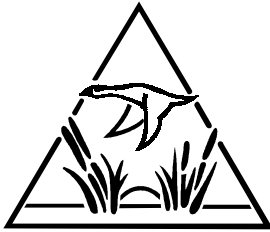


**Annotated vascular plant species list for the
Delta Marsh, Manitoba and surrounding area**

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**Annotated vascular plant species list for the
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by

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Introduction

The Delta Marsh in south central Manitoba (50°11'11" N, 98°24'50" to 50°16'00", 98°05'00") is one of the largest, and most important marshes in the Canadian prairies, occupying approximately 15,000 ha at the south end of Lake Manitoba (Fig. 1). In 1982, the Delta Marsh was designated as a wetland of international importance under the International Union for the Conservation of Nature (IUCN) Ramsar Convention (Gillespie and Boyd 1991) and as a Manitoba Heritage Marsh by a consortium of the Province of Manitoba and a number of non-governmental groups (Anonymous 1982, Manitoba NAWMP Technical Committee 1988). The marsh, formed about 2,400 years ago, lies 247.5 m asl (above mean sea level) and is composed of a network of shallow bays connected by winding channels (Walker 1965). It is separated from Lake Manitoba by a forested sand ridge that rises to a maximum height of four meters, and is classified as a lacustrine lagoon marsh (Warner and Rubec 1997).

The flora of Delta Marsh and the forested ridge was first described by Löve and Löve (1954). Detailed vegetation surveys of several sites throughout the marsh were undertaken by Walker (1959, 1965) who studied vegetation changes after a period of high water levels. The submerged aquatic vascular plants in the marsh east of Public Trunk Highway (PTH) 240 were studied by Anderson and Jones (1976). MacKenzie (1982) described the distribution of the trees at the west end of the forested ridge and Kenkel (1986) investigated the structure and dynamics of trees along the forested ridge east of Delta Beach. Towards the west end of the marsh is an old distributary channel of the Assiniboine River. Oxbow Wood lies in one of its meanders. A species list for this remnant of riverbottom forest is given in Barker and Kenkel (1994).

This publication is a comprehensive list of 360 taxa based on these studies and records in the herbaria housed in the Department of Botany at the University of Manitoba (WIN), the Manitoba Museum of Man and Nature (MMMN), both located in Winnipeg, Manitoba, and the University Field Station (Delta Marsh) (WINDM) on the southern shore of Lake Manitoba, approximately 1 km west of the Portage Diversion. The Delta Waterfowl and Wetlands Research Station (formerly the Delta Waterfowl Research Station) had a small herbarium (DELTA) in the 1960s. It was later amalgamated with WINDM. The University of Winnipeg herbarium (UWPG) does not contain specimens from Delta (Richard Staniforth, personal communication). Brandon University herbarium has a few specimens of common species but they are not, at present, readily retrievable (Al Rogosin, personal communication). All

entries indicate in which herbarium a specimen can be found, although some specimen identifications were not confirmed. A list of taxa that are named in reports for the area but for which no specimens could be located is given at the end of the main list. The list covers the area north of PTH 227, bounded by Cram Creek to the west and extends 5.6 km east of PTH 430 to the east (Fig. 1). Early collections occurred mainly east of PTH 240 and on the Delta Waterfowl and Wetlands Research Station property. More recent collections have come from around the University Field Station which was established in 1966.

This is a first attempt to compile a species list for the Delta Marsh and surrounding area. The list is current to September 1998. Doubtless, new localities and additional species will be found. Information on any such records should be sent to Dr. Bruce Ford, Herbarium Curator, Department of Botany, University of Manitoba, Winnipeg, R3T 2N2, Fax: (204) 474-7604, e-mail: bford@cc.umanitoba.ca.

Area Description

Geology

The Delta Marsh lies within the Lake Manitoba Plain ecoregion of Canada (Ecological Stratification Working Group 1995). It is underlain by a sequence of Devonian, Silurian and Ordovician bedrock (Last 1980). Over this bedrock are Quaternary sediments up to 100 m thick of glacial, fluvial, and lacustrine origin.

Last (1980) described the postglacial history of its southern basin. At the end of the last glaciation around 10,000 years ago, Glacial Lake Agassiz covered the southern part of the province. A recent study of the sediments in the south basin of Lake Manitoba provide a detailed record of the post-glacial conditions (Risberg *et al.* 1999). The oldest part of the sequence was deposited in the waters of Lake Agassiz. A low water phase from 9,000 to 7,000 years BP may have been inhospitable to aquatic life because of high salinity and turbidity. An abrupt change after 7,700 years BP is represented by abundant diatoms, siliceous microfossils, and ostracods. Between 6,000 and 4,000 years BP the Assiniboine River flowed into the south basin of Lake Manitoba carrying a heavy load of silt and sand, and replacing the brackish conditions in the south basin by freshwater. Subsequent wave action and long shore counter clockwise currents reworked the delta forming a barrier beach that eventually isolated the Delta Marsh. The sand deposits from the delta are still being moved in an easterly direction. Some time after 3,000 years ago, the Assiniboine River was diverted eastwards into the Red River (Rannie *et al.* 1989). Remnants of the old



Figure 1. Diagram of Delta Marsh showing the locations of plant collections mentioned in the text.

Assiniboine River survive as the Blind Channel. About 2,600 years BP differential isostatic rebound and a changing climate led to fresher water in the south basin of the lake (Risberg *et al.* 1999) and hence in the marsh.

Sproule (1972) described the post-glacial history of Delta Marsh based on the pollen and macrofossils in two sediment cores. A radiocarbon date of $2,400 \pm 230$ years was obtained from the bottom of a core of sediments taken from Cadham Bay (Sproule 1972). Among the taxa identified, the pollen of *Potamogeton*, *Myriophyllum*, *Typha*, Cyperaceae, and Chenopodiaceae were well represented throughout the pollen record, but the percentages of these pollen types fluctuated dramatically over time, suggesting several cycles of water levels and marsh development (Sproule 1972).

Climate

The climate of the Delta Marsh region is cool to mild continental (Weir 1960). Between 1967 and 1990, the mean annual temperature was 1.5 °C at the University Field Station (Delta Marsh). The mean temperature in January during this period was -19.8 °C and 19.1 °C in July (McGinn 1992). Lake Manitoba affects the local climate by delaying the arrival of spring and prolonging warm temperatures in the fall. The frost-free season averaged 128 days from 1967 to 1990. Annual precipitation over the same period averaged 499 mm with 73% falling as rain between April and October (McGinn 1992). Evaporation, which represents water loss from ponds and other water bodies in the marsh, exceeds precipitation by 54.4 cm annually (McGinn 1992).

Soils

Soils of Delta Marsh are composed of thin, poorly drained “organic muck and peat” overlying glacial deposits (Ehrlich *et al.* 1957). They are broadly classified as gleysols and regosols (Walker 1965). The parent material is lacustrine in origin and ranges in texture from sandy loam to silty clay (Canadian Soil Inventory 1989). Water and soils in the marsh are nutrient-rich (Zbigniewicz 1981, Goldsborough 1995). Clay to silty clay saline soils occur on the south side of the marsh in the vicinity of Flee Island (Fig. 1) and in places where soil has been excavated, creating shallow “Borrow Pits”.

Soils of the forested ridge are poorly developed sand to sandy loam overlying coarse sand. They are very low in organic matter and nutrients (MacKenzie 1982, Kenkel 1986), except for depressions where organic material accumulates. The upper portion of the ridge is excessively drained and lower portions are imperfectly to poorly drained.

In the Oxbow Wood are Chernozemic Dark Grey Soils of the Portage Association composed of a relatively thick layer of leaf litter over a very dark A horizon. The parent materials are alluvial deposits ranging in texture from fine sandy loam to silty clay (Ehrlich *et al.* 1957). The soils of the Portage la Prairie and Woodlands Community Pastures, and the Lake Francis Wildlife Management Area are developed on predominantly limestone boulder till. They belong to the Isafold Association (Rego-Black and Gleyed Carbonated Rego-Black Soils) according to Michalyna and Smith (1972). The surface texture varies from loam to clay loam (Canadian Soil Inventory 1989). Low ridges and swales are common, with imperfect to moderate drainage on ridges and poor drainage in swales (Ehrlich *et al.* 1957).

Hydrology and vegetation changes

The catchment basin for the Delta Marsh covers 64,749 ha (Jones 1978). The main inflow to the south basin of the Lake Manitoba is the Whitemud River and the only outflow is the Fairford River which leads into Lake St. Martin and thence to the Dauphin River.

Throughout its history, the marsh has been connected with Lake Manitoba by several channels, but over the years most of these have been purposely blocked or have silted up. Today, four channels (from east to west: Clandeboye Channel, Delta Channel, Cram Creek, and Deep Creek) remain open, allowing marsh levels to fluctuate with lake levels. In past years of high precipitation and thus high lake levels, marsh water levels rose and inundated the vegetation. This flooding lasted several years and killed the vegetation. When water levels fell, seeds buried in the mud germinated and the marsh was recolonized. Alternating high and low water periods have resulted in a cycle of vegetation dieback and renewal that has allowed the marsh to survive in a manner similar to that described by van der Valk (1981).

The most recent period of high water levels in the marsh occurred between 1953 and 1958. During this period approximately 20% of the emergent vegetation was killed, leaving thousands of hectares of stubble and bare organic muck (Walker 1965, Bossenmaier 1968). Following 1958, when the water fell to normal levels, the exposed muck was rapidly colonized first by damp ground annuals and later by the emergent macrophytes, *Typha*, *Phragmites*, and *Scirpus*, and in drier areas by *Scolochloa* (Walker 1965, Shay 1986).

There are two constructions that have affected the marsh making its future somewhat uncertain. The first is a dam built on the Fairford River in 1961, to stabilize water levels at the historic mean of 247.5 m asl (Anonymous 1973). Since then, lake fluctuations have been reduced from 2.1 to 0.6 meters. This has virtually

eliminated flooding and drying cycles, resulting in a rapid expansion of emergent vegetation throughout the marsh (Shay 1986). Without water level fluctuations that resemble those in the past, the marsh is likely to fill in with vegetation (Goldsborough 1983, 1987, Shay 1986).

The second is the Portage Diversion, completed in 1969 to reduce flooding in the lower Assiniboine River valley by carrying flood water from the river to Lake Manitoba. Its construction blocked Cram Creek, one of the major channels that carried spring run-off from the west side of the marsh to the lake. When in use, the Diversion, which flows into the lake with a potential of 25,000 cubic feet per second, carries a load of sediment (Last 1980), debris, and agricultural chemicals to the lake.

Recent disturbance history and human influence

Apart from floods and droughts, the major natural disturbance in the marsh and its associated habitats is fire. Fires have historically been common in the marsh. Under dry conditions, *Phragmites* is extremely flammable and fires spread rapidly, especially when fanned by a brisk wind. The most recent fires, each several hundred hectares in extent, occurred in October 1990 and August 1991. Another fire in April 1991 burned the extreme northern section of Oxbow Wood (Barker and Kenkel 1994).

Humans have influenced the marsh since the late 19th century. In 1897, a railway was built to what is now the Delta Beach (Table 1). In the early 1900s, this convenient form of transportation brought people from Portage la Prairie and Winnipeg to Delta to enjoy the sandy beaches on Lake Manitoba. Since the turn of the century, many cottages have been built on the forested ridge overlooking the lake, and the marsh has been used for recreation, as well as hunting, trapping, and fishing (Bossenmaier 1968).

The Delta Waterfowl Research Station was established in 1938 east of Delta Beach to carry out waterfowl research. In 1965, the University of Manitoba leased the Bain Estate at the west end of the marsh from the Province of Manitoba and developed the University Field Station (Delta Marsh) as a teaching and research centre. West of the field station is the Portage Country Club property. There are roads to access all these facilities, and a road that runs almost the entire length of the ridge. Invasive weed species are commonly found along these roadways and the Portage Diversion. At Tin Town and Flee Island, south of Simpson and Lytle Bays, are two groups of buildings used in the hunting season and accessed via road allowances.

Vegetation Habitats

Lakeshore

Since water levels in Lake Manitoba have been regulated, the lakeshore has been subject to a narrow range of water levels but there is considerable wave scouring by wind tides. *Potamogeton pectinatus*, *P. vaginatus*, and *P. richardsonii* are found in the shallow water and at various slightly protected places along the water's edge. *Scirpus acutus*, *S. pungens*, *Eleocharis acicularis*, *E. palustris*, *E. erythropoda*, *Phragmites australis*, *Juncus balticus*, *Sagittaria latifolia*, and *Ranunculus cymbalaria* are also found.

Among the widespread species on drift lines and at the upper beach reaches are *Lathyrus japonicus*, *Lycopus asper*, *Leymus innovatus*, *Elytrigia repens*, *Osmorhiza longistylis*, *Polygonum amphibium*, *P. lapathifolium*, *Cirsium arvense*, and *Urtica dioica* (Fig. 2).

Forested Ridge

The forested ridge consists of a series of undulating sand ridges. Depressions between the ridges have accumulated organic material and are poorly drained. On the upper part of the beach and on the south side of the forested ridge, there is a zone of *Salix exigua*. In this zone, *Fraxinus pennsylvanica* and *Acer negundo* seedlings and saplings are common. On the higher portions of the ridge, mature trees of *Acer negundo*, *Fraxinus pennsylvanica*, *Populus deltoides*, and *Salix amygdaloides* form the overstory (MacKenzie 1982, Kenkel 1986). *Celtis occidentalis* and *Ulmus americana* are found occasionally. The forested ridge is the northernmost occurrence of *C. occidentalis*, which is disjunct from its main distribution in the eastern United States (Burns and Honkala 1990). *Prunus virginiana*, *Sambucus racemosa*, *Ribes americanum*, *Cornus sericea*, and *Rubus idaeus* grow in the understory. The herb layer in some areas is sparse, although *Parthenocissus quinquefolia*, *Toxicodendron radicans*, *Aralia nudicaulis*, *Maianthemum stellatum*, *Osmorhiza longistylis*, and *Carex assiniboinensis* are widespread. Patches of *Urtica dioica* and *Arctium lappa* dominate gaps and disturbed areas on the ridge.

Vegetation in depressions includes *Bidens cernua*, *Carex retrorsa*, *Typha latifolia*, *Galium trifidum*, *Impatiens capensis*, *Sparganium eurycarpum*, *Polygonum punctatum*, *Mentha canadensis*, *Urtica dioica*, *Thelypteris palustris* and many other species characteristic of moist sites (Walker 1965).

Table 1. Approximate UTM coordinates (Zone 14, NAD83; ± 10 m accuracy) for plant collection sites.

<i>Site</i>	<i>Easting (m)</i>	<i>Northing (m)</i>	<i>Comment</i>
22 Landing	556980	5560650	end of point
Aikins Bay	555330	5561810	center
Bell Lodge	550910	5560070	site of buildings
Blackfox Lake	557900	5560730	center
Blind Channel	543170	5558300	off from cut to Forster's Bay
Bluebill Bay	561600	5560230	center
Borrow Pits (Saline Pond)	544590	5558510	center
Cadham Bay	550900	5558430	center
Center Marsh	547230	5558110	center
Cherry Ridge	551630	5559140	north of Pitblado's Channel
Chimney Marsh	559100	5563830	location of chimney
Clair Lake	559770	5562440	center
Clandeboye Bay	563930	5565480	center
Cooks Creek	554580	5560580	center of channel on north-south axis
Cram Creek	541770	5559690	mouth of creek
Crescent Pond	542460	5559300	center
Delta Beach	548580	5559620	site of old railway station west of Delta channel
DWWRS	548950	5559560	site of administration buildings
Eaglenest Creek	546760	5559410	where mouth to lake would be if it existed
Flee Island	559150	5557390	1 mile east of Tin Town (no buildings visible)
Forster's Bay	542690	5558780	center
Gadwell Bay	560760	5562620	center
Huddlestone	549000	5555740	on site of public well
Inkster Farm Road	546170	5556210	where north-south road enters trees
Jackfish Pond	561460	5564950	center
Johnson Lake	561320	5558350	center
Lake #2	557820	5562120	center
Lake #2 (Home Bay)	556850	5558170	center
Lake #3	556760	5561660	center
Lyttle Bay	557610	5559050	center
Oxbow Wood	545790	5556970	by nature trail (north side)
Poplar Pools	555520	5555510	center, if pond still existed
Portage Country Club	543910	5559280	site of clubhouse
Portage Creek	553610	5556690	south of mouth, second bend
Portage Creek Bay	554770	5556930	center
Portage Diversion	544880	5559360	mouth of diversion
School Bay	548450	5558060	center between two existing ponds today
Simpson Bay	554830	5558540	center
Slack's Bluff	549510	5555580	southeast corner
Souix Pass	565400	5567930	east of Ducks Unlimited dike
St. Mark's Lake	564160	5561090	center
The Gap	551930	5559940	mouth
The Pass	551490	5560250	east of Bell buildings
Tin Town	557510	5557460	center of village
Twin Lakes (Lake #4)	557820	5562120	center
University Field Station	544150	5559330	Mallard Lodge
Waterhen Bay	563510	5563150	center

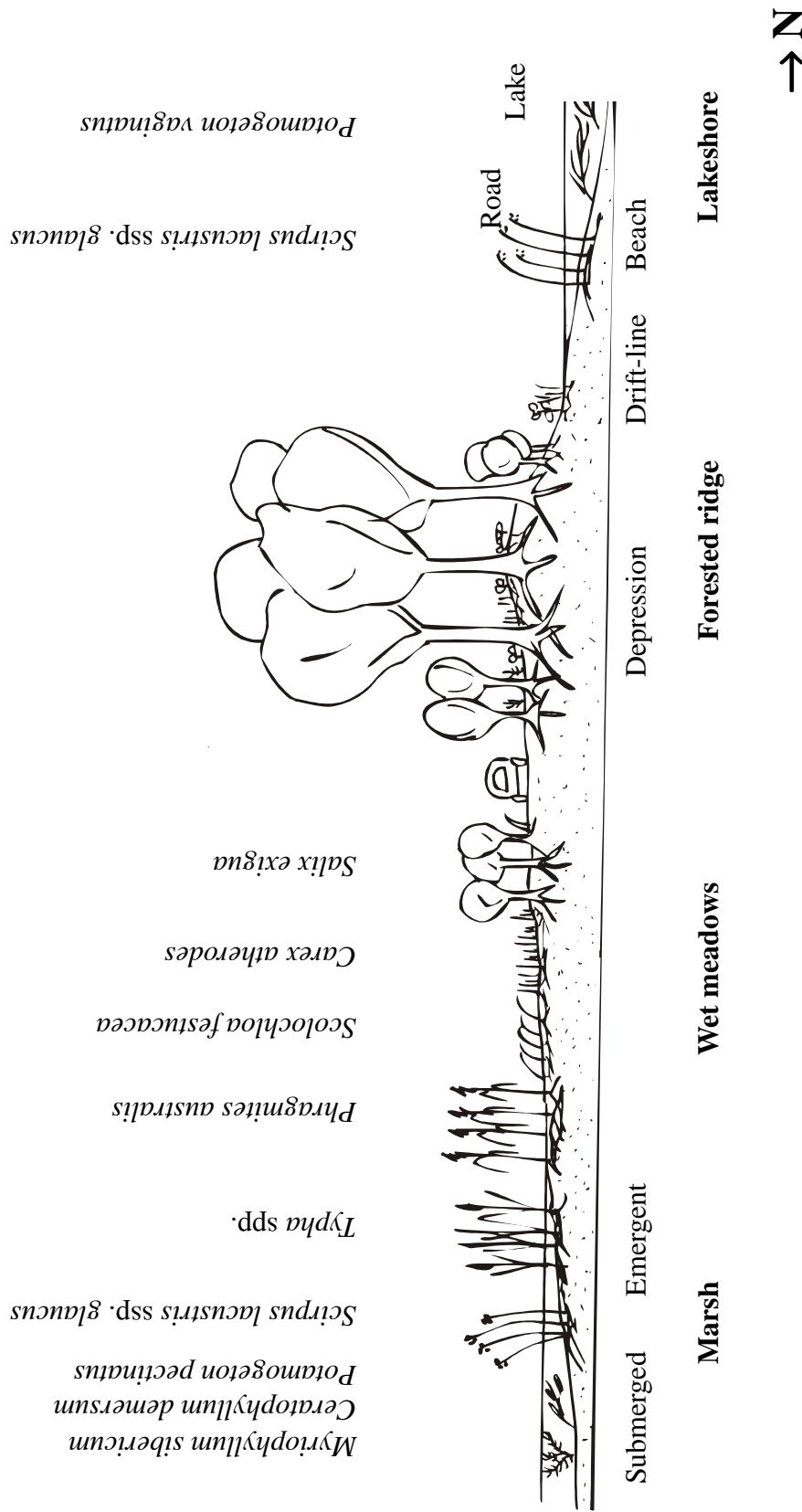


Figure 2. Diagrammatic section through the lakeshore forested ridge and marsh edge: Delta, Manitoba (J.M. Shay). Approximate scale 1 cm = 10 m (plants not drawn to scale).

Sand dunes

At the eastern end of the forested ridge towards Clandeboye Bay the beach ridge is wider than at the western end, and there are active dunes. In a number of places east of Chimney Marsh (Fig. 1), the vegetation is sparse and sand movement occurs. Here *Celtis occidentalis* is more common, together with *Prunus virginiana*, *Ribes americanum*, and *Rosa blanda*. The herb stratum includes *Lathyrus japonicus*, *Elymus lanceolatus*, *E. canadensis*, *Artemisia biennis*, *Astragalus bisulcatus*, *Mirabilis nyctaginea*, *Erysimum cheiranthoides*, and *Agrostis stolonifera*, species that can tolerate xeric conditions.

Meadows

At various places along the ridge, there are grassy openings, and in the neighbourhood of Clandeboye Bay, quite extensive meadows. Such habitats are characterized by *Elytrigia repens*, *Elymus trachycaulus*, *Sporobolus cryptandrus*, *Elymus canadensis*, *Panicum capillare*, *Astragalus canadensis*, *Chenopodium berlandieri*, *Artemisia biennis*, *Asclepias speciosa*, and *Arabis divaricarpa* (Walker 1965).

Roadsides and trails

Roadsides, like the one that follows the south side of the forested ridge, have a flora containing introduced species such as *Bromus inermis*, *Arctium minus*, *Cirsium arvense*, and *Sonchus arvensis*. Among the native species are *Rubus idaeus*, *Rosa blanda*, *Prunus virginiana*, *Urtica dioica*, *Calystegia sepium*, *Echinocystis lobata*, *Vicia americana*, and *Polygonum convolvulus*.

Marsh

Water depths in the marsh are usually less than a meter, but reach a maximum of about 3 meters (Macaulay 1973). The nutrient-rich, shallow water supports a luxuriant growth of submerged aquatic plants dominated by *Potamogeton pectinatus*. *Myriophyllum sibiricum*, *Ceratophyllum demersum*, and *Utricularia macrorhiza* are also widespread (Anderson and Jones 1976). *Zannichellia palustris* and *Ruppia cirrhosa* are more restricted, being found mostly in the eastern part of the marsh.

Scirpus acutus borders open water and also forms small islands. *Typha x glauca* and *Phragmites australis* occur in large monodominant stands in shallow water and along shorelines throughout the marsh. *Scolochloa festucacea* with lesser amounts of *Carex atherodes* characterizes areas inundated in spring that dry out during the summer.

Löve and Löve (1954) stated that the Delta Marsh shorelines were dominated by the emergent macrophyte *Phragmites australis*, and this was true when vegetation was re-established after the high water period of the late 1950s (Walker 1959, 1965). In 1977, *P. australis* and *Typha latifolia* both covered about 350 ha of the shoreline in Centre Marsh (Shay 1977) (Fig. 1). By 1980, however, there was evidence of a shift from *Phragmites* to *Typha* throughout the marsh (Shay 1986, de Geus 1987). This shift was concurrent with the increasing dominance of *Typha x glauca*, the hybrid of the parental species *T. latifolia* and *T. angustifolia* (Shay 1986, Waters and Shay 1990). Unlike its parents, *T. x glauca* seed can germinate in water up to 15 cm deep (Bedish 1967) and tolerates a greater range of water depths than both of the parental species (Waters and Shay 1990). It possesses a combination of competitive advantages derived from the parental species; the vigorous vegetative habit of *T. latifolia*, and the deep-water tolerance of *T. angustifolia* (Waters and Shay 1990). It is therefore an aggressive and successful competitor that has rapidly expanded to become the dominant species in the marsh. Goldsborough and Zbigniewicz (1990) found that plants growing west of the Diversion generally had features of the hybrid namely wide leaves resembling *T. latifolia* and monad pollen resembling *T. angustifolia*. There was, however, considerable morphological variation suggesting that there may be mixed stands of the parental species interspersed with the hybrid (Waters 1989, Goldsborough and Zbigniewicz 1990). In a study of the regeneration of vegetation after fire in the marsh, Greenall (1995) reported that *Typha x glauca* was the only species of *Typha* found in his study area at the west end of the marsh.

Other species found on marsh shores include *Ranunculus sceleratus*, *Eupatorium maculatum*, *Bidens frondosa*, *Epilobium ciliatum*, *Stachys palustris*, *Mentha canadensis*, and *Teucrium canadense*. Soils on the south side of the marsh are more saline than those on the north, particularly saline are the areas east of Portage Creek and around Tin Town and Flee Island in periodically flooded wet meadows (Walker 1965). In these sites *Typha* spp. and *Phragmites australis* border the open water in the bays and in places are joined by *Scirpus acutus*. Widespread species include *Ranunculus sceleratus*, *R. cymbalaria*, *Brachyactis ciliata*, *Hordeum jubatum*, *Puccinellia nuttalliana*, *Suaeda calceoliformis*, *Glaux maritima*, *Rumex maritimus*, *Scirpus maritimus*, *Salicornia rubra*, *Scolochloa festucacea*, *Atriplex littoralis*, *Chenopodium rubrum*, and *Eleocharis palustris*. In the most saline places there is no vegetation but *Puccinellia nuttalliana*, *Triglochin maritimum*, *Salicornia rubra*, and *Suaeda calceoliformis* are found nearby.

Borrow Pits

The Portage Diversion originates at Portage la Prairie and transverse the marsh northward into Lake Manitoba. During its construction in 1968, soil was ‘borrowed’ from the marsh to build up the dyke on the west side. This left a series of shallow ponds which are extremely saline because of the upwelling of saline groundwater. These brackish ponds are surrounded by saline clay mudflats. The halophytes found here include *Scirpus maritimus* in and around water filled depressions, with *Salicornia rubra*, *Suaeda calceoliformis*, *Puccinellia nuttalliana*, *Elytrigia repens*, and *Hordeum jubatum* in slightly drier places.

Oxbow Wood

On the east side of the Diversion and approximately 2 km south of Lake Manitoba is the Oxbow Wood, an area at a slightly higher elevation (approximately 250 m asl) than the marsh. It is a remnant of river bottom forest in an oxbow of a channel that once drained the Assiniboine River into Lake Manitoba. *Fraxinus pennsylvanica* and *Acer negundo* dominate the overstory but numerous large specimens of *Quercus macrocarpa* are found on slightly higher ground that is less prone to spring flooding. *Ulmus americana* and *Populus deltoides* are occasionally encountered but *Celtis occidentalis* and *Tilia americana* are rare. Tall shrubs are generally sparse except in openings where *Corylus americana*, with lesser amounts of *C. cornuta*, are dominant. *Amelanchier alnifolia*, *Prunus virginiana*, *Viburnum lentago*, *Rubus idaeus*, *Symphoricarpos occidentalis*, and *Rosa* spp. are common. The herb layer in the understory is rich. Its flora includes *Aralia nudicaulis*, *Carex assiniboinensis*, *Actaea rubra*, *Amphicarpa bracteata*, *Galium* spp., *Osmorhiza longistylis*, with the locally abundant *Rudbeckia laciniata* and *Matteuccia struthiopteris*. *Trillium cernuum*, *Aquilegia canadensis*, *Phryma leptostachya*, and *Cypripedium calceolus* are also found (Barker and Kenkel 1994).

Tall grass prairie

On the east side of Delta Marsh, the landscape is typical of the aspen parkland region – remnant areas of tall grass prairie interspersed with aspen bluffs. Many prairie remnants have been heavily impacted by cattle grazing and haying. A few well-preserved remnants are in the Portage la Prairie and Woodlands Community Pastures, under the jurisdiction of their respective municipalities, and in the Lake Francis Wildlife Management Area (WMA) just east of St. Ambrose, Manitoba, managed by the Manitoba Department of

Natural Resources. Approximately 15% of the herbarium records represent plants found in the community pastures and similar sites.

The Portage and Woodlands Community Pastures have a number of grasses, herbs, and shrubs typical of the tall grass prairie, such as *Schizachyrium scoparium*, *Andropogon gerardi*, *Sporobolus cryptandrus*, *Elymus trachycaulus*, *Lilium philadelphicum*, *Zigadenus elegans*, *Geum triflorum*, *Anemone cylindrica*, *Monarda fistulosa*, *Galium boreale*, *Pedimelum argophyllum*, *Liatris ligulistylis*, *Astragalus canadensis*, *Dalea purpurea*, *D. candida*, *Solidago rigida*, *Aster ericoides*, *A. laevis*, *Amorpha nana*, *Elaeagnus commutata*, and *Rosa* spp.

Methods

There are herbarium specimens for all the species on this list. They are drawn from the collections made by (1) D. and A. Löve (1954) who worked in the marsh and surrounding area, mainly east of PTH 240, (2) J. M. Walker (1959, 1965) who collected throughout the marsh but mainly east of the Diversion, (3) students who worked mainly around the University Field Station, and (4) miscellaneous collections from elsewhere in the area. I contacted the curators of the herbaria at the Department of Botany (WIN) and the University Field Station (Delta Marsh) (WINDM) at the University of Manitoba; the Departments of Biology at the University of Winnipeg and Brandon University, and the Manitoba Museum of Man and Nature (MMMN). I verified the presence of all the WIN and WINDM specimens. Specimens in this list are housed in WIN, WINDM, and MMMN. There was no concerted effort to survey the area specifically for this project. In the future many species will undoubtedly be added to the list.

The species are listed in alphabetical order by family. Nomenclature follows Kartesz (1994) with Scoggan (1978-79) given as synonyms. Varieties and forms of species are recognized, where appropriate. Scientific and common names are given for each species and whether it is native or introduced. The common names come from Scoggan (1978-79), Looman and Best (1979), and Alex (1980). Distributions are noted as either widespread or local, local implying that a species occurs in only one or two restricted locations. Frequency of occurrence is a subjective assessment and, where known, is indicated by abundant, frequent, occasional or rare.

Approximate Universal Transverse Mercator (UTM) coordinates (Zone 14, NAD83, ±10 m accuracy) for plant collection sites were determined from a base map (August 1997) of Delta Marsh in a Geographic Information System (Goldsborough, unpublished data). A list of these is given in Table 1.

Species List - with voucher specimens

ACERACEAE	MAPLE FAMILY
<i>Acer negundo</i> L.	Manitoba maple
Native. Perennial. Widespread in the forested ridge, Oxbow Wood. West Beach sand dune. Beach ridge, roadside, University Field Station. Moist woods. (WIN, WINDM, MMMN)	
ACORACEAE (=Araceae)	SWEETFLAG FAMILY
<i>Acorus calamus</i> L.	Sweet flag
An early introduction from Eurasia. Perennial. No location given. (WINDM). This taxon is unlikely to occur in the marsh or surrounding area. The native species is <i>A. americanus</i> (Raf.) Raf. (= <i>A. calamus auct. non</i> L.)	
ALISMATACEAE	WATER-PLANTAIN FAMILY
<i>Alisma gramineum</i> Lej.	Water-plantain
Native. Perennial. Locally frequent. Borrow pit, Diversion. (WIN)	
<i>Alisma triviale</i> Pursh. (<i>A. triviale</i> Pursh. and <i>A. plantago-aquatica</i> L. var. <i>americanum</i> Schultes & Schultes)	Common water plantain
Native. Perennial. Locally abundant. Dried slough, roadside ditch. Borrow Pit. Portage Diversion. (WIN, WINDM, MMMN)	
<i>Sagittaria cuneata</i> Sheldon	Arrowhead
Native. Perennial. Widespread. Shallow water, along marsh shores. Lakeshore, 6 km east of Delta. North end of Portage Diversion. (WIN, WINDM, MMMN)	
<i>Sagittaria latifolia</i> Willd.	Arrowhead
Native. Perennial. Shallow water, sloughs and ditches throughout the marsh. St. Ambrose. (WIN, WINDM)	
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus blitoides</i> S. Watson (<i>A. graecizans auct. non</i> L.) (Tumbleweed)	
Native. Annual. Occasional. Lakeshore driftline. Roadsides. (WIN, WINDM)	
<i>Amaranthus retroflexus</i> L.	Redroot pigweed
Tropical America. Annual. Occasional. Lakeshore driftline, disturbed roadsides, St. Ambrose. (WIN, WINDM)	
ANACARDIACEAE	CASHEW FAMILY
<i>Toxicodendron radicans</i> P. Mill. (<i>Rhus radicans</i> L.)	Poison ivy
Native. Perennial. Widespread. Abundant in disturbed parts of the forested ridge, in clearings and along the forest edge. Oxbow Wood. (WIN, WINDM)	
APOCYNACEAE	DOGBANE FAMILY
<i>Apocynum androsaemifolium</i> L.	Spreading dogbane
Native. Perennial. Widespread. Edges of the forested ridge, Oxbow Wood. (WIN)	
<i>Apocynum cannabinum</i> L. (same in Scoggan but <i>A. sibiricum</i> Jacq. in WINDM)	Indian hemp
Native. Perennial. Occasional. Edges of the forested ridge at east end. (WIN, WINDM)	
ARALIACEAE	GINSENG FAMILY
<i>Aralia nudicaulis</i> L.	Wild sarsaparilla
Native. Perennial. Widespread on moist, sandy soil throughout the forested ridge, and in Oxbow Wood. (WIN, WINDM)	
ASCLEPIADACEAE	MILKWEED FAMILY
<i>Asclepias incarnata</i> L.	Swamp-milkweed
Native. Perennial. Local. Occasional. Lakeshore driftlines, exposed sandy places, and wet ground in forested ridge. (WIN, WINDM)	

<i>Asclepias ovalifolia</i> Dcne. Native. Perennial. Local. St. Ambrose prairie. (WIN)	Milkweed
<i>Asclepias speciosa</i> Torr. Native. Perennial. Widespread. Occasional. Forested ridge roadside, sand dunes, lakeshore. Portage Creek. (WIN, WINDM, MMMN)	Showy milkweed
<i>Asclepias syriaca</i> L. Native. Perennial. Occasional. Roadsides and meadows, Tin Town. (WIN)	Common milkweed
ASTERACEAE (=Compositae)	SUNFLOWER FAMILY
<i>Achillea millefolium</i> L. (<i>A. millefolium</i> var. <i>occidentalis</i> DC. and <i>A. millefolium</i> L. var. <i>lanulosa</i> (Nutt.) Piper) Naturalized from Europe. Perennial. Widespread. Frequent. Occasional. Meadows and roadsides. Oxbow Wood. South of Huddlestone railroad prairie. (WIN, WINDM)	Common yarrow
<i>Achillea sibirica</i> Ledeb. Native. Perennial. Local. Occasional. University Field Station. Oxbow Wood. (WIN, WINDM)	Yarrow
<i>Agoseris glauca</i> (Pursh) Raf. Native. Perennial. Occasional. Road to Poplar Pools. (WIN, WINDM)	False dandelion
<i>Ambrosia acanthicarpa</i> Hook. (<i>Franseria acanthicarpa</i> (Hook.) Coville) Native. Annual. Rare. Forested ridge, 10 km east of Delta village. (WIN)	Sandbur
<i>Ambrosia artemisiifolia</i> L. var. <i>elatior</i> (L.) Desc. Native. Annual. Occasional. Edge of the forested ridge. (WIN)	Common ragweed
<i>Ambrosia coronopifolia</i> T.&G. (<i>A. psilostachya</i> DC. var. <i>coronopifolia</i> (T.&G.) Farw.) Native. Perennial. Occasional. Well drained area of Borrow Pit, stabilized sand dune. Prairie roadside, south of Cadham Bay. (WIN, WINDM)	Perennial ragweed
<i>Antennaria microphylla</i> Rydb. (<i>A. rosea</i> Greene var. <i>nitidla</i> (Greene) Breitung.) Native. Perennial. Lake Francis WMA. (WIN)	Rosy everlasting
<i>Arctium lappa</i> L. Eurasian. Biennial. Widespread. Forested ridge, roadsides. Eaglenest Creek. (WIN, WINDM)	Great burdock
<i>Arctium minus</i> Bernh. Eurasian. Facultative biennial or short-lived perennial. Abundant. Edge of the forested ridge, roadsides and disturbed places. (WIN, WINDM)	Common burdock
<i>Arctium tomentosum</i> Mill. Eurasian. Biennial. Rare. Forested ridge roadsides. (WIN)	Burdock
<i>Artemisia absinthium</i> L. Eurasian. Perennial. Widespread. Forested ridge, roadsides. Borrow Pits. (WIN, WINDM)	Absinthe
<i>Artemisia biennis</i> Willd. Native. Biennial. Widespread. Frequent. Disturbed roadside, sandy openings in the forested ridge. (WIN)	Biennial wormwood
<i>Artemisia dracunculus</i> L. Native. Perennial. Occasional. Huddlestone railroad prairie. (WIN, WINDM)	Tarragon
<i>Artemisia frigida</i> Willd. Native. Perennial. Widespread. Prairie, sandy roadsides. Huddlestone railroad prairie. (WIN, WINDM)	Prairie-sagewort
<i>Artemisia ludoviciana</i> Nutt. ssp. <i>ludoviciana</i> (<i>A. ludoviciana</i> Nutt. var. <i>latifolia</i> (Bess.) T.&G., and var. <i>gnaphalodes</i> (Nutt.) T.&G.) Native. Perennial. Widespread. Prairie on forested ridge at The Pass. Huddlestone railroad prairie. (WIN, WINDM)	White sage

- Aster ciliolatus* Lindl. Aster
Native. Perennial. Locally abundant in Oxbow Wood. (WIN)
- Aster ericoides* L. var. *pansus* (Blake) Boivin Heath aster
Native. Perennial. Widespread. Prairie, openings in forested ridge, meadows near Oxbow Wood, St. Ambrose. (WIN)
- Aster falcatus* Lindl. var. *commutatus* (T.&G.) Boivin (*A. ericoides* L. var. *commutatus* (T.&G.) Boivin) Heath aster
Native. Perennial. Rare. 3 km south of Delta Beach. Huddlestone railroad prairie. Oxbow Wood. (WIN, WINDM)
- Aster laevis* L. Aster
Native. Perennial. Widespread. Occasional. Prairie roadsides and ditches. Huddlestone railroad prairie. (WIN, WINDM)
- Aster lateriflorus* (L.) Britt. Calico aster
Native. Perennial. Occasional. Oxbow Wood. (WIN)
- Aster novae-angliae* L. New England aster
Native. Perennial. Local. Roadside ditch at Slack's Bluff. (WIN)
- Aster lanceolatus* Willd. ssp. *lanceolatus* var. *lanceolatus* (*A. simplex* Willd.) Aster
Native. Perennial. Widespread. University Field Station. Delta Waterfowl Station, disturbed areas, Borrow Pits, lakeshore driftlines, south of Huddlestone railroad. Whitetop meadows. (WIN, WINDM)
- Bidens cernua* L. Stick-tight
Native. Annual. Widespread. Marsh shores, depressions in the forested ridge. Abundant when water levels are falling. Oxbow Wood. (WIN, WINDM, MMMN)
- Bidens frondosa* L. Beggar-ticks
Native. Annual. Widespread. Drying marsh shores. Forested ridge in moist depressions. (WIN, WINDM)
- Bidens vulgata* Greene Beggar-ticks
Native. Annual. Occasional. Depressions in the forested ridge, marsh shores. (WIN, WINDM)
- Brachyactis ciliata* (Ledeb.) Ledeb. ssp. *angusta* (Lindl.) A.G.Jones (*Aster laurentianus* Fern. in Scoggan, *A. laurentianus* and *A. brachyactis* Blake in herbaria) Rayless Aster
Native. Annual. Widespread. Abundant. Saline wet meadows, drawdown marsh shores, Borrow Pits, Portage Creek. (WIN, WINDM)
- Cirsium arvense* (L.) Scop. Canada thistle
Eurasian. Perennial. Widespread and abundant. Forested ridge roadsides, wet meadows, waste places and fields. Huddlestone. Oxbow Wood. (WIN, WINDM)
- Cirsium flodmanii* (Rydb.) Arthur Flodman's thistle
Native. Biennial. Occasional. Prairie, Flee Island. Huddlestone. (WIN, WINDM)
- Conyza canadensis* (L.) Cronq. var. *canadensis* (*Erigeron canadensis* L.) Horse-weed
Native. Annual. Locally frequent. Disturbed sites in the forested ridge, lakeshore. (WIN, WINDM)
- Crepis tectorum* L. Hawk's-beard
Eurasian. Annual. Occasional. Forested ridge roadside, Oakland. (WIN, WINDM)
- Erigeron asper* Nutt. Fleabane
Native. Annual. Meadows, moist places, Oakland. South of Cadham Bay. Huddlestone railroad prairie. (WIN, WINDM)
- Erigeron glabellus* Nutt. Fleabane
Native. Perennial. Rare. Moist open ground, Tin Town. (WIN)
- Erigeron philadelphicus* L. Fleabane
Native. Biennial or short-lived perennial. Widespread. Wet meadow, forested ridge. Lakeshore. (WIN, WINDM)

- Eupatorium maculatum* L. var. *maculatum* (*E. purpureum* L. var. *maculatum* (L.) Darl.) Joe-Pye-weed
Native. Perennial. Widespread, abundant. Wet meadows, margins of the forested ridge, lakeshore driftlines. (WIN, WINDM, MMMN)
- Euthamia graminifolia* var. *graminifolia* (L.) Nutt. (*Solidago graminifolia* (L.) Salisb.) Goldenrod
Native. Perennial. Frequent. Lakeshore driftline and the forested ridge. St. Ambrose, Woodlands Community Pasture. (WIN, WINDM)
- Gaillardia aristata* Pursh Gaillardia
Native. Perennial. Occasional. Prairie, Lake Francis. (WIN)
- Grindelia squarrosa* (Pursh) Dunal Gumweed
Native. Biennial. Widespread. Abundant along Portage Diversion bank. Roadsides. Huddlestone railroad prairie. (WIN)
- Helianthus giganteus* L. Sunflower
Native. Perennial. Local. Forested ridge roadside. (WIN)
- Helianthus pauciflorus* Nutt. ssp. *subrhomboides* (Rydb.) O.Spring & E.Schilling (*Helianthus x laetiflorus* Pers. var. *subrhomboides* (Rydb.) Fern.) (Sunflower)
Native. Annual. Dry, sandy meadows, roadsides. Huddlestone railroad prairie. (WIN, WINDM).
- Helianthus maximiliani* Schrad. Sunflower
Native. Perennial. Locally abundant. Dry meadows, Huddlestone railroad prairie. (WIN, WINDM)
- Helianthus nuttallii* T.&G. Sunflower
Native. Perennial. Dry meadow, edge of Oxbow Wood. (WIN, WINDM)
- Heliopsis helianthoides* (L.) Sweet var. *scabra* (Dunal) Fern. Ox-eye
Native. Perennial. Widespread, occasional. Edge of the forested ridge, Portage Creek, Woodlands Community Pasture. (WIN, WINDM)
- Heterotheca villosa* (Pursh) Shinnery var. *villosa* (*Chrysopsis villosa* (Pursh) Nutt.) Golden aster
Native. Perennial. Widespread. Roadsides, prairie. Huddlestone railroad prairie. (WIN)
- Iva xanthifolia* Nutt. Marsh-elder
Native. Annual. Widespread, frequent. Roadsides, disturbed places along Huddlestone railroad. St. Ambrose. (WIN, WINDM)
- Lactuca serriola* L. (*L. scariola* L.) Prickly lettuce
Eurasian. Occasional. Edge of Oxbow Wood. (WIN)
- Lactuca tatarica* (L.) Mey. (same in Scoggan, but also as *L. pulchella* (Pursh) D.C. in herbaria.) Lettuce
Native. Perennial. Widespread, frequent. Lakeshore drift lines, wet meadows, roadsides. Portage Creek, PTH 227. (WIN, WINDM, MMMN)
- Leucanthemum vulgare* Lam. (*Chrysanthemum leucanthemum* L.) Ox-eye-daisy
Eurasian. Perennial. Occasional. Forested ridge, roadsides. (WIN, WINDM)
- Liatris ligulistylis* (Nels.) Schum. Blazing-star
Native. Perennial. Occasional. Prairies, Woodland Community Pasture, St. Ambrose. Huddlestone railroad prairie. (WIN, WINDM)
- Matricaria discoidea* DC. (*M. matricarioides* auct. non (Less.) Porter) Pineapple-weed
Eurasian. Annual. Widespread. Roadsides. Blind Channel. (WIN, WINDM)
- Petasites sagittatus* (Banks ex Pursh) Gray Sweet coltsfoot
Native. Perennial. Local, occasional. Meadows. (WIN, WINDM)
- Prenanthes alba* L. Rattlesnake-root
Native. Perennial. Rare. Oxbow Wood. (WIN, WINDM)

- Prenanthes racemosa* Michx. ssp. *multiflora* Cronq. (*P. racemosa* Michx.) Rattlesnake-root
Native. Perennial. Rare. St. Ambrose Community Pasture. (WIN)
- Rudbeckia hirta* L. (same in Scoggan, but *R. serotina* Nutt. in herbaria) Black-eyed Susan
Native. Biennial or short-lived perennial. Widespread in prairies. St. Ambrose. (WIN, WINDM)
- Rudbeckia laciniata* L. Coneflower
Native. Perennial. Abundant in Oxbow Wood. Occasional in the forested ridge. Poplar Pools. St. Ambrose.
(WIN, WINDM)
- Senecio congestus* (R. Br.) DC. Marsh-fleabane
Native. Annual or biennial. Widespread and abundant in drawdowns and drying marsh shorelines, Portage
Diversion. (WIN, WINDM, MMMN)
- Senecio integerrimus* Nutt. Groundsel
Native. Perennial. Occasional. Wet meadows. (WIN)
- Solidago canadensis* L. var. *gilvocanescens* Rydb. (also as *S. lepida* Ait. var. *molina* Fern. in herbarium) Canada goldenrod
Native. Perennial. Lakeshore driftline, Slack's Bluff, immediately south of Huddlestone. (WIN, WINDM)
- Solidago gigantea* Ait. Goldenrod
Native. Perennial. Occasional. Edges of the forested ridge, roadsides. Marsh near Delta Waterfowl Station,
Hydro right of way. (WIN, WINDM, MMMN)
- Solidago hispida* Muhl. ex Willd. Goldenrod
Native. Perennial. Occasional. Dry meadow near Oxbow Wood. Sandy bank near Portage Creek. (WIN)
- Solidago missouriensis* Nutt. Goldenrod
Native. Perennial. Occasional. Dry meadows, Portage Creek. (WIN, WINDM)
- Solidago ptarmicoides* (Nees) Boivin (*Aster ptarmicoides* (Nees) T.&G.) White upland aster
Native. Perennial. Woodlands Community Pasture, St. Ambrose. (WIN)
- Solidago rigida* L. Goldenrod
Native. Perennial. Locally abundant. Prairie, St. Ambrose, Woodlands Community Pasture. Huddlestone
railroad prairie. (WIN, WINDM)
- Sonchus arvensis* L. ssp. *uliginosus* (Bieb.) Nyman (*S. arvensis* L. var. *glabrescens* Geunth., Grab.&Wimm.) Field-sow-thistle
European. Annual. Widespread. Sandy roadsides, heavy wet soil, dry upland meadows, the forested ridge
roadsides. Disturbed gravel near Borrow Pits. (WIN, WINDM)
- Sonchus oleraceus* L. Common-sow-thistle
Eurasian. Annual. Local. Frequent. Roadsides east of Delta Beach, marsh shores. (WIN, WINDM, MMMN)
- Tanacetum vulgare* L. Common tansy
Eurasian. Perennial. Local, frequent. Oxbow Wood margins. (WIN)
- Taraxacum officinale* Weber ex Wiggers Common dandelion
Eurasian. Perennial. Widespread, frequent. Roadsides, disturbed areas, the forested ridge. (WIN, WINDM)
- Tragopogon dubius* Scop. (same in Scoggan, but also *T. major* Jacq. in herbaria) Goat's-beard
European. Perennial. Occasional. Abandoned railroad at Huddlestone, roadsides. (WIN, WINDM)
- Trimorpha acris* (L.) Nesom var. *asteroides* (Andrz. ex Bess.) Nesom (*Erigeron acris* L.) Fleabane
Native. Biennial. Widespread. Roadsides, shores. (WIN)
- Xanthium strumarium* L. Cocklebur
Native. Annual. Lakeshore driftlines, roadsides, moist ground. (WIN)

BALSAMINACEAE	TOUCH-ME-NOT FAMILY
<i>Impatiens capensis</i> Meerb.	Spotted-touch-me-not
Native. Annual. Local. Occasional. Depressions at the edges of the forested ridge and Oxbow Wood. (WIN, WINDM, MMMN)	
BETULACEAE	BIRCH FAMILY
<i>Alnus viridis</i> (Vill.) Lam. & DC. ssp. <i>crispa</i> (Ait.) Turrill (<i>A. crispa</i> (Ait.) Pursh)	Green alder
Native. Perennial. Occasional. Forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Corylus americana</i> Walt.	American hazel
Native. Perennial. Widespread. Frequent. Forested ridge, Oxbow Wood, and Oakland. (WIN, WINDM)	
<i>Corylus cornuta</i> Marsh.	Beaked hazelnut
Native. Perennial. Widespread. Frequent. Forested ridge, Oxbow Wood. (WIN, WINDM)	
BORAGINACEAE	BORAGE FAMILY
<i>Hackelia deflexa</i> (Wahlenb.) Opiz var. <i>americana</i> (Gray) Fern.&Johnston (<i>H. americana</i> (Gray) Fern.)	Nodding stickseed
Native. Perennial. Forested ridge. (WIN, WINDM)	
<i>Lappula squarrosa</i> (Retz.) Dumort. (<i>L. myosotis</i> Moench in Scoggan, <i>L. echinata</i> Gilib. in WINDM)	Bluebur
Native. Annual. Widespread. Forested ridge. (WINDM)	
<i>Lithospermum canescens</i> (Michx.) Lehm.	Hoary Puccoon
Native. Perennial. Local. Dry meadows on south side of marsh, Lake Francis WMA. Huddlestone railroad prairie. (WIN, WINDM)	
CAMPANULACEAE	BLUEBELL FAMILY
<i>Campanula rotundifolia</i> L.	Harebell
Native. Perennial. Widespread. Oakland, Lake Francis roadsides. South of Cadham Bay. (WIN, WINDM)	
<i>Lobelia spicata</i> Lam.	Pale-spike-lobelia
Native. Annual. Local. Occasional. Woodlands Community Pasture. St. Ambroise. (WIN)	
CANNABACEAE	HEMP FAMILY
<i>Humulus lupulus</i> L.	Common hop
Native. Perennial. Local. Forested ridge, thickets in wet meadows. Roadsides. (WIN, WINDM, MMMN)	
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
<i>Sambucus racemosa</i> L. ssp. <i>pubens</i> (Michx.) House	Red-berried elder
Native. Perennial. Widespread in the forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Symphoricarpos albus</i> (L.) Blake	Snowberry
Native. Perennial. Oxbow Wood. (WIN, WINDM)	
<i>Symphoricarpos occidentalis</i> Hook.	Wolfberry
Native. Perennial. Widespread. Abundant along edges of the forested ridge, slightly elevated meadow south of the University Field Station. Oxbow Wood. (WIN)	
<i>Viburnum edule</i> (Michx.) Raf.	Mooseberry
Native. Perennial. Local. Occasional. Oxbow Wood, Inkster farm road. (WINDM)	
<i>Viburnum lentago</i> L.	Nannyberry
Native. Perennial. Widespread. Oxbow Wood, Portage Creek, south of PTH 227. (WINDM)	
<i>Viburnum opulus</i> L. var. <i>americanum</i> Ait.	Guelder-rose
Native. Perennial. Oxbow Wood. PTH 227, west of Portage Creek. PTH 227, near Oakland. (WIN)	

CARYOPHYLLACEAE	PINK FAMILY
<i>Cerastium arvense</i> L.	Field chickweed
Native. Perennial. Occasional. Oakland. (WIN)	
<i>Moehringia lateriflora</i> (L.) Fenzl (<i>Arenaria lateriflora</i> L.)	Grove-sandwort
Native. Perennial. Widespread on the forested ridge. Huddlestone. (WIN, WINDM)	
<i>Silene cserei</i> Baumg.	Campion
European. Biennial. Local. Occasional. PTH 240, 4.5 km south of Delta Beach. (WIN)	
<i>Spergularia salina</i> J. & K. var. <i>salina</i> (<i>S. marina</i> (L.) Griseb.)	Sand-spurrey
Native. Annual. Widespread on south side of the marsh. In Portage Diversion, Borrow Pits, Portage Creek, Tin Town. Alkaline meadows. (WIN, WINDM)	
<i>Stellaria longifolia</i> Muhl. ex Willd.	Chickweed
Native. Perennial. Widespread. Damp meadows in the forested ridge and Oxbow Wood. (WIN, WINDM)	
<i>Stellaria longipes</i> Goldie	Chickweed
Native. Perennial. Occasional. Edges of the forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Vaccaria hispanica</i> (P. Mill) Rauschert (<i>Saponaria vaccaria</i> L.)	Cow-cockle
European. Annual. Local along roadsides. (WIN)	
CELASTRACEAE	STAFF-TREE FAMILY
<i>Celastrus scandens</i> L.	Climbing bittersweet
Native. Perennial. Local on the forested ridge east of the Delta Waterfowl Station. Roadside thicket. Open canopy in Oxbow Wood. (WIN, WINDM)	
CERATOPHYLLACEAE	HORNWORT FAMILY
<i>Ceratophyllum demersum</i> L.	Hornwort
Native. A rootless perennial. Widespread. Shallow water throughout the marsh in open bays and sloughs. (WIN, WINDM)	
CHENOPODIACEAE	GOOSEFOOT FAMILY
<i>Atriplex littoralis</i> L. (<i>A. patula</i> L. var. <i>littoralis</i> (L.) Gray)	Spearscale
Native. Annual. Local. Wet meadows, Delta Waterfowl Station. (WIN, WINDM)	
<i>Atriplex nuttallii</i> S.Wats.	Moundscale
Native. Annual. Occasional. Wet meadows and in Borrow Pit. (WINDM)	
<i>Atriplex patula</i> L.	Spearscale
Native. Annual. Widespread in drawdown conditions. Wet meadows and marsh shores. North end of Portage Diversion, 22 Landing, Borrow Pit. (WIN, WINDM)	
<i>Axyris amaranthoides</i> L.	Russian pigweed
Asiatic. Annual. Occasional. Lakeshore, meadows, roadsides. Forested ridge. Oxbow Wood. Huddlestone railroad prairie. (WIN, WINDM)	
<i>Chenopodium album</i> L.	Lamb's-quarters
Native. Annual. Lakeshores driftlines, disturbed areas. Roadsides, University Field Station. (WIN, WINDM)	
<i>Chenopodium berlandieri</i> Moq.	Lamb's-quarters
Native. Annual. Occasional. Marsh shores. (WIN)	
<i>Chenopodium leptophyllum</i> (Moq.) Nutt. ex S.Wats.	Goosefoot
Native. Annual. Occasional. Prairie, sandy soil. Oxbow Wood. (WIN, WINDM)	
<i>Chenopodium rubrum</i> L.	Coast-blite
Native. Annual. Abundant when water levels are falling. Marsh shores. Oxbow Wood. (WIN, WINDM)	
<i>Chenopodium salinum</i> Standl. (<i>C. salinum</i> L. var. <i>salinum</i> (Standl.) Boivin)	Oak-leaved goosefoot
Eurasian. Annual. Widespread. Alkaline meadows, Borrow Pits. (WIN, WINDM)	

- Chenopodium simplex* (Torr.) Raf. (*C. hybridum* L. in Scoggan, includes *C. hybridum* L. ssp. *gigantospermum* (Aellen) Rouleau in herbaria) Maple-leaved goosefoot
Native. Annual. Occasional. Meadows on the forested ridge. (WIN, WINDM)
- Corispermum orientale* Lam. (*C. hyssopifolium* L. var. *emarginatum* (Rydb.) Boivin) Bugseed
Native. Annual. Occasional. Dry sandy roadside, Cook's Creek. Chimney Marsh. (WIN, WINDM)
- Kochia scoparia* (L.) Schrad. Summer-cypress
Eurasian. Annual. Occasional. PTH 240 roadside. (WIN, WINDM)
- Salicornia rubra* A.Nels. (*S. europaea* L. in Scoggan) Samphire
Native. Annual. Locally abundant. Alkaline meadows, Diversion, Borrow Pits. South of Huddleston railroad prairie. (WIN, WINDM, MMMN)
- Salsola kali* L. ssp. *ragus* (L.) Aellen (*S. kali* L. ssp. *tenuifolia* Tausch) Russian thistle
Eurasian. Annual. Occasional. Lakeshore, sandy roadside. (WIN, WINDM)
- Suaeda calceoliformis* (Hook.) Moq. (*S. maritima* (L.) Dumort. var. *americana* (Pers.) Boivin in Scoggan, *S. depressa* (Pursh) S.Wats. in herbarium) Sea-blite
Native. Annual. Widespread. Abundant. Borrow Pits, alkaline meadows on south side of the marsh. (WIN)

COMPOSITAE (see Asteraceae)

CONVOLVULACEAE

MORNING-GLORY FAMILY

- Calystegia sepium* (L.) R.Br. ssp. *sepium* (*Convolvulus sepium* L.) Hedge-bindweed
Native. Perennial. Widespread, frequent. Forested ridge, roadsides. (WIN, WINDM, MMMN)
- Cuscuta gronovii* Willd. ex J.A.Schultes Dodder
Native. Annual. Widespread, frequent. Forested ridge margins and drying marsh shores on a variety of plants including *Rubus idaeus* and *Mentha canadensis*. (WIN, WINDM, MMMN)
- Cuscuta umbrosa* Beyrich Dodder
Native. Annual. Local. Forested ridge, willow thickets. (WIN, WINDM)

CORNACEAE

DOGWOOD FAMILY

- Cornus sericea* L. (*C. stolonifera* Michx.) Red osier
Native. Perennial. Widespread, frequent. Forested ridge and Oxbow Wood. (WIN, WINDM, MMMN)

CRUCIFERAE

MUSTARD FAMILY

- Arabis divaricarpa* Nels. Rock-cress
Native. Biennial. Widespread, occasional. Forested ridge roadsides and sandy places. (WIN, WINDM)
- Capsella bursa-pastoris* (L.) Medic. Shepard's-purse
European. Annual. Widespread. University Field Station, forested ridge roadsides, waste places. (WIN, WINDM)
- Cardamine pensylvanica* Muhl. ex Willd. Bitter cress
Native. Biennial. Local, occasional. In water-logged depressions at roadside of forested ridge. (WIN)
- Descurainia incana* (Bernh. ex Fisch.&A.Mey.) Dorn (*D. richardsonii* (Sweet) Shultz) Tansy-mustard
Native. Biennial. Widespread. Sandy roadsides, the forested ridge, shoreline, waste places. Huddleston. (WIN, WINDM)
- Descurainia pinnata* (Walt.) Britt. ssp. *brachycarpa* (Richards) Detling (*D. pinnata* (Walt.) Britt. var. *brachycarpa* (Richards) Fern.) Tansy-mustard
Native. Annual. Local. Abandoned railroad near Delta Beach. (WIN, WINDM)
- Descurainia sophia* (L.) Webb ex Prantl Tansy-mustard
European. Annual-biennial. Occasional. Prairie. Forested ridge roadside. (WIN, WINDM)
- Draba nemorosa* L. Draba
Native. Annual. Widespread. Forested ridge roadside. (WIN, WINDM)

<i>Erysimum cheiranthoides</i> L.	Wormseed-mustard
Eurasian. Annual to perennial. Widespread, occasional. Roadsides, forested ridge, meadows. (WIN, WINDM, MMMN)	
<i>Erysimum inconspicuum</i> (Wats.) MacM.	Wallflower
Native. Perennial. Local, occasional. Forested ridge, prairie and sandy openings. (WIN, WINDM)	
<i>Lepidium densiflorum</i> Schrad.	Peppergrass
Native. Annual-biennial. Widespread. Forested ridge roadsides. Oxbow Wood. (WIN, WINDM)	
<i>Rorippa islandica</i> (Oeder) Borbas	Yellow cress
Native. Annual. Locally frequent. Lakeshore driftlines, marsh south of Cadham Bay. (WIN)	
<i>Rorippa palustris</i> (L.) Bess. ssp. <i>fernaldiana</i> (Butt.&Abbe) Jonsell (<i>R. islandica</i> (Oeder) Borbas var. <i>fernaldiana</i> Butt.&Abbe)	Yellow cress
Native. Annual. Roadside ditch, forested ridge. (WINDM)	
<i>Rorippa palustris</i> (L.) Bess. ssp. <i>hispida</i> (Desv.) Jonsell (<i>R. islandica</i> (Oeder) Borbas var. <i>hispida</i> (Desv.) Butt.&Abbe)	Yellow cress
Native. Annual. Widespread. Lakeshore forest. (WINDM)	
<i>Sinapis arvensis</i> L. (<i>Brassica kaber</i> (DC.) Wheeler)	Charlock
Eurasian. Annual. Widespread, occasional. University Field Station roadsides, sandy conditions, waste places. Cadham Bay, Cherry Ridge. (WIN, WINDM)	
<i>Sisymbrium altissimum</i> L.	Tumble-mustard
European. Annual. Widespread, occasional. Lakeshore forest, in wet exposed habitats, along Oxbow Wood roadside. Huddlestone railroad prairie. (WIN, WINDM)	
<i>Thlaspi arvense</i> L.	Field penny-cress
European. Annual. Widespread. Frequent. Roadsides. Oxbow Wood. (WIN, WINDM)	
CUCURBITACEAE	CUCUMBER FAMILY
<i>Echinocystis lobata</i> (Michx.) T.&G.	Wild cucumber
Native. Annual. Locally frequent. Ditches along margins of the forested ridge. North end of Portage Diversion. (WIN, WINDM, MMMN)	
CYPERACEAE	SEDGE FAMILY
<i>Carex alopecoidea</i> Tuckerm.	Sedge
Native. Perennial. Wet meadows. Oxbow Wood. (WIN, WINDM)	
<i>Carex assiniboinensis</i> Boott	Sedge
Native. Perennial. Widespread, abundant. Forested ridge, Oxbow Wood. (WIN, WINDM, MMMN)	
<i>Carex atherodes</i> Spreng.	Sedge
Native. Perennial. Widespread, abundant. Marsh shores in shallow water, forested ridge depressions. Oxbow Wood. (WIN, WINDM, MMMN)	
<i>Carex aurea</i> Nutt.	Sedge
Native. Perennial. Prairie, Lake Francis. (WIN)	
<i>Carex backii</i> Boott	Sedge
Native. Perennial. Local. Oxbow Wood. (WIN)	
<i>Carex bebbii</i> Olney ex Fern.	Sedge
Native. Perennial. Widespread, occasional. Wet soil on the sandy lakeshore, forested ridge. (WIN, WINDM)	
<i>Carex buxbaumii</i> Wahl.	Sedge
Native. Perennial. Prairie, Portage Community Pasture. (WIN)	
<i>Carex deweyana</i> Schw.	Sedge
Native. Perennial. Occasional. Forested ridge, Oxbow Wood. (WIN, WINDM)	

Vascular plant species list for Delta Marsh

Shay

<i>Carex lanuginosa</i> Michx. Native. Perennial. Occasional. Wet ditches, meadows, Oxbow Wood. St. Ambroise, Oakland. (WIN, WINDM)	Sedge
<i>Carex parryana</i> Dewey Native. Perennial. Lake Francis WMA. (WIN)	Sedge
<i>Carex pennsylvanica</i> Lam. Native. Perennial. Open areas in forested ridge. Oxbow Wood, Oakland. (WIN, WINDM)	Sedge
<i>Carex praegracilis</i> Boott Native. Perennial. Prairie, road to Flee Island. (WIN, WINDM)	Sedge
<i>Carex pseudo-cyperus</i> L. Native. Perennial. Widespread, occasional. Emergent marsh zone, roadside marsh. (WIN, WINDM)	Sedge
<i>Carex retrorsa</i> Schw. Native. Perennial. Widespread, occasional. Sandy shore, marsh, wet depressions in the forested ridge. (WIN, WINDM)	Sedge
<i>Carex sartwellii</i> Dewey Native. Perennial. Widespread, occasional. Meadows, near Flee Island. (WIN, WINDM)	Sedge
<i>Carex sprengei</i> Dewey ex Spreng. Native. Perennial. Meadows in the forested ridge, Oxbow Wood. Poplar Pools in drying meadow. (WIN, WINDM)	Sedge
<i>Carex sychnocephala</i> Carey Native. Perennial. (WIN)	Sedge
<i>Carex tenera</i> Dewey Native. Perennial. Local. Frequent. Oxbow Wood. (MMMN)	Sedge
<i>Carex viridula</i> Michx. Native. Perennial. Cram Creek. (WINDM)	Green sedge
<i>Eleocharis acicularis</i> (L.) R.&S. Native. Perennial. Widespread, locally abundant. Lakeshore, marsh shores. East of Huddlestone railroad. Borrow Pit. Portage Diversion. (WIN, WINDM)	Spike-rush
<i>Eleocharis erythropoda</i> Steud. (and as <i>E. calva</i> Torr. in herbaria) Native. Perennial. Local. Lakeshore, Delta Beach and St. Ambroise. (WIN, WINDM)	Spike-rush
<i>Eleocharis palustris</i> (L.) R.&S. (<i>E. macrostachya</i> Britt. in herbaria) Native. Perennial. Widespread, abundant. Wet ground, shallow water, lakeshore driftlines, marsh edge. Eaglenest creek. Borrow Pit. Huddlestone. (WIN, WINDM)	Spike-rush
<i>Scirpus acutus</i> Muhl. (<i>S. lacustris</i> L. ssp. <i>glaucus</i> auct.) Native. Perennial. Widespread, abundant. Lakeshore, wet ground, marsh shores, forms islands. Portage Diversion. Blind Channel, Borrow Pits, Cadham Bay, Tin Town. (WIN, WINDM, MMMN)	Hard-stem Bulrush
<i>Scirpus atrovirens</i> Willd. Native. Perennial. Huddlestone (junction of Twp. 14 and 13 with PTH 240), east of old railroad, roadside ditches. (WIN, WINDM)	Bulrush
<i>Scirpus cespitosus</i> L. Native. Perennial. Rare. (WIN, WINDM)	Bulrush
<i>Scirpus maritimus</i> L. (<i>S. maritimus</i> L. var. <i>paludosus</i> (A.Nels.) Kuk.) Native. Perennial. Widespread, frequent. Lakeshore, marsh, wet ground, roadsides. Portage Diversion. Borrow Pits. (WIN, WINDM, MMMN)	Bulrush
<i>Scirpus microcarpus</i> Presl Native. Perennial. Local. Marsh shores. (WIN, WINDM)	Bulrush

- Scirpus pungens* Vahl. (*S. americanus* Pers. ssp. *americanus* var. *longispicatus* Britt.) Bulrush
Native. Perennial. Widespread, abundant. Lakeshore, roadside ditches, Portage Creek, St. Ambroise. (WIN, WINDM)
- Scirpus rufus* (Huds.) Schrad. var. *neogaea* Fern. Bulrush
Native. Perennial. Rare. Delta. (WIN, WINDM)
- Scirpus tabernaemontani* Gmel. (*S. validus* Vahl., *S. lacustris* L. ssp. *validus* (Vahl) Koyama, *S. lacustris* L. ssp. *glauca* (Sm.) Hartm.) Soft-stem Bulrush
Native. Perennial. Widespread. Frequent on sandy lakeshore and marsh shorelines. Abundant in north end of Portage Diversion. (WIN, WINDM)
- ELAEAGNACEAE OLEASTER FAMILY
- Elaeagnus commutata* Bernh. ex Rydb. Silverberry
Native. Perennial. Local. South of Huddlestone. (WIN, WINDM)
- EQUISETACEAE HORSETAIL FAMILY
- Equisetum arvense* L. Common horsetail
Native. Perennial. Marsh, roadsides, meadows near Oxbow Wood and Portage Creek. (WIN, WINDM)
- Equisetum fluviatile* L. Water-horsetail
Native. Perennial. West side, Portage Creek. (WIN)
- Equisetum laevigatum* A.Br. Smooth scouring-rush
Native. Perennial. Huddlestone, abandoned railroad. (WIN, WINDM)
- EUPHORBIACEAE SPURGE FAMILY
- Chamaesyce glyptosperma* (Engelm.) Small (*Euphorbia glyptosperma* Engelm.) Spurge
Native. Annual. Widespread, frequent. Dry, open areas, Huddlestone abandoned railroad prairie. (WIN, WINDM)
- Euphorbia esula* L. Leafy spurge
European. Perennial. Local. Around the University Field Station. (WIN, WINDM)
- FABACEAE (=Leguminosae) PEA FAMILY
- Amorpha nana* Nutt. Fragrant false indigo
Native. Perennial. Local. Lake Francis. (WIN)
- Amphicarpa bracteata* (L.) Fern. Hog-peanut
Native. Perennial. Widespread. Forested ridge, Oxbow Wood. South of Cadham Bay. (WIN, WINDM)
- Astragalus adsurgens* Pallas var. *robustior* Hook. (same in Scoggan, but *A. striatus* Nutt. in herbaria) Milk-vetch
Native. Perennial. Local. Edge of woods. Roadside, University Field Station. Oxbow Wood. (WIN, WINDM)
- Astragalus agrestis* Dougl. ex G. Don (same in Scoggan, but *A. goniatus* Nutt. in herbaria) Milk-vetch
Native. Perennial. Local. Prairie and marshy areas, exposed sandy areas. (WIN, WINDM)
- Astragalus bisulcatus* (Hook.) Gray Milk-vetch
Native. Perennial. Local. Prairie, Portage Creek and St. Ambroise, lakeshore. (WIN)
- Astragalus canadensis* L. Milk-vetch
Native. Perennial. Widespread, occasional. Wet meadow, forested ridge, roadside, prairie meadows, edge of marsh, St. Ambroise (WIN, WINDM)
- Dalea candida* Willd. (*Petalostemum candidum* (Willd.) Michx.) White prairie-clover
Native. Perennial. Local, occasional. Dry prairie, St. Ambroise. (WIN, WINDM)
- Dalea purpurea* Vent. (*Petalostemum purpureum* (Vent.) Rydb.) Purple prairie-clover
Native. Perennial. Local, widespread. Prairie on forested ridge. East of Oxbow Wood. Huddlestone railroad prairie. St. Ambroise. Woodlands Community Pasture. (WIN, WINDM)

<i>Glycyrrhiza lepidota</i> Pursh	Wild licorice
Native. Perennial. Widespread, occasional. Prairie, St. Ambroise. (WIN)	
<i>Lathyrus japonicus</i> Willd. var. <i>maritimus</i> (L.) Kartesz & Gandhi	Beach-pea
Native. Perennial. Local, abundant along lakeshore, driftlines, dunes. Exposed sandy soil. (WIN, WINDM, MMMN)	
<i>Lathyrus ochroleucus</i> Hook.	Vetchling
Native. Perennial. Widespread, frequent. Forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Lathyrus palustris</i> L.	Vetchling
Native. Perennial. Widespread, occasional. Forested ridge. Oxbow Wood. (WIN, WINDM)	
<i>Lathyrus venosus</i> Muhl. ex Willd.	Vetchling
Native. Perennial. Widespread, occasional. Forested ridge. Sandy beach, south shore of Lake Manitoba. (WIN, MMMN)	
<i>Lotus corniculatus</i> L.	Bird's foot-trefoil
Eurasian. Perennial. Disturbed areas, University Field Station. (WIN, WINDM)	
<i>Medicago lupulina</i> L.	Black medick
European. Annual. Widespread. Forested ridge, roadsides. Portage Diversion dike. Disturbed sites. (WIN, WINDM)	
<i>Medicago sativa</i> L.	Alfalfa
Eurasian. Perennial. Widespread. Forested ridge. Portage Diversion dike. (WIN, WINDM, MMMN)	
<i>Melilotus alba</i> Medicus	White melilot
European. Annual-biennial. Widespread occasional. Clearings in forested ridge. (WIN, WINDM)	
<i>Melilotus officinalis</i> (L.) Pallas	Yellow sweet clover
European. Annual-biennial. Widespread, frequent. Prairie, waste places, roadsides. (WIN, WINDM)	
<i>Oxytropis campestris</i> (L.) DC.	Stemless locoweed
Native. Annual. Forested ridge. Bell Lodge roadside. (WIN, WINDM)	
<i>Oxytropis campestris</i> (L.) DC. var. <i>dispar</i> (Nels.) Barneby	Stemless locoweed
Native. Annual. Forested ridge. Woodlands Community Pasture. (WIN)	
<i>Pedimelum argophyllum</i> (Pursh) J.Grimes (<i>Psoralea argophylla</i> Pursh)	Scurf-pea
Native. Perennial. Local. Prairie on forested ridge. Huddleston railroad prairie. (WIN, WINDM)	
<i>Pedimelum esculentum</i> (Pursh) Rydb. (<i>Psoralea esculenta</i> Nutt.)	Breadroot
Native. Perennial. Local. Lake Francis WMA. (WIN)	
<i>Trifolium pratense</i> L.	Red clover
European. Annual-biennial. Widespread. Road clearings. Woodlands Community Pasture. (WIN, WINDM)	
<i>Trifolium repens</i> L.	White clover
European. Perennial. Moist sandy soil, forested ridge, roadsides, lakeshore driftlines. (WIN, WINDM)	
<i>Vicia americana</i> Muhl. ex Willd.	Vetch
Native. Perennial. Widespread. Forested ridge, roadside, sand, dry prairie, forested ridge. South of Cadham Bay. (WIN, WINDM)	
<i>Vicia cracca</i> L.	Tufted vetch
European. Annual or perennial. Local. Oxbow Wood roadside. (WINDM)	
FAGACEAE	BEECH FAMILY
<i>Quercus macrocarpa</i> Michx.	Bur oak
Native. Perennial. Widespread, frequent. Forested ridge, Oxbow Wood. (WIN, WINDM)	

FUMARIACEAE	FUMITORY FAMILY
<i>Corydalis aurea</i> Willd. Native. Annual-biennial. Local, occasional. Forested ridge, Oxbow Wood. (WIN, WINDM)	Golden corydalis
<i>Corydalis sempervirens</i> (L.) Pers. Native. Annual-biennial. (WINDM)	Pale corydalis
GENTIANACEAE	GENTIAN FAMILY
<i>Gentiana affinis</i> Griseb. Native. Perennial. Prairie, Woodlands Community Pasture. (WIN)	Gentian
<i>Gentiana andrewsii</i> Griseb. Native. Perennial. Local, occasional. PTH 240 roadside. St. Ambrose. (WIN)	Closed gentian
<i>Gentianella amarella</i> (L.) Boerner ssp. <i>acuta</i> (Michx.) Raf. (<i>G. amarella</i> (L.) Borner) Annual of perennial. Roadside ditch. Delta Beach. (MMMN)	Felwort
<i>Gentianopsis crinita</i> (Froel.) Ma (<i>Gentianella crinita</i> (Froel.) Don) Native, Annual or biennial. Delta Beach. (MMMN)	Fringed gentian
GERANIACEAE	GERANIUM FAMILY
<i>Erodium cicutarium</i> (L.) L'Her. ex Ait. European. Annual-biennial. Local, rare. Shaded roadside. (WIN)	Pin-clover
GRAMINEAE (see Poaceae)	
HALORAGACEAE	WATER-MILFOIL FAMILY
<i>Myriophyllum sibiricum</i> Komarov (<i>M. spicatum</i> L. var. <i>exalbescens</i> (Fern.) Jeps.) Native. Perennial. Widespread. Aquatic, open water, marsh shores, Blind Channel, Portage Diversion. Cadham Bay. (WIN, WINDM, MMMN)	Water-milfoil
HIPPURIDACEAE	MARE'S-TAIL FAMILY
<i>Hippuris vulgaris</i> L. Native. Perennial. Sloughs. Lakeshore. In marsh south of Huddlestone. (WIN, WINDM)	Mare's-tail
IRIDACEAE	IRIS FAMILY
<i>Sisyrinchium montanum</i> Greene Native. Perennial. Prairie and meadows, near Oakland. Woodlands Community Pasture. (WIN, MMMN)	Blue-eyed grass
JUNCACEAE	RUSH FAMILY
<i>Juncus alpinus</i> Vill. Native. Perennial. Lakeshore driftline. (WIN, WINDM)	Rush
<i>Juncus balticus</i> Willd. var. <i>littoralis</i> Engelm. Native. Perennial. Widespread. Lakeshore. (WIN, WINDM)	Rush
<i>Juncus bufonius</i> L. Native. Annual. Widespread, frequent. Low, wet ground. (WIN, WINDM)	Toad-rush
<i>Juncus dudleyi</i> Wieg. Native. Perennial. St. Ambrose. (WIN)	Rush
<i>Juncus nodosus</i> L. Native. Perennial. Widespread, occasional. Sandy lakeshore. (WIN, WINDM)	Rush
<i>Juncus torreyi</i> Coville Native. Perennial. Widespread. Lakeshore in moist sand. (WIN, WINDM)	Rush

JUNCAGINACEAE

ARROW-GRASS FAMILY

Triglochin maritima L.

Arrow-grass

Native. Perennial. Widespread. Saline marshy meadows, lakeshore marsh, Borrow Pits. North end of Portage Diversion. (WIN, WINDM, MMMN)

LABIATAE

MINT FAMILY

Agastache foeniculum (Pursh) Kuntze

Blue giant hyssop

Native. Perennial. Local. Dry thickets near Oxbow Wood, St. Ambrose. Huddleston railroad prairie. Poplar Pools. (WIN, WINDM)

Dracocephalum parviflorum Nutt. (*Moldavica parviflora* (Nutt.) Britt.)

Dragonhead

Native. Annual-biennial. Roadside ditch. (WIN)

Galeopsis bifida Boenn. (*G. tetrahit* L. var. *bifida* (Boenn.) Lej. & Court. f. *bifida*)

Hemp-nettle

European. Annual. Local. Delta Beach. (WIN, WINDM)

Glechoma hederacea L.

Run-away-robin

European. Perennial. Forested ridge, open woodlands. (WIN, WINDM)

Leonurus cardiaca L.

Common motherwort

European. Perennial. Widespread, occasional. Roadsides, waste grounds, south of Cadham Bay in oak bluff. (WIN, WINDM)

Lycopus americanus Muhl. ex Bart.

Water-horehound

Native. Perennial. Local. Lakeshore, wet meadows. (WIN)

Lycopus asper Greene

Water-horehound

Native. Perennial. Widespread. Forested ridge, marsh shores, lakeshore, Portage Diversion, stabilized sand dunes. (WIN, WINDM)

Mentha canadensis L. (*M. arvensis* L. var. *villosa* (Benth.) Stewart)

Common mint

Native. Perennial. Widespread. Abundant. Forested ridge roadside, wet meadows, marsh and lakeshore, Portage Diversion, Borrow Pits, Blind Channel, west of Cooks Creek. (WIN)

Monarda fistulosa L.

Wild bergamot

Native. Perennial. Open prairie. Along Huddleston railroad. Tin Town. Portage Community Pasture. (WIN, WINDM, MMMN)

Nepeta cataria L.

Catnip

European. Perennial. Local. Along roadside, Oxbow Wood. (WIN, WINDM)

Physostegia virginiana (L.) Benth ssp. *virginiana* (*Dracocephalum formosius* (Lunell) Rydb.)

False dragonhead

Native. Perennial. Local. Marsh and wet thickets. (WIN, WINDM)

Scutellaria galericulata L. (*S. epilobiifolia* Hamilton)

Common skullcap

Native. Perennial. Widespread, occasional. Lakeshore, wet meadows, depressions in the forested ridge. Blind Channel. (WIN, WINDM)

Scutellaria lateriflora L.

Mad-dog skullcap

Native. Perennial. Sandy lakeshore, forested ridge. (WIN)

Stachys palustris L. ssp. *pilosa* (Nutt.) Epling (*S. palustris* L. var. *pilosa* (Nutt.) Fern.)

Woundwort

Native. Perennial. Widespread, frequent. Forested ridge. Chimney Marsh. Meadow at edge of Oxbow Wood, lakeshore marsh shores, roadsides. Portage Creek. (WIN, WINDM, MMMN)

Teucrium canadense L. var. *occidentale* (Gray) McClintock & Epling (*T. occidentale* Gray)

Germander

Native. Perennial. Widespread, occasional. Lakeshore, marsh shores, often under *Phragmites*, roadsides. Oxbow Wood. (WIN, WINDM)

LEMNACEAE	DUCKWEED FAMILY
<i>Lemna minor</i> L.	Duckweed
Native. Annual. Widespread, abundant. Marsh. Blind Channel, ponds, drainage ditches. (WIN, WINDM)	
<i>Lemna trisulca</i> L.	Star-duckweed
Native. Annual. Widespread, abundant. Marsh. Blind Channel, ponds, creeks. (WIN, WINDM, MMMN)	
LENTIBULARIACEAE	BLADDERWORT FAMILY
<i>Utricularia macrorhiza</i> LeConte (<i>U. vulgaris</i> L.)	Common bladderwort
Native. Perennial. Widespread, abundant. Submerged in shallow marshes, Blind Channel. Cadham Bay. (WIN, WINDM)	
LILIACEAE	LILY FAMILY
<i>Allium stellatum</i> Nutt. ex Ker-Gawl.	Prairie onion
Native. Perennial. Local, occasional. PTH 240 roadside, prairie meadow, St. Ambroise. (WIN, WINDM)	
<i>Hypoxis hirsuta</i> (L.) Coville	Yellow stargrass
Native. Perennial. Local among grasses in prairie, Woodlands Community Pasture, Lake Francis WMA. 4.5 km east of Portage Creek. (MMMN)	
<i>Lilium philadelphicum</i> L. var. <i>andinum</i> (Nutt.) Ker.	Wood-lily
Native. Perennial. Widespread, frequent. Pasture, upland meadows, dry roadsides, Lake Francis WMA. (WIN, WINDM)	
<i>Maianthemum canadense</i> Desf.	Wild lily-of-the-valley
Native. Perennial. Local. Oxbow Wood. Oakland. (WIN, WINDM)	
<i>Maianthemum stellatum</i> (L.) Link (<i>Smilacina stellata</i> (L.) Desf.)	False Solomon's-seal
Native. Perennial. Widespread, abundant. Along upper reaches of beach, forested ridge. Oxbow Wood. (WIN, WINDM, MMMN)	
<i>Polygonatum biflorum</i> (Walt.) Ell. (<i>P. canaliculatum</i> auct. non (Muhl.) Pursh in herbaria)	Solomon's-seal
Native. Perennial. Local, occasional. Forested ridge, marsh edge. Bluff south of Cadham Bay. Oxbow Wood. (WIN, WINDM)	
<i>Smilax lasioneura</i> Hook. (<i>S. herbacea</i> L. var. <i>lasioneura</i> (Hook. A.DC.)	Carrion-flower
Native. Perennial. Widespread. Forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Zigadenus elegans</i> Pursh	White camass
Native. Perennial, widespread. Frequent. Prairie and roadsides, St. Ambroise and Oakland. (WIN)	
LINACEAE	FLAX FAMILY
<i>Linum lewisii</i> Pursh var. <i>lewisii</i> (<i>L. perenne</i> L. var. <i>lewisii</i> (Pursh) Eat.&Write)	Perennial flax
Native. Perennial. Local. Lake Francis WMA. (WIN)	
<i>Linum sulcatum</i> Riddell	Yellow flax
Native. Annual. Local. Woodlands Community Pasture. (WIN)	
<i>Linum usitatissimum</i> L.	Common flax
European. Annual. Local. University Field Station, near Portage Diversion road. (WIN, WINDM)	
LYTHRACEAE	LOOSESTRIFE FAMILY
<i>Lythrum salicaria</i> L.	Purple loosestrife
European. Perennial. Becoming widespread along marsh shores and in ditches. (WIN, WINDM)	
MALVACEAE	MALLOW FAMILY
<i>Malva rotundifolia</i> L.	Mallow
European. Annual or biennial. In dry roadside gravel on side of Portage Diversion. (WINDM)	

NYCTAGINACEAE	FOUR-O'CLOCK FAMILY
<i>Mirabilis nyctaginea</i> (Michx.) MacM.	Four-o'clock
Native. Perennial. Local. Forested ridge, sandy sites, lakeshore driftlines. West side of Diversion. (WIN, WINDM, MMMN)	
OLEACEAE	OLIVE FAMILY
<i>Fraxinus pennsylvanica</i> Marsh.	Red ash
Native. Perennial. Moist woods, forested ridge. Bell Lodge. (WIN, WINDM)	
ONAGRACEAE	EVENING-PRIMROSE FAMILY
<i>Circaea alpina</i> L.	Small enchanter's nightshade
Native. Perennial. Frequent. Oxbow Wood and near Inkster Farm. (WINDM)	
<i>Circaea lutetiana</i> L. ssp. <i>canadensis</i> (L.) Aschers. & Magnus (<i>C. quadrisulcata</i> (Maxim.) Franch. & Sav.)	Enchanter's nightshade
Native. Perennial. Locally frequent. Shady parts of Oxbow Wood. (WIN, WINDM)	
<i>Epilobium angustifolium</i> L.	Fireweed
Native. Perennial. Widespread. Forested ridge. Roadsides in fire cleared areas and exposed areas and shoreline driftlines. (WIN, WINDM)	
<i>Epilobium ciliatum</i> Raf. (<i>E. glandulosum</i> Lehm. var. <i>adenocaulon</i> (Hausk.) Fern.)	Willow-herb
Native. Perennial. Widespread, frequent. Edge of forested ridge. Wet ground. Portage Creek, south of Huddlestone. (WIN, WINDM)	
<i>Oenothera biennis</i> L.	Common evening-primrose
Native. Perennial. Widespread. Sandy soil, forested ridge, Woodlands Community Pasture. (WIN, WINDM)	
<i>Oenothera nuttallii</i> Sweet	White evening-primrose
Native. Perennial. Local. Delta Beach. Forested ridge roadsides. (WIN, WINDM)	
OPHIOGLOSSACEAE	ADDER'S-TONGUE FAMILY
<i>Botrychium virginianum</i> (L.) Sw.	Rattlesnake-fern
Native. Perennial. Local. Oxbow Wood. (WIN, WINDM)	
ORCHIDACEAE	ORCHID FAMILY
<i>Corallorhiza trifida</i> Chat.	Pale coral-root
Native. Perennial. Local. Rare. Oakland woods. (WIN)	
<i>Cypripedium calceolus</i> Salisb. (<i>C. calceolus</i> L. var. <i>parviflorum</i> (Salisb.) Fern. and <i>C. calceolus</i> L. var. <i>pubescens</i> (Willd.) Correll)	Yellow lady's-slipper
Native. Perennial. Local. South-east of Delta Beach. St. Ambroise. Lake Francis WMA. (WIN)	
<i>Coeloglossum viride</i> (L.) Hartman var. <i>virescens</i> (Muhl. ex Willd.) Luer (<i>Habenaria viridis</i> (L.) R. Br. ex Ait.f.)	Frog-orchid
Native. Perennial. Local. Portage Community Pasture. (WIN, WINDM)	
OXALIDACEAE	WOOD-SORREL FAMILY
<i>Oxalis stricta</i> L.	Wood-sorrel
Native. Annual. Roadsides. Huddlestone. (WIN, WINDM)	
PHRYMACEAE	LOPSEED FAMILY
<i>Phryma leptostachya</i> L.	Lopseed
Native. Perennial. Occasional. Forest understorey, Oxbow Wood. (WIN, WINDM)	
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Plantago eriopoda</i> Torr.	Plantain
Native. Perennial. Local. Lake Francis WMA. (WIN)	

Plantago major L. Common plantain
Eurasian. Annual-perennial. Widespread, frequent. Roadsides, sandy soil, meadows. (WIN, WINDM, MMMN)

POACEAE (=Gramineae)

GRASS FAMILY

Agrostis gigantea Roth (*A. stolonifera* L. var. *major* (Gaud.) Farw.) Redtop
Eurasian. Perennial. Widespread, abundant. Forested ridge near Chimney Marsh. (WIN, WINDM)

Agrostis stolonifera L. (*A. stolonifera* L. var. *palustris* (Huds.) Farw.) Redtop
Native. Perennial. Local. Lakeshore. (WIN)

Alopecurus aequalis Sobol. Foxtail
Native. Perennial. Prairie, creek bed. Marsh, east of Portage Diversion. South of Huddlestone railway. 2 miles (3.2 km) east of S18-T14-R6 marsh, in 0.5 feet (15 cm) of water. (WIN, WINDM)

Andropogon gerardii Vitman Big bluestem
Native. Perennial. Widespread. Along roadsides in prairie. South of Huddlestone railroad. Woodlands Community Pasture. (WIN, WINDM)

Avena sativa L. Oat
Eurasian. Annual. Woods. (WINDM)

Beckmannia syzigachne (Steud.) Fern. Slough-grass
Native. Annual. Wet depression in forested ridge. North end of Portage Diversion. University Field Station, east of Diversion. (WIN, WINDM)

Bromus inermis Leyss. ssp. *inermis* Awnless brome
Eurasian. Perennial. Widespread. Abundant. Meadows. Sandy roadside, forested ridge. Eaglenest Creek. (WIN, WINDM)

Bromus kalmii Gray (*B. purgans* L.) Canada brome
Native. Perennial. Forest edge. (WINDM)

Calamagrostis canadensis (Michx.) Beauv. Marsh reed grass
Native. Perennial. Sandy lakeshore. (WINDM)

Calamagrostis montanensis Scribn. ex Vasey Plains reed grass
Native. Perennial. Meadow at edge of woods. (WINDM)

Calamagrostis stricta (Timm) Koel. ssp. *inexpansa* (Gray) Greene (*C. inexpansa* Gray) Reed bent-grass
Native. Perennial. Widespread. Meadows, frequent on wet margins of the forested ridge. (WIN, WINDM)

Cinna latifolia (Trev. ex Goepp.) Griseb. Slender wood grass
Native. Perennial. Edge of Oxbow Wood near cultivated field. (WINDM)

Dichanthelium leibergii (Vasey) Freckmann (*Panicum leibergii* (Vasey) Scribn.)
Native. Perennial. Lake Francis WMA. (WIN)

Distichlis spicata (L.) Greene (*D. stricta* (Torr.) Rydb.) Alkali-grass
Native. Perennial. Sides of cart track, Portage Creek. (WIN)

Echinochloa crus-galli (L.) Beauv. Barnyard-grass
Eurasian. Annual. Widespread. Marsh shores, lakeshore driftlines. (WIN, WINDM)

Elyhordeum x macounii (Vasey) Bark. & Dewey [= *Elymus trachycaulus* (Link) Gould ex Shinners x *Hordeum jubatum* L.] (*Elymus macounii* Vasey in Scoggan) Wild rye
Native. Perennial. Local. Sandy lakeshore, Oxbow Wood, meadow. (WIN, WINDM)

Elymus canadensis L. var. *canadensis* Wild rye
Native. Perennial. Widespread, occasional. Lakeshore, roadsides, sandy beach, meadows near the edge of woods, forested ridge. (WIN, WINDM)

Elymus hystrix L. Bottle-brush grass
Native. Annual or perennial. Oxbow Wood. (WIN, WINDM)

- Elymus lanceolatus* (Scribn.&J.G.Sm.) Gould ssp. *lanceolatus* (*Agropyron dasystachyum* (Hook.) Scribn.)
Couch-grass
Native. Perennial. Local. Sandy forested ridge margin. (WIN, WINDM)
- Elymus trachycaulus* (Link) Gould ex Shinners ssp. *subsecundus* (Link) A.&D.Love (*Agropyron trachycaulum* (Link) Malte var. *glaucum* (Pease & Moore) Malte and *Agropyron trachycaulum* var. *laterale* (Cassidy) Malte)
Couch-grass
Native. Perennial. Forested ridge. (WINDM)
- Elymus trachycaulus* (Link) Gould ex Shinners ssp. *trachycaulus* (*Agropyron trachycaulum* (Link) Malte ex H.F.Lewis)
Couch-grass
Native. Perennial. Locally common. Bell Estate, Delta Waterfowl Station, forested ridge. (WIN)
- Elymus virginicus* L. (same in Scoggan, but *E. australis* Scribn.& Ball in the herbarium) Virginia wild rye
Native. Perennial Sandy lakeshore. (WINDM)
- Elytrigia repens* (L.) Desv. ex B.D.Jackson var. *repens* (*Agropyron repens* (L.) Beauv.)
Couch-grass
Native. Perennial. Widespread. Disturbed areas, dykes, Delta Waterfowl Station, Centre Marsh. Forested ridge. Oxbow Wood. University Field Station, near Borrow Pit. (WIN, WINDM)
- Glyceria grandis* Wats. var. *grandis*
Reed-meadow grass
Native. Perennial. Wet meadows, Huddlestone. (WIN, WINDM)
- Helictotrichon hookeri* (Scribn.) Henr.
Hooker's oat grass
Native. Perennial. Lake Francis WMA. (WIN)
- Hierochloa odorata* (L.) Beauv.
Sweet grass
Native. Perennial. Widespread. Abundant in Portage Diversion. Also in meadows, woody area, marsh, roadsides. Oxbow Wood. (WIN, WINDM, MMMN)
- Hordeum jubatum* L.
Squirrel-tail grass
Native. Annual-biennial. Widespread, abundant. Sandy roadside, upland meadow, disturbed saline environment. Borrow Pit. (WIN, WINDM)
- Koeleria macrantha* (Ledeb.) Schultes (*K. cristata* auct. p.p. non Pers.)
June-grass
Native. Perennial. Widespread, frequent. Meadows south of Cadham Bay, prairie, St. Ambrose. (WIN, WINDM)
- Leymus innovatus* (Beal) Pilger (*Elymus innovatus* Beal var. *innovatus* f. *innovatus*)
Wild rye
Native. Perennial. Moist woods, sandy lakeshore. Roadside to Flee Island. (WIN, WINDM)
- Lolium perenne* L.
Perennial rye-grass
Eurasian. Perennial. Local. Roadsides, Delta Waterfowl Station. (WIN, WINDM)
- Muhlenbergia mexicana* (L.) Trin.
Wood muhly
Native. Perennial. Forested ridge. (WINDM)
- Muhlenbergia racemosa* (Michx.) BSP.
Scratchgrass
Native. Perennial. Local. Meadows, prairies. Forested ridge. (WIN, WINDM, MMMN)
- Oryzopsis asperifolia* Michx.
Mountain-rice
Native. Perennial. Widespread. Forested ridge. Oxbow Wood. (WIN, WINDM)
- Panicum capillare* L.
Old-witch grass
Native. Annual. Sand dunes at Clandeboye. (WIN)
- Pascopyrum smithii* (Rydb.) A.Löve (*Agropyron smithii* Rydb.)
Couch-grass
Native. Perennial. Sandy roadsides, Delta Waterfowl Station, Borrow Pits, University Field Station. (WIN, WINDM)
- Phalaris arundinacea* L.
Reed-canary-grass
Native. Perennial. Widespread. Sandy roadside, Oxbow meadows. Community Pasture. (WIN, WINDM)

- Phalaris canariensis* L. Canary-grass
North Africa and the Canary Islands. Annual. Open, moist fields, University Field Station. (WIN, WINDM)
- Phleum pratense* L. Common timothy
Eurasian. Perennial. Widespread. Meadow, prairies, Borrow Pit. Poplar Pools. (WIN, WINDM)
- Phragmites australis* (Cav.) Trin. ex Steud Giant reed
Native. Perennial. Widespread, abundant. Throughout the marsh. Borrow Pits, lakeshore. (WIN, WINDM)
- Poa annua* L. Annual bluegrass
Eurasian. Perennial. Widespread. Dry ground adjacent to marsh, along road edges. (WIN, WINDM)
- Poa compressa* L. Wiregrass
Eurasian. Perennial. Local. Forested ridge near Bell Lodge. (WIN, WINDM)
- Poa palustris* L. Fowl meadow-grass
Native. Perennial. Local. Wet meadows. (WIN, WINDM)
- Poa pratensis* L. Kentucky bluegrass
Native. Perennial. Widespread, frequent. Roadsides, dry fields. (WIN, WINDM)
- Polypogon monspeliensis* (L.) Desf. Beardgrass
European. Annual. Edge of lawns, roadsides, ditches. (WIN, WINDM, MMMN)
- Puccinellia distans* (Jacq.) Parl. Alkali-grass
Eurasian. Perennial. Meadow near Oxbow Wood. (WINDM)
- Puccinellia nuttalliana* (Schultes) Hitchc. Alkali-grass
Native. Perennial. Widespread, abundant. Wet meadows, Borrow Pits, saline flats, Tin Town, Flee Island.
(WIN, WINDM)
- Schizachyrium scoparium* (Michx.) Nash (*Andropogon scoparius* Michx.) Broom-beardgrass
Native. Perennial. Widespread in prairie. Pylon Road, south of Slack's Bluff. East of Huddlestone railroad.
(WIN, WINDM)
- Scolochloa festucacea* (Willd.) Link Sprangle-top
Native. Perennial. Widespread. In standing water to 15 cm in wet meadows throughout marsh, Borrow Pits.
(WIN, WINDM, MMMN)
- Setaria viridis* (L.) Beauv. Green foxtail
Eurasian. Annual. Widespread. Prairies south of Huddlestone. Roadside, University Field Station. (WIN, WINDM, MMMN)
- Spartina pectinata* Link Fresh-water cord-grass
Native. Perennial. Widespread. Wet meadows, sandy bank, roadsides. Borrow Pit. Edge of Portage Diversion.
(WIN, WINDM)
- Sphenopholis intermedia* (Rydb.) Rydb. Wedge-grass
Native. Perennial. University Field Station, meadows. Delta Beach. (WIN)
- Sporobolus cryptandrus* (Torr.) Gray Sand-drop-seed
Native. Perennial. Local. Prairie, sandy beaches and dunes near Clandeboye Bay. Huddlestone. (WIN, WINDM)
- Sporobolus heterolepis* (Gray) Gray Prairie drop-seed
Native. Perennial. Prairie, Poplar Pools. (MMMN)
- Sorghastrum nutans* (L.) Nash Indian grass
Native. Perennial. Local, occasional. Prairie, Woodlands Community Pasture, Lake Francis. (WIN)
- Stipa comata* Trin. & Rupr. Needle and thread, Speargrass
Native. Perennial. Grassy ditch, Portage Creek. (MMMN)

POLEMONIACEAE	POLEMONIUM FAMILY
<i>Collomia linearis</i> Nutt.	Collomia
Native. Annual. Local. Sandy soils, St. Ambroise. (WIN)	
POLYGALACEAE	MILKWORT FAMILY
<i>Polygala senega</i> L.	Seneca-snakeroot
Native. Perennial. Community Pasture. (WINDM)	
<i>Polygala verticillata</i> L. var. <i>isocycla</i> Fern.	Common pasture milkwort
Native. Annual. Local. Roadside ditch, Woodlands Community Pasture. (WIN, MMMN)	
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Polygonum achoreum</i> Blake	Knotweed
Native. Annual. Lakeshore driftlines, disturbed sites. (WIN, WINDM)	
<i>Polygonum amphibium</i> L. var. <i>emersum</i> Michx. (<i>P. coccineum</i> Muhl.)	Water-smartweed
Native. Perennial. Widespread, frequent. Roadsides, forested ridge, lakeshore, Portage Diversion. Delta Waterfowl Station. (WIN, WINDM)	
<i>Polygonum amphibium</i> L. var. <i>stipulaceum</i> Coleman	Water-smartweed
Native. Perennial. Widespread. Wet ground and marsh shores. Ditches near University Field Station, east of Delta Waterfowl Station. (WIN, WINDM, MMMN)	
<i>Polygonum aviculare</i> L.	Prostrate knotweed
European. Annual. Widespread. Lakeshore driftlines, forested ridge roadside. (WIN, WINDM)	
<i>Polygonum convolvulus</i> L.	Black bindweed
European. Annual. Local, occasional. Forested ridge, roadsides. (WIN, WINDM)	
<i>Polygonum lapathifolium</i> L. (<i>P. scabrum</i> Moench. in herbarium)	Willow-weed
Native. Annual. Widespread. Frequent. Wooded depressions in forested ridge, Borrow pit, Diversion (WIN, WINDM, MMMN)	
<i>Polygonum persicaria</i> L.	Lady's-thumb
European. Annual. Local, occasional. Forested ridge, Chimney Marsh, lakeshore driftlines. (WIN)	
<i>Polygonum punctatum</i> Ell. var. <i>confertiflorum</i> (Meisn.) Fassett	Water-smartweed
Native. Annual-perennial. Widespread. Frequent. Marsh, wet or shallow water. Forested ridge. (WIN, WINDM)	
<i>Polygonum ramosissimum</i> Michx.	Bushy knotweed
Native. Widespread. Frequent. Lakeshores, moist ground in forested ridge margins. Borrow Pit. (WIN, WINDM)	
<i>Polygonum scandens</i> L.	Climbing false buckwheat
Native. Perennial. Local. Occasional. Lakeshore, damp thickets, Chimney Marsh. (WIN)	
<i>Rumex aquaticus</i> L. var. <i>fenestratus</i> (Greene) Dorn (<i>R. occidentalis</i> Wats.)	Western dock
Native. Perennial. Local. St. Ambroise. (WIN)	
<i>Rumex crispus</i> L.	Curly-leaf
European. Perennial. Forested ridge, roadsides. (WIN, WINDM)	
<i>Rumex maritimus</i> L. (<i>R. maritimus</i> L. var. <i>fuiginus</i> (Phil.) Dusen.)	Golden dock
Native. Annual-biennial. Widespread. Marsh shores, abundant when water levels are falling. Borrow pit, Portage Diversion. (WIN, WINDM)	
<i>Rumex salicifolius</i> Weinm. var. <i>mexicanus</i> (Meisn.) C.L.Hitchc. (<i>R. salicifolius</i> Weinm. ssp. <i>triangulivalvis</i> Danser)	Dock
Native. Perennial. Wet meadows, forested ridge. (WIN, WINDM)	

POLYPODIACEAE	FERN FAMILY
<i>Dryopteris carthusiana</i> (Vill.) H.P.Fuchs (<i>D. austriaca</i> (Jacq.) Woyнар var. <i>spinulosa</i> (Muell.) Fiori)	Spinulose shield-fern
Native. Perennial. Local. Rare. Forested ridge. (WIN)	
<i>Matteuccia struthiopteris</i> (L.) Todaro	Ostrich-fern
Native. Perennial. Local. Occasional. Oxbow Wood. (WIN, WINDM)	
<i>Thelypteris palustris</i> (Salisb.) Schott var. <i>pubescens</i> (Lawson) Fern.	Marsh-fern
Native. Perennial. Local, occasional in forested ridge depressions near Chimney Marsh. (WIN, WINDM)	
PORTULACACEAE	PURSLANE FAMILY
<i>Portulaca oleracea</i> L.	Common portulaca
European. Annual. Widespread, frequent. Forested ridge and disturbed, sandy sites. (WIN, WINDM)	
PRIMULACEAE	PRIMROSE FAMILY
<i>Androsace occidentalis</i> Pursh	Western pygmy-flower
Native. Annual. Borrow Pit, wet meadow, roadsides, sandy soil. (WIN, WINDM)	
<i>Glaux maritima</i> L.	Sea-milkwort
Native. Perennial. Widespread, frequent. Moist saline locations, Borrow Pit. Portage Creek. (WIN, WINDM, MMMN)	
<i>Lysimachia ciliata</i> L. (<i>Steironema ciliatum</i> (L.) Raf.)	Fringed loosestrife
Native. Perennial. Local, occasional. Edge of <i>Salix</i> scrub, forested ridge. (WIN)	
<i>Lysimachia thyrsoflora</i> L.	Tufted loosestrife
Native. Perennial. Moist places, Lake Francis. (WIN)	
PYROLACEAE	WINTERGREE FAMILY
<i>Pyrola asarifolia</i> Michx.	Wintergreen
Native. Perennial. Local. Oxbow Wood. Community Pasture. (WIN, WINDM)	
RANUNCULACEAE	CROWFOOT FAMILY
<i>Actaea rubra</i> (Ait.) Willd.	Red baneberry
Native. Perennial. Local, occasional. Oxbow Wood, west of Portage Creek, bluff south of Cadham Bay. (WIN, WINDM)	
<i>Anemone canadensis</i> L.	Canada anemone
Native. Perennial. Widespread. Forested ridge, meadow, prairie, Oxbow Wood, Huddlestone. (WIN, WINDM)	
<i>Anemone cylindrica</i> Gray	Long-headed anemone
Native. Perennial. Prairies, Huddlestone, St. Ambroise. (WIN, WINDM)	
<i>Aquilegia canadensis</i> L.	Wild columbine
Native. Perennial. Widespread, occasional. Oxbow Wood, Oakland, PTH 240 3 km south of Delta Beach. (WIN, WINDM)	
<i>Ranunculus abortivus</i> L.	Kidney-leaf buttercup
Native. Biennial. Forested ridge roadsides. (WIN, WINDM)	
<i>Ranunculus cymbalaria</i> Pursh	Seaside crowfoot
Native. Perennial. Widespread, locally abundant, marsh shores, Borrow Pits, Portage Diversion. Saline marsh, University Field Station. (WIN, WINDM, MMMN)	
<i>Ranunculus gmelinii</i> DC. var. <i>purshii</i> (Richards.) Hara (<i>R. gmelinii</i> DC. var. <i>hookeri</i> (Don) Benson)	Small yellow water-crowfoot
Native. Perennial. Local. Rare. Slough on south side of marsh, St. Ambroise. (WIN, WINDM)	

<i>Ranunculus longirostris</i> Godr. (<i>R. circinatus</i> auct. non Sibth., <i>R. subrigidus</i> Drew)	White water-crowfoot
Native. Aquatic perennial. Shallow water, ditches, Borrow pit. (WIN, WINDM)	
<i>Ranunculus macounii</i> Britt.	Buttercup
Native. Perennial. Local, occasional. Wet meadows, slough margins. Delta Beach, St. Ambroise. (WIN, WINDM)	
<i>Ranunculus pensylvanicus</i> L. f.	Bristly crowfoot
Native. Annual. Local. Wet, marshy areas. (WIN, WINDM)	
<i>Ranunculus sceleratus</i> L.	Cursed crowfoot
Native. Annual-perennial. Widespread, frequent. Lakeshores and throughout the marsh. Borrow Pit, Portage Diversion. (WIN, WINDM, MMMN)	
<i>Thalictrum dasycarpum</i> Fisch. & Lall.	Purple meadow-rue
Native. Perennial. Widespread. Clearings in forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Thalictrum venulosum</i> Trel.	Meadow-rue
Native. Perennial. Local. St. Ambroise. (WIN)	
ROSACEAE	ROSE FAMILY
<i>Agrimonia striata</i> Michx.	Agrimony
Native. Perennial. Local, occasional. Understorey in Oxbow Wood. (WIN, WINDM)	
<i>Amelanchier alnifolia</i> (Nutt.) Nutt. ex M.Roemer	Saskatoon-berry
Native. Perennial. Widespread, abundant. Forested ridge, Oxbow Wood, Inkster Farm road. (WIN, WINDM)	
<i>Argentina anserina</i> (L.) Rydb. (<i>Potentilla anserina</i> L.)	Silverweed
Native. Perennial. Widespread, frequent. Forested ridge roadside, shore driftlines, open waste ground. (WIN, WINDM, MMMN)	
<i>Crataegus chrysoarpa</i> Ashe. (<i>C. rotundifolia</i> Moench)	Hawthorn
Native. Perennial. Forested ridge, Oxbow Wood, bluff south of Cadham Bay. (WIN, MMMN)	
<i>Crataegus succulenta</i> Schrad. ex Link (includes both var. <i>macrantha</i> and var. <i>occidentalis</i> in Scoggan)	Hawthorn
Native. Perennial. Moist woods, Cherry Ridge, south of Cadham Bay. Forested ridge. (WIN, WINDM)	
<i>Fragaria virginiana</i> Dcne.	Strawberry
Native. Perennial. Widespread, forested ridge margins, Oxbow Wood. (WIN, WINDM)	
<i>Geum aleppicum</i> Jacq. (= <i>G. aleppicum</i> Jacq. var. <i>strictum</i> (Ait.) Fern.)	Avens
Native. Perennial. Local, occasional. Forested ridge, Portage Creek, Oxbow Wood. (WIN, WINDM)	
<i>Geum triflorum</i> Pursh	Purple avens
Native. Perennial. Prairie, Lake Francis WMA. (WIN, WINDM)	
<i>Pentaphylloides floribunda</i> (Pursh) A.Löve (<i>Potentilla fruticosa</i> L.)	Shrubby cinquefoil
Native. Perennial. Local. Woodlands Community Pasture. (WIN, WINDM)	
<i>Potentilla concinna</i> Richardson	Early cinquefoil
Native. Perennial. Gravel road, University Field Station. (MMMN)	
<i>Potentilla norvegica</i> L.	Cinquefoil
Native. Perennial. Frequent. Forested ridge roadside, disturbed sites, Oxbow Wood. (WIN, WINDM)	
<i>Potentilla paradoxa</i> Nutt.	Bushy cinquefoil
Native. Perennial. Local. Forested ridge. (WIN)	
<i>Prunus americana</i> Marsh.	American plum
Native. Perennial. Forested ridge, Oxbow Wood, Inkster Farm road. (WIN, WINDM)	

<i>Prunus virginiana</i> L.	Choke-cherry
Native. Perennial. Widespread. Roadsides, forested ridge, lake shore, Oxbow Wood, Inkster Farm road. (WIN, WINDM)	
<i>Rosa acicularis</i> Lindl.	Prickly rose
Native. Perennial. Roadsides, Oxbow Wood meadows, St. Ambroise. (WIN, WINDM)	
<i>Rosa arkansana</i> Porter	Low prairie rose
Native. Perennial. Meadow at forest edge, University Field Station. Along Huddlestone railroad. (WIN, WINDM)	
<i>Rosa blanda</i> Ait.	Smooth rose
Native. Perennial. Forested ridge margin, roadsides and prairie, Oxbow Wood. (WIN, WINDM)	
<i>Rosa x dulcissima</i> Lunell (= <i>R. blanda</i> x <i>R. woodsii</i>)	Rose
Native. Perennial. Local. Rare. Forested ridge. (WIN, WINDM, MMMN)	
<i>Rosa woodsii</i> Lindl.	Wood's rose
Native. Perennial. Widespread, frequent. Forested ridge, Oxbow Wood, meadows. (WIN, WINDM)	
<i>Rubus idaeus</i> L.	Red raspberry
Native. Perennial. Widespread. Forested ridge, Oxbow Wood. (WIN, WINDM)	
<i>Rubus idaeus</i> L. ssp. <i>strigosus</i> (Michx.) Focke (<i>R. idaeus</i> L. var. <i>canadensis</i> Fern.)	
Native. Perennial. Forested ridge. (WIN, WINDM)	
<i>Rubus pubescens</i> Raf. var. <i>pubescens</i>	Dwarf raspberry
Native. Perennial. Oxbow Wood. (WINDM)	
<i>Spiraea alba</i> Du Roi	Meadow-sweet
Native. Perennial. Prairie meadow. Edge of forested ridge, Woodlands Community Pasture, St. Ambroise. (WIN, WINDM)	
RUBIACEAE	MADDER FAMILY
<i>Galium aparine</i> L.	Cleavers
Native. Annual. Sand dune in forested ridge 14 km east of Delta Beach. (WIN, WINDM)	
<i>Galium boreale</i> L.	Northern bedstraw
Native. Perennial. Forested ridge. Sandy, sunny roadside, aspen woods, prairie at Huddlestone, Lake Francis WMA. (WIN, WINDM, MMMN)	
<i>Galium trifidum</i> L.	Bedstraw
Native. Perennial. Widespread. Drying marsh shores. Shade in forested ridge, Chimney Marsh. Under aspen canopy in Woodlands Community Pasture. (WIN, WINDM)	
<i>Galium triflorum</i> Michx.	Sweet-scented bedstraw
Native. Perennial. Widespread, occasional. Moist areas in forested ridge, Oxbow Wood. (WIN, WINDM)	
RUPPIACEAE	DITCHGRASS FAMILY
<i>Ruppia cirrhosa</i> (Petagna) Grande (<i>R. maritima</i> L. var. <i>occidentalis</i> (Wats.) Graebn.)	
Native. Perennial. Local. Clandeboye Bay and eastern parts of the marsh. (WIN, WINDM, MMMN)	
SALICACEAE	WILLOW FAMILY
<i>Populus balsamifera</i> L.	Balsam-poplar
Native. Perennial. Forested ridge, Oxbow Wood, Poplar Pools. (WIN, WINDM)	
<i>Populus deltoides</i> Bartr. ex Marsh.	Cottonwood
Native. Perennial. Sandy, forested ridge. Oxbow Wood. (WIN, WINDM, MMMN)	
<i>Populus x jackii</i> Sarg. (= <i>P. balsamifera</i> x <i>P. deltoides</i>)	
Native. Perennial. Along sandy lakeshore, Delta Waterfowl Station. (WINDM, MMMN)	

<i>Populus tremuloides</i> Michx.	Trembling aspen
Native. Perennial. Widespread. Forested ridge. Lakeshore 3 km east of Delta Beach. Oxbow Wood, bluffs adjacent to PTH 227. (WIN, WINDM, MMMN)	
<i>Salix alba</i> L.	White willow
European. Perennial. Lake shore driftlines. (WIN)	
<i>Salix amygdaloides</i> Anderss.	Peach-leaved willow
Native. Perennial. Widespread. Frequent. Sandy, forested ridge, lakeshore. Oxbow Wood. (WIN, WINDM)	
<i>Salix discolor</i> Muhl.	Pussy-willow
Native. Perennial. Widespread, occasional. Damp depressions in forested ridge, Oxbow Wood. (WIN, WINDM, MMMN)	
<i>Salix exigua</i> Nutt. (<i>Salix interior</i> Rowlee)	Sandbar-willow
Native. Perennial. Widespread. Abundant. Lakeshore driftlines, forested ridge. (WIN, WINDM, MMMN)	
<i>Salix lucida</i> Muhl.	Shining willow
Native. Perennial. Local, occasional. Lakeshore driftlines, moist ground. (WIN)	
<i>Salix petiolaris</i> Sm.	Willow
Native. Perennial. Local, occasional. Edge of forested ridge, Oxbow Wood. (WIN, WINDM)	
SAXIFRAGACEAE	SAXIFRAGE FAMILY
<i>Heuchera richardsonii</i> R. Br.	Alumroot
Native. Perennial. Sandy soil in Community Pasture. (WINDM)	
<i>Ribes americanum</i> Mill.	Wild black currant
Native. Perennial. Widespread. Frequent. Forested ridge. (WIN, WINDM, MMMN)	
SANTALACEAE	SANDALWOOD FAMILY
<i>Comandra umbellata</i> (L.) Nutt.	Bastard-toadflax
Native. Perennial. Prairie, Lake Francis WMA. (WIN)	
SCROPHULARIACEAE	FIGWORT FAMILY
<i>Agalinis aspera</i> (Dougl. ex Benth.) Britt. (<i>Gerardia aspera</i> Dougl.)	
Native. Annual. Local, rare. PTH 227, between PTH 240 and 430. (WIN)	
<i>Castilleja miniata</i> Dougl. ex Hook.	Indian paint-brush
Native. Perennial. Local, occasional. Dry roadside, Woodlands Community Pasture. (WIN)	
<i>Chaenorrhinum minus</i> (L.) Lange	Dwarf snapdragon
European. Annual. Local, rare. Borrow pit. (WIN)	
<i>Orthocarpus luteus</i> Nutt.	Owl-clover
Native. Annual, local, occasional. Prairie, roadside ditches, along Huddlestone railroad. Woodlands Community Pasture. St. Ambroise. (WIN, WINDM)	
<i>Pedicularis canadensis</i> L.	Common lousewort
Native. Perennial. Portage Community Pasture, Woodlands Community Pasture PTH 227 between 240 and 430, St. Ambroise. (WIN)	
<i>Pedicularis lanceolata</i> Michx.	Lousewort
Native. Perennial. Local. Rare. St. Ambroise. (WIN)	
<i>Veronica anagallis-aquatica</i> L. (<i>V. catenata</i> Pennell)	Speedwell
Native. Perennial. Muddy shores, Back marsh at Delta Beach. (WIN, WINDM)	
<i>Veronica peregrina</i> L. ssp. <i>xalapensis</i> (Kunth) Pennell	
Native. Annual. Forested ridge sandy roadside. (WIN)	

SOLANACEAE	NIGHTSHADE FAMILY
<i>Physalis virginiana</i> Mill.	Prairie ground cherry
Native. Annual. Roadside ditch along PTH 240 in sandy soil. (WINDM)	
<i>Solanum nigrum</i> L.	Black nightshade
European. Annual. Roadsides, disturbed sites. (WIN)	
<i>Solanum rostratum</i> Dunal	Buffalo-bur
Native. Annual. Prairies. (WIN, WINDM)	
SPARGANIACEAE	BUR-REED FAMILY
<i>Sparganium eurycarpum</i> Engelm. ex Gray	Bur-reed
Native. Perennial. Widespread. Lake edge, marsh shores, sloughs. (WIN, WINDM, MMMN)	
TILIACEAE	LINDEN FAMILY
<i>Tilia americana</i> L.	Basswood
Native. Perennial. Local, rare. Oxbow Wood, near Blind Channel. (WIN)	
TRILLIACEAE	TRILLIUM FAMILY
<i>Trillium cernuum</i> L.	Nodding trillium
Native. Perennial. Widespread, occasional. Forested ridge, Oxbow Wood, Inkster Farm road, woods west of Portage Creek. (WIN)	
TYPHACEAE	CAT-TAIL FAMILY
<i>Typha angustifolia</i> L.	Narrow-leaved cat-tail
Native. Perennial. Widespread. Locally frequent. Marsh, roadside ditches. Saline marsh, Delta Waterfowl Station. (WIN, WINDM, MMMN)	
<i>Typha x glauca</i> Godr. (pro sp.)	Hybrid Cat-tail
Native. Perennial. Widespread, abundant. Marsh, Blind Channel, Portage Diversion. (WIN, WINDM, MMMN)	
<i>Typha latifolia</i> L.	Common cat-tail
Native. Perennial. Widespread. Locally abundant. Marsh, roadside ditches. (WIN, WINDM)	
ULMACEAE	ELM FAMILY
<i>Celtis occidentalis</i> L.	Hackberry
Native. Perennial. Local, occasional. Forested ridge, frequent at east end. Oxbow Wood. (WIN, WINDM, MMMN)	
<i>Ulmus americana</i> L.	American elm
Native. Perennial. Rich lowland areas, forested ridge. Oxbow Wood. (WIN, WINDM)	
UMBELLIFERAE	PARSLEY FAMILY
<i>Cicuta bulbifera</i> L.	Water-hemlock
Native. Perennial. Drying out ponds and depressions in forested ridge. (WIN)	
<i>Cicuta maculata</i> L.	Spotted cowbane
Native. Biennial. Widespread. Lakeshore, moist to submerged conditions, marsh sloughs. (WIN, WINDM, MMMN)	
<i>Heracleum maximum</i> Bartr. (<i>H. lanatum</i> Michx.)	Cow-parsnip
Native. Perennial. Widespread. Frequent. Forested ridge, roadsides, waste places. Oakland. (WIN, WINDM)	
<i>Osmorhiza longistylis</i> (Torr.) DC.	Anise-root
Native. Annual-biennial. Widespread. Abundant. Forested ridge. Oxbow Wood. (WIN, WINDM)	
<i>Pastinaca sativa</i> L.	Parsnip
European. Biennial. Local. Forested ridge. (WIN)	

Sanicula marilandica L. Black snakeroot
Native. Perennial. Local. Oxbow Wood, Manitoba maple-oak bluff south of Cadham Bay. (WIN, WINDM)

Sium suave Walt. Water-parsnip
Native. Perennial. Widespread. Frequent. Lakeshore, shallow water, marsh shores. (WIN, WINDM)

Zizia aptera (Gray) Fern.
Native. Perennial. Woodlands Community Pasture. (WIN)

Zizia aurea (L.) Koch Golden alexanders
Native. Perennial. Local. South of Cadham Bay. Oxbow Wood. (WIN, WINDM)

URTICACEAE

NETTLE FAMILY

Parietaria pensylvanica Muhl. ex Willd. Pellitory
Native. Annual. Forested ridge. (WINDM)

Urtica dioica L. ssp. *gracilis* (Ait.) Selander Stinging nettle
Native. Perennial. Widespread. Abundant in forested ridge, Oxbow Wood. Moist areas, marsh shores, sloughs.
(WIN, WINDM)

VERBENACEAE

VERVAIN FAMILY

Verbena hastata L. Blue vervain
Native. Perennial. Local. Cherry Ridge, Oxbow Wood. (WIN)

VIOLACEAE

VIOLET FAMILY

Viola canadensis L. Canada-violet
Native. Forested ridge road. (WIN, WINDM)

Viola canadensis L. var. *rugulosa* (Greene) Hitchc. Canada-violet
Native. Perennial. Widespread, occasional. Forested ridge, Portage Creek bluffs. Moist areas. (WIN,
WINDM)

Viola pubescens Ait. Downy yellow violet
Native. Perennial. Local. Oxbow Wood. (WIN, WINDM)

VITACEAE

VINE FAMILY

Parthenocissus quinquefolia (L.) Planch. var. *quinquefolia* (includes var. *inserta*) Virginia creeper
Native. Perennial. Widespread, frequent. Forested ridge, Oxbow Wood. (WIN, WINDM)

ZOSTERACEAE

PONDWEED FAMILY

Potamogeton filiformis Pers. (*Coleogeton filiformis* (Pers.) D.Les & R. Haynes ssp. *alpinus* (Blytt.) D.Les & R.Haynes, and *Coleogeton filiformis* (Pers.) D.Les & R.Haynes ssp. *occidentalis* (Robbins) D.Les & R.Haynes in herbarium)
Native. Perennial. Local, frequent. Lake Manitoba at University Field Station in shallow water. Throughout marsh: Blind Channel, in water 1 m deep, Cadham Bay, Chimney Marsh, PTH 227 near 430, in gravel pit. (WIN)

Potamogeton foliosus Raf. Leafy pondweed
Native. Perennial. Blind Channel, ditch beside forested ridge near Portage Diversion, Moffat Lake. (WIN, WINDM)

Potamogeton friesii Rupr. Pondweed
Native. Perennial. Local. Shallow water in marsh. (WIN)

Potamogeton gramineus L. Various-leaved pondweed
Native. Perennial. Shallow water, junction of PTH 227 and 430, calcareous ditches in community pasture. (WIN, WINDM)

- Potamogeton pectinatus* L. Sago pondweed
Native. Perennial. Widespread in shallow water, particularly along north shores of bays Simpson, Blackfox, Clandeboye, Cadham Bay, Borrow pits near winter road, Lake Manitoba at University Field Station in water 1 m deep. Aikins Bay. (WIN, WINDM)
- Potamogeton richardsonii* (Benn.) Rydb. (*P. perfoliatus* L. ssp. *richardsonii* (Benn.) Hult.) Richardson's pondweed
Native. Perennial. Widespread. Frequent. Cadham Bay, Waterhen Bay and throughout marsh, marsh channels, Lake Manitoba south shore. (WIN, WINDM)
- Potamogeton vaginatus* Turcz. Sheathed pondweed
Native. Perennial. Widespread in shallow water. Cadham Bay, Chimney Marsh and throughout marsh. (WIN, WINDM)
- Zannichellia palustris* L. Horned pondweed
Native. Perennial. Local. Occasional. Cadham Bay, Twin Lakes, Aikins Bay and eastern parts of the marsh. (WIN, WINDM)

Species List - reported in literature but no specimens in herbaria

Agrimonia gryposepala Wallr.
Agropyron trachycaulum (Link) Malte
Carex stipata Muhl. ex Willd.
Carum carvi L.
Comarum palustre L. (*Potentilla palustris* (L.) Scop.)
Cornus canadensis L.
Geum macrophyllum Willd.
Juncus tenuis Willd.
Lonicera tatarica L.
Osmorhiza claytonii (Michx.) Clarke
Osmunda claytoniana L.
Potamogeton pusillus L.
Potentilla pensylvanica L.
Prunus pensylvanica L.
Ribes oxyacanthoides L.
Scirpus fluviatilis (Torr.) Gray
Silene cucubalis Wibel
Silene noctiflora L.
Solanum dulcamara L.
Viburnum rafinesquianum Schultes
Vitis riparia L.

NOTES

References

- Alex, J. F. 1980. Common and botanical names of weeds in Canada. Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, ON.
- Anderson, M. G. and Jones, R. E. 1976. Submerged aquatic vascular plants of east Delta Marsh. Manitoba Department of Renewable Resources and Transportation Services, Winnipeg, MB.
- Anonymous 1973. Lake Manitoba regulation, Volume 1. The Manitoba Water Commission. Manitoba Department of Natural Resources, Winnipeg, MB.
- Anonymous 1982. Manitoba Heritage Marsh program. Manitoba Department of Natural Resources, Winnipeg, MB.
- Barker, J. and Kenkel, N. C. 1994. Biotic inventory and development of a low impact, self-guided trail in Oxbow Wood, Delta Manitoba. University of Manitoba Field Station (Delta Marsh) Annual Report 29:35-55.
- Bedish, J. W. 1967. Cattail moisture requirements and their significance to marsh management. American Midland Naturalist. 78:288-300.
- Bossenmaier, E. J. 1968. The Delta Marsh: it's values, problems and potentialities. Manitoba Department of Mines and Natural Resources, Winnipeg, MB.
- Burns, R. M. and Honkala, B. H., tech. cords. 1990. Silvics of North America Vol. 2: Hardwoods. Agric. Handbook 654. U.S. Department of Agriculture. Forest Service, Washington, DC.
- Canadian Soil Inventory. 1989. Soil landscapes of Canada-Manitoba. Land Resource Research Centre, Research Branch, Agriculture Canada, Ottawa, Ont. Agric. Can. Publ. 5241/B. 22pp. 1:1 million scale map compiled by Canada-Manitoba soil survey.
- de Geus, P. M. J. 1987. Vegetation changes in the Delta Marsh, Manitoba between 1948-80, MSc Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Ecological Stratification Working Group. 1995. National ecological framework for Canada. Agriculture and Agrifood Canada and Environment Canada, Ottawa, ON.
- Ehrlich, W. A., Poyser, E. A. and Pratt, L. E. 1957. Report of reconnaissance Soil Survey of Carberry Map Sheet area. Soils Report 7. Manitoba Soil Survey, Manitoba Department of Agriculture and Immigration, Winnipeg, MB.
- Gillespie, D. I. and Boyd, H. 1991. Wetlands for the world: Canada's Ramsar sites. Canadian Wildlife Service, Ottawa, ON.
- Goldsborough, L. G. 1983. Ontogeny of a small marsh. University of Manitoba Field Station (Delta Marsh) Annual Report 18:44-51.
- Goldsborough, L. G. 1987. Ontogeny of a small marsh pond: revisited. University of Manitoba Field Station (Delta Marsh) Annual Report 22:37-39.
- Goldsborough, L. G. 1995. Weather and water quality data summary (1994). University of Manitoba Field Station (Delta Marsh) Annual Report 29:11-19.
- Goldsborough, L. G. and Zbigniewicz, M. W. 1990. Studies of the distribution and morphology of *Typha* spp. in the Delta Marsh. University of Manitoba Field Station (Delta Marsh) Annual Report 25:59-67.
- Greenall, J. A. 1995. First-year regrowth of three marsh plant communities after fall and spring fires in the Delta Marsh, Manitoba. MSc Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Jones, R. E. 1978. Delta Marsh Plan. Manitoba Department of Renewable Resources and Transportation Services, Renewable Resources Division, Winnipeg, MB.
- Kartesz, J. T. 1994. A synonymized checklist of the vascular flora of the United States, Canada, and Greenland, second edition. Biota of North American Program of the North Carolina Botanical Garden. Timber Press, Portland, OR.
- Kenkel, N. C. 1986. Vegetation structure and dynamics of the barrier-beach ridge at Delta, Lake Manitoba. University of Manitoba Field Station (Delta Marsh) Annual Report 21:61-83.
- Last, W. M. 1980. Sedimentary and post glacial history of Lake Manitoba, PhD Thesis. Department of Earth Sciences, University of Manitoba, Winnipeg, MB.
- Looman, L. and Best, K. F. 1979. Budd's Flora of the Canadian Prairie Provinces. Research Branch Agriculture Canada Publication 1662. Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, ON.
- Löve, A. and Löve, D. 1954. Vegetation of a prairie marsh. Bull. Torrey Bot. Club. 81: 61-64.
- Macaulay, A. J. 1973. Taxonomic and ecological relationships of *Scirpus acutus* Muhl. and *S. validus* Vahl. (Cyperaceae) in southern Manitoba. PhD Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Mackenzie, D. I. 1982. The dune-ridge forest, Delta Marsh Manitoba: overstory vegetation and soil patterns. Can. Field Nat. 96:61-68.
- McGinn, R. A. 1992. Climatology of the Delta Marsh area. University of Manitoba Field Station (Delta Marsh) Annual Report 27:65-77.
- Michalyna, W. and Smith, R. E. 1972. Soils of the Portage la Prairie area. Soils Report 17. Manitoba Department of Agriculture, Winnipeg, MB.

- Manitoba NAWMP Technical Committee. 1988. Manitoba implementation plan of the North American Waterfowl Management Plan. Manitoba NAWMP. Technical Committee, Winnipeg, MB.
- Rannie, W. F., Thorleifson, L. H. and Teller, J. T. 1989. Holocene evolution of the Assiniboine River paleochannels and Portage la Prairie alluvial fan. *Can. J. Earth Sci.* 26:1834-1841.
- Risberg, J., Sandgren, P., Teller, J. T. and Last, W. M. 1999. Siliceous microfossils and mineral magnetite characteristics in a sediment core from Lake Manitoba, Canada. *Can. J. Earth Sci.* (in press).
- Scoggan, H. J. 1978-79. The Flora of Canada. National Museum of Natural Sciences, Publications in Botany No. 7: 1-4. National Museums of Canada, Ottawa, ON.
- Shay, J. M. 1986. Vegetation dynamics in the Delta Marsh, Manitoba. pp. 65-70 in G. K. Clambey and Pemble, R. H. *editors*. Proceedings of the Ninth North American Prairie Conference 1984. Tri-College University, Fargo, ND.
- Shay, J. M. 1977. A survey of vegetation in the centre unit of Delta Marsh, July 1976. University Field Station (Delta Marsh) / Department of Botany, University of Manitoba. Unpublished manuscript.
- Sproule, T. A. 1972. A paleoecological investigation into the post-glacial history of the Delta Marsh, Manitoba. MSc Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Teller, J. T. and Last, W. M. 1979. Post-glacial sedimentation and history in Lake Manitoba. Manitoba Department of Mines, Natural Resources and Environment, Winnipeg, MB.
- Van der Valk, A. G. 1981. Succession in wetlands: A Gleasonian approach. *Ecology* 62:688-698.
- Walker, J. M. 1959. Vegetation studies in the Delta Marsh, Manitoba, MSc Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Walker, J. M. 1965. Vegetation changes with falling water levels in the Delta Marsh, Manitoba, PhD Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Warner, B.G. and Rubec, C.D.A. *editors*. 1997. The Canadian Wetland Classification System. 2nd edition. The National Wetlands Working Group. The Wetlands Research Centre, University of Waterloo. Waterloo, ON.
- Waters, I. 1989. The ecology of *Typha glauca* Godr.: field studies along a water depth gradient, PhD Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.
- Waters, I. and Shay, J. M. 1990. A field study of the morphometric response of *Typha glauca* shoots to a water depth gradient. *Can. J. Bot.* 68:2339-2343.
- Weir, T. R. 1960. Economic Atlas of Manitoba. Manitoba Department of Industry and Commerce, Winnipeg, MB.
- Zbigniewicz, M. W. 1981. A comparison of the vegetation at the north end of the Assiniboine Diversion with that of the adjacent marsh, BSc Honors Thesis. Department of Botany, University of Manitoba, Winnipeg, MB.

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<i>arundinacea</i>	28	<i>vaginatus</i>	37
<i>canariensis</i>	29	<i>Potentilla</i>	
<i>Phleum</i>		<i>concinna</i>	32
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<i>Phragmites</i>		<i>paradoxa</i>	32
<i>australis</i>	29	<i>pennsylvanica</i>	37
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<i>virginiana</i>	33	<i>lucida</i>	34
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<i>gmelinii</i>	31	<i>acutus</i>	20
<i>longirostris</i>	32	<i>atrovirens</i>	20
<i>macounii</i>	32	<i>cespitosus</i>	20
<i>pensylvanicus</i>	32	<i>fluviatilis</i>	37
<i>sceleratus</i>	32	<i>maritimus</i>	20
<i>Ribes</i>		<i>microcarpus</i>	20
<i>americanum</i>	34	<i>pungens</i>	21
<i>oxycanthoides</i>	37	<i>rufus</i>	21
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<i>palustris</i>	19	<i>festucea</i>	29
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<i>rubra</i>	18	<i>nigrum</i>	35
<i>Salix</i>		<i>rostratum</i>	35
<i>alba</i>	34	<i>Solidago</i>	
		<i>canadensis</i>	15
		<i>gigantea</i>	15
		<i>hispida</i>	15

<i>missouriensis</i>	15	<i>Trifolium</i>	
<i>ptarmicoides</i>	15	<i>pratense</i>	22
<i>rigida</i>	15	<i>repens</i>	22
<i>Sonchus</i>		<i>Triglochin</i>	
<i>arvensis</i>	15	<i>maritimum</i>	24
<i>oleraceus</i>	15	<i>Trillium</i>	
<i>Sorghastrum</i>		<i>cernuum</i>	35
<i>nutans</i>	29	<i>Trimorpha</i>	
<i>Sparganium</i>		<i>acris</i>	15
<i>eurycarpum</i>	35	<i>Typha</i>	
<i>Spartina</i>		<i>angustifolia</i>	35
<i>pectinata</i>	29	<i>latifolia</i>	35
<i>Spergularia</i>		<i>x glauca</i>	35
<i>salina</i>	17		
<i>Sphenopholis</i>		<i>Ulmus</i>	
<i>intermedia</i>	29	<i>americana</i>	35
<i>Spiraea</i>		<i>Urtica</i>	
<i>alba</i>	33	<i>dioica</i>	36
<i>Sporobolus</i>		<i>Utricularia</i>	
<i>cryptandrus</i>	29	<i>macrorhiza</i>	25
<i>heterolepis</i>	29		
<i>Stachys</i>		<i>Vaccaria</i>	
<i>palustris</i>	24	<i>hispanica</i>	17
<i>Stellaria</i>		<i>Verbena</i>	
<i>longifolia</i>	17	<i>hastata</i>	36
<i>longipes</i>	17	<i>Veronica</i>	
<i>Stipa</i>		<i>anagallis-aquatica</i>	34
<i>comata</i>	29	<i>peregrina</i>	34
<i>Suaeda</i>		<i>Viburnum</i>	
<i>calceoliformis</i>	18	<i>edule</i>	16
<i>Symphoricarpos</i>		<i>lentago</i>	16
<i>albus</i>	16	<i>opulus</i>	16
<i>occidentalis</i>	16	<i>rafinesquianum</i>	37
		<i>Vicia</i>	
<i>Tanacetum</i>		<i>americana</i>	22
<i>vulgare</i>	15	<i>cracca</i>	22
<i>Taraxacum</i>		<i>Viola</i>	
<i>officinale</i>	15	<i>canadensis</i>	36
<i>Teucrium</i>		<i>pubescens</i>	36
<i>canadense</i>	24	<i>Vitis</i>	
<i>Thalictrum</i>		<i>riparia</i>	37
<i>dasycarpum</i>	32		
<i>venulosum</i>	32	<i>Xanthium</i>	
<i>Thelypteris</i>		<i>strumarium</i>	15
<i>palustris</i>	31		
<i>Thlaspi</i>		<i>Zannichellia</i>	
<i>arvense</i>	19	<i>palustris</i>	37
<i>Tilia</i>		<i>Zigadenus</i>	
<i>americana</i>	35	<i>elegans</i>	25
<i>Toxicodendron</i>		<i>Zizia</i>	
<i>radicans</i>	11	<i>aptera</i>	36
<i>Tragopogon</i>		<i>aurea</i>	36
<i>dubius</i>	15		