2006	N
Prunus virginiana	Red-fruited choke cherry	14/07/2006	N
Quercus macrocarpa	Bur oak	14/07/2006	N
Rhus radicans var. rydbergii	Poison ivy	14/07/2006	
Ribes spp.	Currant	14/07/2006	
Rosa spp.	Rose	14/07/2006	
Rubus idaeus	Wild red raspberry	14/07/2006	N
Rumex crispus	Curled dock	14/07/2006	I
Salix exigua	Sandbar willow	14/07/2006	N

Salix spp.	Willow	14/07/2006	
Scirpus spp.	Bulrush	14/07/2006	
Smilacina stellata	Star-flowered Solomon's-seal	14/07/2006	N
Solidago canadensis	Canada goldenrod	14/07/2006	N
Sonchus arvensis	Perennial sow-thistle	14/07/2006	I
Stachys palustris	Marsh hedge-nettle	14/07/2006	N
Thalictrum venulosum	Veiny meadow-rue	14/07/2006	N
Tilia americana	Basswood	14/07/2006	N
Tragopogon dubius	Yellow goats-beard	14/07/2006	I
Trifolium spp.	Clover	14/07/2006	
Trillium cernuum	Nodding trillium	14/07/2006	N
Typha spp.	Cat-tail	14/07/2006	
Ulmus americana	American elm	14/07/2006	N
Viola pubescens	Downy yellow violet	14/07/2006	N
Vitis riparia	Riverbank grape	14/07/2006	N

[Back to map](#)

APPENDIX

G

MANITOBA
BREEDING BIRD
ATLAS SUMMARY

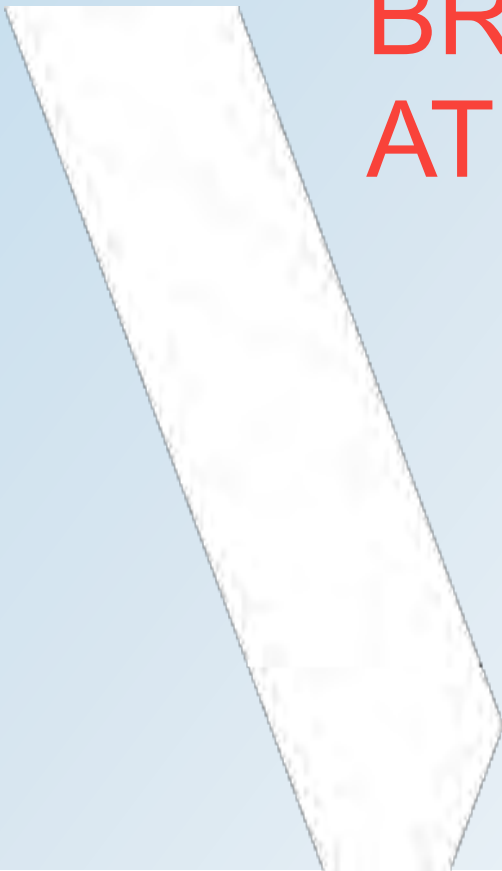




Table G-1. Species list for square 14PA31, Region 3 from Manitoba's Breeding Bird Atlas

Species	Max BE	Categ	#Sq	#PC	%PC	Abun	#Sq
Canada Goose	FY	CONF	1	4	25	0.6875	1
Wood Duck	FY	CONF	1				
Mallard	FY	CONF	1				
Hooded Merganser	FY	CONF	1				
Ruffed Grouse	H	POSS	1				
Sharp-tailed Grouse	D	PROB	1				
Wild Turkey	FY	CONF	1				
Red-necked Grebe	H	POSS	1				
American Bittern	H	POSS	1				
Great Blue Heron	P	PROB	1				
Green Heron	P	PROB	1				
Turkey Vulture	H	POSS	1				
Osprey	NY	CONF	1	1	6.25	0.0625	1
Bald Eagle	FY	CONF	1				
Northern Harrier	H	POSS	1				
Cooper's Hawk	NY	CONF	1				
Broad-winged Hawk	NY	CONF	1				
Swainson's Hawk	AE	CONF	1				
Red-tailed Hawk	T	PROB	1				
American Kestrel	CF	CONF	1				
Merlin	AE	CONF	1	1	6.25	0.0625	1
Peregrine Falcon	FY	CONF	1				
Sora	T	PROB	1	1	6.25	0.0625	1
American Coot	FY	CONF	1				
Killdeer	FY	CONF	1	1	6.25	0.0625	1
Spotted Sandpiper	P	PROB	1				
Rock Pigeon	AE	CONF	1				
Mourning Dove	D	PROB	1	1	6.25	0.125	1
Black-billed Cuckoo	H	POSS	1				
Eastern Screech-Owl	H	POSS	1				
Great Horned Owl	AE	CONF	1				
Long-eared Owl	NY	CONF	1				
Chimney Swift	AE	CONF	1				

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Species	Max BE	Categ	#Sq	#PC	%PC	Abun	#Sq
Ruby-throated Hummingbird	H	POSS	1				
Belted Kingfisher	AE	CONF	1				
Yellow-bellied Sapsucker	NY	CONF	1				
Downy Woodpecker	FY	CONF	1				
Hairy Woodpecker	N	PROB	1	2	12.5	0.125	1
Northern Flicker	H	POSS	1				
Pileated Woodpecker	V	PROB	1				
Alder Flycatcher	S	POSS	1	1	6.25	0.0625	1
Least Flycatcher	AE	CONF	1				
Eastern Phoebe	NY	CONF	1	1	6.25	0.0625	1
Great Crested Flycatcher	T	PROB	1	2	12.5	0.125	1
Western Kingbird	CF	CONF	1				
Eastern Kingbird	D	PROB	1	1	6.25	0.0625	1
Yellow-throated Vireo	T	PROB	1				
Warbling Vireo	T	PROB	1				
Red-eyed Vireo	FY	CONF	1	3	18.75	0.3125	1
Blue Jay	FY	CONF	1	2	12.5	0.1875	1
Black-billed Magpie	AE	CONF	1	2	12.5	0.125	1
American Crow	FY	CONF	1	7	43.75	0.6875	1
Common Raven	AE	CONF	1				
Purple Martin	S	POSS	1				
Tree Swallow	AE	CONF	1				
Bank Swallow	AE	CONF	1				
Cliff Swallow	NY	CONF	1				
Barn Swallow	AE	CONF	1	4	25	0.375	1
Black-capped Chickadee	CF	CONF	1	2	12.5	0.125	1
Red-breasted Nuthatch	D	PROB	1				
White-breasted Nuthatch	NB	CONF	1	1	6.25	0.0625	1
House Wren	CF	CONF	1				
Sedge Wren	N	PROB	1				
Marsh Wren	N	PROB	1				
Eastern Bluebird	H	POSS	1				
American Robin	NE	CONF	1	7	43.75	0.8125	1
Gray Catbird	CF	CONF	1				
Brown Thrasher	S	POSS	1	1	6.25	0.0625	1
European Starling	CF	CONF	1	4	25	1.5	1
Cedar Waxwing	V	PROB	1	1	6.25	0.9375	1
Tennessee Warbler	H	POSS	1				
Yellow Warbler	CF	CONF	1	4	25	0.3125	1
American Redstart	S	POSS	1				

Species	Max BE	Categ	#Sq	#PC	%PC	Abun	#Sq
Common Yellowthroat	CF	CONF	1	5	31.25	0.3125	1
Chipping Sparrow	NY	CONF	1	9	56.25	0.625	1
Clay-colored Sparrow	CF	CONF	1	5	31.25	0.5	1
Vesper Sparrow	T	PROB	1				
Lark Sparrow	CF	CONF	1				
Savannah Sparrow	CF	CONF	1	4	25	0.3125	1
LeConte's Sparrow	S	POSS	1				
Song Sparrow	NE	CONF	1	3	18.75	0.1875	1
Indigo Bunting	A	PROB	1				
Dickcissel	S	POSS	1				
Bobolink	DD	CONF	1	1	6.25	0.125	1
Red-winged Blackbird	CF	CONF	1	11	68.75	0.9375	1
Western Meadowlark	P	PROB	1	5	31.25	0.4375	1
Brewer's Blackbird	P	PROB	1	2	12.5	0.25	1
Common Grackle	CF	CONF	1	2	12.5	0.125	1
Brown-headed Cowbird	FY	CONF	1	1	6.25	0.0625	1
Orchard Oriole	CF	CONF	1				
Baltimore Oriole	NB	CONF	1				
House Finch	FY	CONF	1	2	12.5	0.125	1
American Goldfinch	AE	CONF	1	5	31.25	0.375	1
House Sparrow	CF	CONF	1	5	31.25	0.875	1

Note: Taken directly from the Atlas of Breeding Birds of Manitoba, February 2021 from:

https://www.birdatlas.mb.ca/index_en.jsp

Key Breeding Evidence (BE):

OBSERVED

X Species observed during its breeding season, but not in suitable nesting habitat (no breeding evidence found).

POSSIBLE

H Species observed in suitable nesting habitat during its breeding season.

S Individual singing or producing other sounds associated with breeding (e.g., calls or drumming) in suitable nesting habitat during the species' breeding season.

PROBABLE

M At least 7 individuals singing or producing other sounds associated with breeding (e.g., calls or drumming), heard during the same visit to a single square and in suitable nesting habitat during the species' breeding season.

P Pair observed in suitable nesting habitat during the species' breeding season.

T Presumed territory based on the presence of an adult bird, whether producing sounds associated with breeding (e.g., song, other calls or drumming) or not, at the same place, in suitable nesting habitat, on at least two visits, one week or more apart, during the species' breeding season.

D Breeding behaviour involving a male and female (e.g., display, courtship feeding and copulation) or antagonistic behaviour between two or more individuals (e.g., territorial disputes or chases), in suitable nesting habitat during the species' breeding season.

V Bird visiting a probable nest site in suitable nesting habitat during the species' breeding season.

A Agitated behaviour or alarm call of an adult in suitable nesting habitat during the species' breeding season.

B Brood patch or cloacal protuberance on an adult individual caught in suitable nesting habitat during the species' breeding season.

N Nest-building by wrens or nest hole excavation by woodpeckers.

CONFIRMED



- NB Nest building, including the carrying of nesting material, by all species except wrens and woodpeckers.
- DD Individual attempting to draw attention away from a nest or young by feigning injury or by using any other distraction display.
- NU Empty nest used during the atlas survey period, or the shells of eggs laid during the same period.
- FY Recently fledged (nidicolous species) or downy (nidifugous species) young incapable of sustained flight.
- AE Adult occupying, leaving or entering a probable nest site (visible or not) and whose behaviour suggests the presence of an occupied nest.
- FS Adult carrying a fecal sac.
- CF Adult carrying food for young.
- NE Nest containing one or more eggs.
- NY Nest with one or more young (seen or heard).