CITY OF WINDSOR

HISTORICAL ECOLOGICAL LAND CLASSIFICATION & DESKTOP NATURAL HERITAGE REVIEW

OJIBWAY PRAIRIE COMPLEX

OCTOBER 18, 2023



HISTORICAL ELC AND DESKTOP NATURAL HERITAGE REVIEW

OJIBWAY PRAIRIE COMPLEX

CITY OF WINDSOR

PROJECT NO.: IM22104012
DATE: OCTOBER 18, 2023

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"Effective September 21, 2022, Wood Environment & Infrastructure Solutions Canada Limited is now operating as WSP E&I Canada Limited. No other aspects of our legal entity, contractual terms or capabilities have changed in relation to this report submission."

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1 INTRODUCTION

In support of the Ojibway National Urban Park initiative announced by the federal government in August 2021, the City of Windsor (City) engaged WSP Environment & Infrastructure Canada Limited (WSP) to undertake several tasks related to the natural heritage assessment of 11 environmentally significant natural areas within the City. Six of the natural areas are part of the Ojibway Prairie Complex: Black Oak Heritage Park, Ojibway Park, Tallgrass Prairie Heritage Park Area, Ojibway Prairie Provincial Nature Reserve, Spring Garden Natural Area, and Oakwood Natural Area which total approximately 588 hectares (ha). The natural areas are all in relatively close proximity to each other, between the Detroit River to the west and Highway 401 to the east. Oakwood Natural Area, although east of Highway 401, is ecologically connected to the Spring Garden Natural Area by the Rt. Hon. Herb Gray Parkway T5 Ecopassage (Figure 1).

In addition to the Ojibway Prairie Complex, five additional areas: Ojibway Shores, Malden Park, South Cameron Woodlot Area, Chappus Natural Area, and St. Clair College Prairie and Woods are included in the review and inventory (Figure 1). Ojibway Shores is located immediately adjacent to the Detroit River and Black Oak Heritage Park; Malden Park is just north of Highway 401 and the E.C. Row Expressway; Chappus Natural Area is located between Malden Park and Tallgrass Prairie Heritage Park Area; South Cameron Woodlot Area is east of Huron Church Road, between Totten Street and the E.C. Row Expressway; and St. Clair Prairie is east of Highway 401/Highway 3 and adjacent to St. Clair College. These natural areas comprise an additional 264 ha of green space.

The first task included in the natural heritage assessment is a desktop review of the land use and ecological environment within and adjacent to the natural areas and a description of the vegetation communities likely to be historically present on the sites. This was accomplished by completing a secondary source review that included the screening of available ecological background information from both past and recent studies and database queries. Next, historical aerial images of the natural areas from 1948, 1978, and 2008, as well as recent imagery from 2021, were evaluated for the presence of environmental stressors, specifically anthropogenic disturbances, over time. Together the results were used to determine the vegetation community types most likely present within the natural areas prior to significant development occurring within the City of Windsor.

The results of this first natural heritage assessment task are presented in this report. Additional tasks related to site-specific flora and fauna surveys, current vegetation community composition and Ecological Land Classification (ELC) mapping, and evaluation of the significance of the natural heritage features found within these 11 areas was undertaken during the spring-summer 2022 and presented under separate cover.



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LEGEND

- Natural Heritage Review Boundary
- Railway

0 0.5 1 2 Kilometres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Project Overview

PROJECT N°:OMGS21045 | **FIGURE: 1**

SCALE: 1:25,000 | DATE: October 2023

2 METHODS

2.1 SECONDARY SOURCE REVIEW

Screening of available background information from existing studies, online databases, and other sources was completed. The desktop screening assisted in the preliminary determination of:

- natural heritage features and other potential environmental sensitivities;
- historical vegetation communities present in site-specific natural areas; and
- the known and potential occurrences of species of conservation concern, including species at risk (SAR) and provincially rare species on or near the sites from historical records to present day.

Information gathered from site-specific studies is cited where applicable in this report. The history of Ojibway Prairie has been summarized from on-line sources provided in the reference section.

Natural heritage occurrence records, online databases and atlases queried for this report include:

- Natural Heritage Information Centre (grids 17LG2681, 17LG2682, 17LG2781, 17LG2782, 17LG2881, 17LG2882, 17LG2979, 17LG2980, 17LG2981, 17LG3079, 17LG3082, 17LG3083, 17LG3180, 17LG3182, 17LG3183, 17LG3279, 17LG3280, 17LG3282);
- Ontario Nature Reptile and Amphibian Atlas (grids 17LG28, 17LG37, 17LG38);
- Ontario Breeding Bird Atlas (grids 17LG28, 17LG37, 17LG38);
- eBird Hotspots (Ojibway Prairie Complex (natural area + 500 meter (m) buffer);
- iNaturalist (natural area + 500 m buffer)
- Ontario Butterfly Atlas by the Toronto Entomologists' Association (grids 17LG28, 17LG37, 17LG38);
- Fisheries and Oceans Canada, Aquatic Species at Risk Maps (https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html);
- Ontario GeoHub (https://geohub.lio.gov.on.ca/);
- Ojibway Nature Centre, Species List for the Ojibway Prairie Complex (https://www.ojibway.ca/raresp.htm);
- Atlas of the Mammals of Ontario (Dobbyn, J.S. 1994);
- Mammals of the Great Lakes Region (Kurta, 1995); and
- Amphibians and Reptiles of the Great Lakes Region (Harding, 1997).

Appendix A contains the rare species lists and SAR summarized from the secondary source reviews, including Natural Heritage Information Centre (NHIC) occurrence records, online databases, wildlife atlases, and site-specific natural heritage reports.

2.2 AERIAL PHOTO INTERPRETATION

Aerial photo interpretation, together with the results of the secondary source review, was used to determine the preliminary historical conditions of the 11 natural areas. This evaluation focused on historical land uses, specifically anthropogenic disturbances, that could be identified on and surrounding the natural areas from 1948, 1978, 2008 and 2021 aerial images. A description of the land use and various anthropogenic stressors are described for each year (1948, 1978, 2008, 2021), and the aerial imagery from 1948 was used to determine vegetation community types based on ELC descriptors (Lee et al. 1998; Lee 2008). The year 1948 was used as a baseline condition of the historical landscape before areas were largely tilled, mowed, channelized and filled, and developed for residences, transportation, agriculture and recreation. Figures containing all aerial images and 1948 ELC evaluations are provided following the text descriptions.

3 RESULTS AND DISCUSSION

3.1 HISTORICAL CONTEXT

Before Europeans arrived, the land along the Detroit River was referred to as Wawiiatanong by the Indigenous populations (City of Windsor 2022a). The area surrounding it is the traditional territory of the Three Fires Confederacy: Ojibwe/Chippewa, Potawotami, and Odawa (Ottawa). Many other Indigenous groups have also called the area home, such as the Huron (Wyandot) and the Attawandaron (Neutral) (City of Windsor 2022a). For thousands of years before Europeans arrived, the area was very important as a gathering place from Lake Huron in the north, Lake Erie in the south and from other rivers and streams that emptied into or near the Detroit River. Many Indigenous groups came to the river to gather, hunt and fish, and trade.

Although little is known about early Indigenous settlements, there are several known prehistoric sites believed to be seasonal camps. Prior to European settlement, the larger region was dominated by lush Carolinian woodlands, wetlands, and prairies. It is hypothesized that the Indigenous camps were positioned in the wooded areas bordering the open expanse of the prairie, where timber and water were more readily available (City of Windsor 2022a and 2022b). Most of the known prehistoric sites are situated along Turkey Creek and its tributaries.

As early as 1640, French explorers, fur traders and voyageurs from Montreal were common along the river. In 1701, Antoine de la Mothe Cadillac proclaimed the territory for France and built Fort Pontchartrain du Détroit (Detroit), establishing the first European settlement in the Windsor-Detroit area (City of Windsor 2022a). He invited Indigenous groups such as the Huron (Wyandot) to establish villages in the area. Early writings note the presence of Huron cornfields along portions of the river; however, by 1749, they were largely replaced by fields and farmsteads of French settlers. The area was known as Petite Cote and was the first major farming community in Southern Ontario. Writings during this time describe the land as prairie-like parkland and open country intersected by groves of full-grown forest trees. Settlers farmed the land close to the river having little impact on the prairie landscape. By the end of the eighteenth century, the site became known as la Cote de Misere (The Coast of Misery) because the sandy soils lost their fertility, and farming was no longer productive (City of Windsor 2022b).

Throughout the nineteenth century, wars befell the area (War of 1812, American Civil War 1861-1865), although it was also a very productive period for urban and commercial growth. Mills, railways, shops, taverns, newspaper offices and hotels were established. Vast salt deposits were discovered, and salt mining began in 1893 (City of Windsor 2022a). In 1897, the Ojibway post office was founded at the foot of present-day Sprucewood Ave., presumably named after the Indigenous settlement in the area.

Ojibway was incorporated as a town in 1913. In the same year, the United States Steel Corporation purchased 567 hectares (ha) of land for the development of a steel plant, which

encompassed the current day Black Oak Heritage Park, Ojibway Park, Tallgrass Prairie Heritage Park Area and the Ojibway Prairie Provincial Natural Reserve. Although World War I stopped the plant development, the land was readied with the installation of concrete storm sewers and ditches (City of Windsor 2022b; Johnson and Hamadani 2022).

The depression of the 1930s hampered Ojibway's growth. Land that was readied with road allotments and sidewalks never had homes built. The Dominion Steel and Coal Company purchased the United States Steel Corporation property in 1937 and some steel was produced. During World War II, Ojibway (the Town) was also used as a testing ground for military vehicles. When the Dominion Steel and Coal Company shut down in 1957, the Canadian Salt Company purchased the property to mine salt. Failure to develop the land for broader industrial or residential uses allowed for the persistence of large areas of prairie and woodland (Johnson and Hamadani 2022).

The City of Windsor began acquiring significant tracts of land to be set aside as parkland beginning in the late 1950s with Ojibway Park, through 2008 when the last significant block was acquired in the Spring Garden Natural Area (City of Windsor 2022b). Throughout those years, major changes in land use occurred in the City, shifting away from agriculture and towards residential, commercial and industrial developments. As land use changed, environmentally significant areas were also evaluated, acquired, and protected, preventing major anthropogenic disturbances from affecting their largely natural condition.

The sections below summarize the historical natural heritage context for Ojibway, including the 11 natural areas and the significance of these areas in providing habitat for the unique biological diversity that exists in the region.

3.2 HISTORICAL NATURAL HERITAGE STUDIES

Some of the earliest historical descriptions of the native landscape along the Detroit River shoreline date back to 1679 when Father Louis Hennepin described the area to be a prairie-type parkland with elk, deer, bear, wild turkey, and swans. David Douglas was the first naturalist to visit the Ojibway prairie and collect plant specimens in 1823. Over the following 60 years, much of the larger wildlife recorded in early writings (e.g., elk, deer, bear) had disappeared and other once abundant species such as Passenger Pigeon (*Ectopistes migratorius*), Trumpeter Swan (*Cygnus buccinator*) and Greater Prairie-Chicken (*Tympanuchus cupido*) were on a steep decline towards extirpation. Still, in 1892, John Macoun, a Dominion Botanist for Canada, visited the area and discovered many new plants, proclaiming Ojibway as "a garden of rarities" and "the eastern extension of the prairie flora."

Although tallgrass prairie was documented in these early writings of Douglas and Macoun, its ecological significance was largely ignored. It wasn't until 1969 when Dr. Paul Maycock visited the remnant prairie across from Ojibway Park that he immediately recognized the importance of the tract and brought it to the attention of the City, provincial government and property owner. From that point on, numerous individuals and groups made concerted efforts to protect the remaining tallgrass prairie habitat in Windsor (Paiero et al. 2010). From those efforts stemmed the acquisition and protection of the Ojibway Prairie Provincial

Nature Reserve beginning in 1973 and legislated under the Provincial Parks Act in 1977. At the time, extensive surveys to catalogue the flora and fauna of the Ojibway prairie began in earnest by the City (through the Ojibway Nature Centre) and the provincial government (Pratt 1979). The City completed life sciences inventories and evaluations of their properties, including Spring Garden Natural Area (City of Windsor 1996) and Tallgrass Prairie Heritage Park (City of Windsor 2001), and worked closely with the Essex Region Conservation Authority (ERCA) on the evaluation of other natural areas within the City boundaries.

ERCA was created in 1973 as one of the last Conservation Authorities in Ontario (the first Conservation Authority was established in 1946). ERCA initiated surveys of biologically significant natural areas in the region in 1977. The first study considered 50 candidate natural heritage sites with fieldwork commencing in 1981 and 1982. The areas evaluated included a portion of Black Oak Heritage Park and the northern portion of Spring Garden Natural Area (Oldham 1983). In 1992, ERCA completed additional biological inventories for 34 candidate natural heritage sites, including the South Cameron Woodlot Area, Oakwood Natural Area, St. Clair College Prairie and Woods, Ojibway Shores, and portions of Black Oak Heritage Park, Spring Garden Natural Area, and Tallgrass Prairie Heritage Park Area (ERCA 1992). In 1995, the Environmental Youth Corps for the City of Windsor completed a biological inventory at Oakwood Park (Lum et al. 1995). ERCA completed additional follow-up surveys in South Cameron Woodlot Area and Tallgrass Prairie Heritage Park Area, as well as an evaluation of St. Clair College Prairie and Woods in 2008 (ERCA 2008).

Beginning in 2006, the Ministry of Transportation (MTO) conducted natural heritage inventories and surveys for plant and wildlife SAR in the City as part of the approval and permitting of the Rt. Hon. Herb Gray Parkway (URS 2008; Canada-United States-Ontario-Michigan Border Transportation Partnership 2008). Surveys were undertaken in many of the natural areas near the proposed highway project, including Spring Garden Natural Area, Oakwood Natural Area, and Chappus Natural Area. Additional follow-up studies have been completed in these sites associated with the project's precedent setting Endangered Species Act, 2007 permits (LGL Limited 2012; LGL and Sage Earth 2016; MTO 2016; Wood 2021a). Some of the associated project reporting is summarized and available to the public on federal and provincial websites, as well as in updates to SAR recovery strategies (ECCC 2017; Jones 2013; MNRF 2016; MNRF 2017; MECP 2019a and 2019b). A summary of the findings in publicly available reports is provided in the sections below and species lists are in Appendix A.

3.3 HISTORICAL ELC AND DISTURBANCE EVALUATIONS

ELC was used to describe and map the historical vegetation communities most likely present in the natural areas. The City of Windsor occurs in Essex County. Essex County is found within the Mixedwood Plains Ecozone and Ecoregion 7E (Lake Erie-Lake Ontario Ecoregion) and is the southwestern extremity of Southern Ontario. It is bounded by Lake St. Clair to the north, the Detroit River to the west, and Lake Erie to the south. The flora and fauna of Ecoregion 7E are the most diverse in Canada. They include hundreds of provincially significant plants, animals, and vegetation communities found only in the remnants of Carolinian forests, tallgrass ecosystems, and alvars in the region. Because much of the natural habitat has been

converted to agricultural and suburban land use over time, this ecoregion is also home to many of Ontario's SAR.

Within Ecoregion 7E, the City occurs in the Essex Ecodistrict 7E-1. More specifically, Ecodistrict 7E-1 is part of the Warm Eastern Canadian Temperate Deciduous Forest (Wester et al. 2018). Windsor's natural areas are all located in the warmest part of the province with the lowest annual precipitation (Richards et al. 1949). High temperatures and low precipitation made for historically rich tallgrass landscapes (Richards et al. 1949). Tallgrass prairie and savannah was present as an almost continuous strip along the shoreline of the western Lake Erie basin (MNRF 2021). On the Canadian side, tallgrass prairies were found in Windsor along the shores of the Detroit River and the eastern Lake St. Clair shoreline. Approximately 45 square kilometres (km) of tallgrass prairie and savannah were estimated to be present before European settlement (MNRF 2021). Once dominant, these ecosystems now represent only a very small portion of the City of Windsor, and Essex, Kent, and Lambton Counties. The Ojibway Prairie Complex, comprising most of the natural areas evaluated in this report, contains the second largest remnants of tallgrass prairie and savannah left in the Ecodistrict, after Walpole Island.

Similarly, the natural forest that once covered Essex County has been nearly all removed, beginning with European settlement and subsequent agricultural development (Richards et al. 1949). In a 1941 census, almost 87% of Essex County was farmland (Richards et al. 1949). Today, 90% is dedicated to agriculture, 3% to settlement and associated infrastructure, and less than 1% comprises protected areas (Wester et al. 2018).

In the sections below, WSP has provided a summary of the site-specific environmental conditions and features for the 11 natural areas, including a historical ELC description to the Community or Ecosite level, as feasible. The information provided herein is based on the evaluation of aerial photographs, secondary source reviews, consultation with the City of Windsor, and field surveys conducted in spring-summer 2022 by WSP as part of updated natural heritage assessments in selected natural areas.

3.3.1 OJIBWAY PARK

Ojibway Park (the "Park") is located between Ojibway Parkway and Matchett Road south of Broadway Street (Figure 1). Ojibway Park was the first significant natural area to be acquired by the City in 1957 from the Canadian Salt Company, in exchange for mineral rights under what is now Malden Park. Ojibway Park provides an important ecological linkage between Black Oak Heritage Park and Tallgrass Prairie Heritage Park Area.

For the purpose of this study, the natural heritage review boundary is approximately 68 ha and includes all the land designated as part of the Prairie Remnants Life Area of Natural and Scientific Interest (ANSI) in this location. A review of the historical aerial images from 1948, 1978, and 2008 illustrates the pressure of early agricultural use surrounding the Park and later, recreational and residential development within and adjacent to the Park (Figures 2A, 2B, and 2C).

In 1948, Ojibway Park was in a largely natural state. Signs of agricultural use appeared outside the Park. It was assumed there was limited agricultural disturbance within the Park boundaries because the land was originally set aside for industrial use, but this conversion never occurred. Two visible dirt access roads bisect the Park and there was also a relatively large drainage ditch constructed adjacent to Matchett Road. A gas utility line bisects the southeast corner, but otherwise, the landscape appears relatively undisturbed.

Based on this imagery and the results of current and historical natural heritage studies, the following ELC communities most likely occurred in Ojibway Park (Figure 2A):

- Dry Tallgrass Savannah Ecosite (TPS1)
- Fresh – Moist Tallgrass Savannah Ecosite (TPS2)
- Fresh – Moist Tallgrass Woodland Ecosite (TPW2)
- Dry – Fresh Oak – Maple – Hickory Deciduous Forest Ecosite (FOD2)
- Oak Mineral Deciduous Swamp Ecosite (SWD1)

In 1975, the original Nature Centre was constructed on the property, with access from Matchett Road (it formally opened in 1976; Figure 2B). It included the main facility, shed, and picnic shelter. A dirt parking lot and mowed picnic area were also present. A pond was constructed to the north of the Nature Centre as an added park feature, complete with a trail and set of washrooms. A second dirt parking lot was constructed in the northeast corner of the Park.

By 1978, the open tallgrass savannah was undergoing succession to woodland, forest, and deciduous swamp community types (Figure 2B). Areas along Matchett Road and close to the Nature Centre appear routinely mowed. Several formal trails can be seen through the tree canopy. Areas that remained open or were routinely maintained continued to exhibit tallgrass prairie and savannah indicator species, such as Bluejoint Reedgrass (*Calamagrostis canadensis*), Prairie Cordgrass (*Sporobolus michauxianus*), Virginia Mountain-mint (*Pycnanthemum virginianum*), Culver's Root (*Veronicastrum virginicum*), Wild Bergamot (*Monarda fistulosa*) and Giant Ironweed (*Vernonia gigantea*) (Pratt 1979).

Surrounding the Park, farmsteads were beginning to be converted to residential development and areas to the east were no longer actively farmed. Some agricultural use continued to the northeast. To the south, the Windsor Raceway was constructed (circa 1965). The Windsor Raceway also owned a portion of the land adjacent to Ojibway Parkway where sand removal activity can be seen in the 1978 aerial image (Figure 2B). In 1991, the City, with funding from the Nature Conservancy of Canada, acquired the land from Windsor Raceway and incorporated it into the Park. With recovery of the native vegetation, several rare plants and plant SAR were recorded in this area by Ojibway Nature Centre staff.

In 2008, there were no anthropogenic disturbances visible in the Park and the plant communities present appeared to be mature woodland, forest, deciduous swamp and a small tallgrass prairie opening (Figure 2C).

Today, Ojibway Park is the center of activity for the Ojibway Prairie Complex. A new Nature Centre was built in 2011. Four trails are maintained to ease pedestrian access and passive recreational use (Figure 2D). Mowing has been reduced and open habitats are maintained through invasive species control and prescribed fire. The City is also evaluating a proposed vegetated eco-passage to connect Ojibway Park and Black Oak Heritage Park with the goal to facilitate the movement of wildlife and plant species across Ojibway Parkway (Wood 2021b).

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, rare species lists compiled for the Ojibway Prairie Complex, and site-specific reports and lists indicate that Ojibway Park and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Ojibway Park where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

328000

329000

4681000

BROADWAY ST

MATCHETT RD

ARMANDA ST

TTCOMBE

QJIBWAY PKY

TPS1

FOD2

TPW2

SWD1

TPS2

Ojibway Park

FOD2

TPS2

FOD2

TPS1

TPS2

S:\Gis\Projects\MM2210412_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_1948_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
FOD2	— Dry - Fresh Oak - Maple - Hickory Deciduous Forest Ecosite
SWD1	— Oak Mineral Deciduous Swamp Ecosite
TPS1	— Dry Tallgrass Savannah Ecosite
TPS2	— Fresh - Moist Tallgrass Savannah Ecosite
TPW2	— Fresh - Moist Tallgrass Woodland Ecosite

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

0 100 200 400 Metres

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Park
1948

PROJECT N°:OMGS21045 | **FIGURE: 2A**

SCALE: 1:5,600 | DATE: October 2023

328000

329000

4681000

BROADWAY ST

ARMANDA ST

WENTWORTH ST

WERNER AVE

MATCHETT RD

QUEWAY PKY

Ojibway Park

S:\Gis\Projects\IMM22104012_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_1978_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing
- Rail

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Park 1978

PROJECT N°:OMGS21045 | **FIGURE: 2B**

SCALE: 1:5,600 | DATE: October 2023

328000

329000

4681000

BROADWAY ST

BEECH AVE

MATCHETT RD

WATERLOO AVE

ARMANDA ST

WENTWORTH ST

WERNER AVE

OJIBWAY PKY

Ojibway Park

Wood dump

WEAVER RD

S:\Gis\Projects\IMM22104012_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_2008_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Rail

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Park 2008

PROJECT N°:OMGS21045 | **FIGURE: 2C**

SCALE: 1:5,500 | DATE: October 2023

328000

329000

4681000

BROADWAY ST

BEECH AVE

WATERLOO AVE

ARMANDA ST

WENTWORTH ST

WERNER AVE

OJIBWAY PKY

Ojibway Park

MATCHETT RD

WEAVER RD

S:\Gis\Projects\IM\IM221040\12_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_2021_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Rail

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Park 2021

PROJECT N°:OMGS21045 | **FIGURE: 2D**

SCALE: 1:5,500 | DATE: October 2023

3.3.2 BLACK OAK HERITAGE PARK

Black Oak Heritage Park (the "Park") is approximately 97 ha and is located adjacent to Ojibway Shores and the Morterm Limited port terminal facility on the west. The Park is bound by Broadway Street to the north and Ojibway Parkway and the Essex Terminal Railway (ETR) corridor to the east (Figure 1).

In 1987, the City of Windsor acquired land from the Canadian Salt Company and set aside the most significant woodland as Black Oak Heritage Park. A review of the historical aerial images from 1948, 1978, and 2008 illustrates the pressure of early agricultural use and construction of the ETR, followed by residential and industrial development that occurred adjacent to the Park, to the north and south respectively (Figures 3A, 3B, and 3C).

In 1948, the area surrounding Black Oak Heritage Park was comprised of agricultural fields and light industrial uses, with exception of the land east of Ojibway Parkway (i.e. Ojibway Park). Several high use dirt/gravel access roads were present in the Park. Obvious anthropogenic disturbance occurred around these roads, including vegetation clearing and superficial soil disturbance within and adjacent to the south and west portions of the Park, near the port/barge terminal. ETR rail spurs are also visible through the Park. Still, much of the area appears to be in a natural or successional state at this time.

A historical ELC of Black Oak Heritage Park was previously completed by Sage Earth (2019) as part of the Black Oak Heritage Park Management Plan. Wood reviewed the ELC boundaries and descriptors and made minor adjustments to the polygons (Figure 3A). Based on this review and the results of current and historical natural heritage studies, the following ELC communities most likely occurred in the Park (Sage Earth 2019):

- Fresh – Moist Forb Tallgrass Prairie Ecosite (MEFM3)
- Fresh – Moist Mixed Tallgrass Prairie or Meadow Ecosite (MEMM2 or MEMM4)
- Dry Black Oak Tallgrass Savannah Type (SVDM1-1; TPS1-1)
- Fresh – Moist Tallgrass Deciduous Savannah Ecosite (SVDM2)
- Deciduous Swamp (SWD)
- Dry – Fresh Oak Tallgrass Deciduous Woodland Ecosite (WODM1)
- Fresh – Moist Tallgrass Deciduous Woodland Ecosite (WODM6)
- Fresh – Moist Black Walnut Lowland Deciduous Forest Type (FODM7-4)
- Fresh – Moist Oak Carolinian Deciduous Forest Type (FODM10-2)

By 1978, several areas were cleared for agricultural use and additional dirt trails can be seen through the tree canopy. In general, those areas not impacted by vegetation clearing and agricultural use appear to have undergone succession from open tallgrass prairie and savannah habitat to woodland and forest. The treed communities were primarily Oak-dominated and described as lightly disturbed (Pratt, 1979). The Dainty Food rice mill was

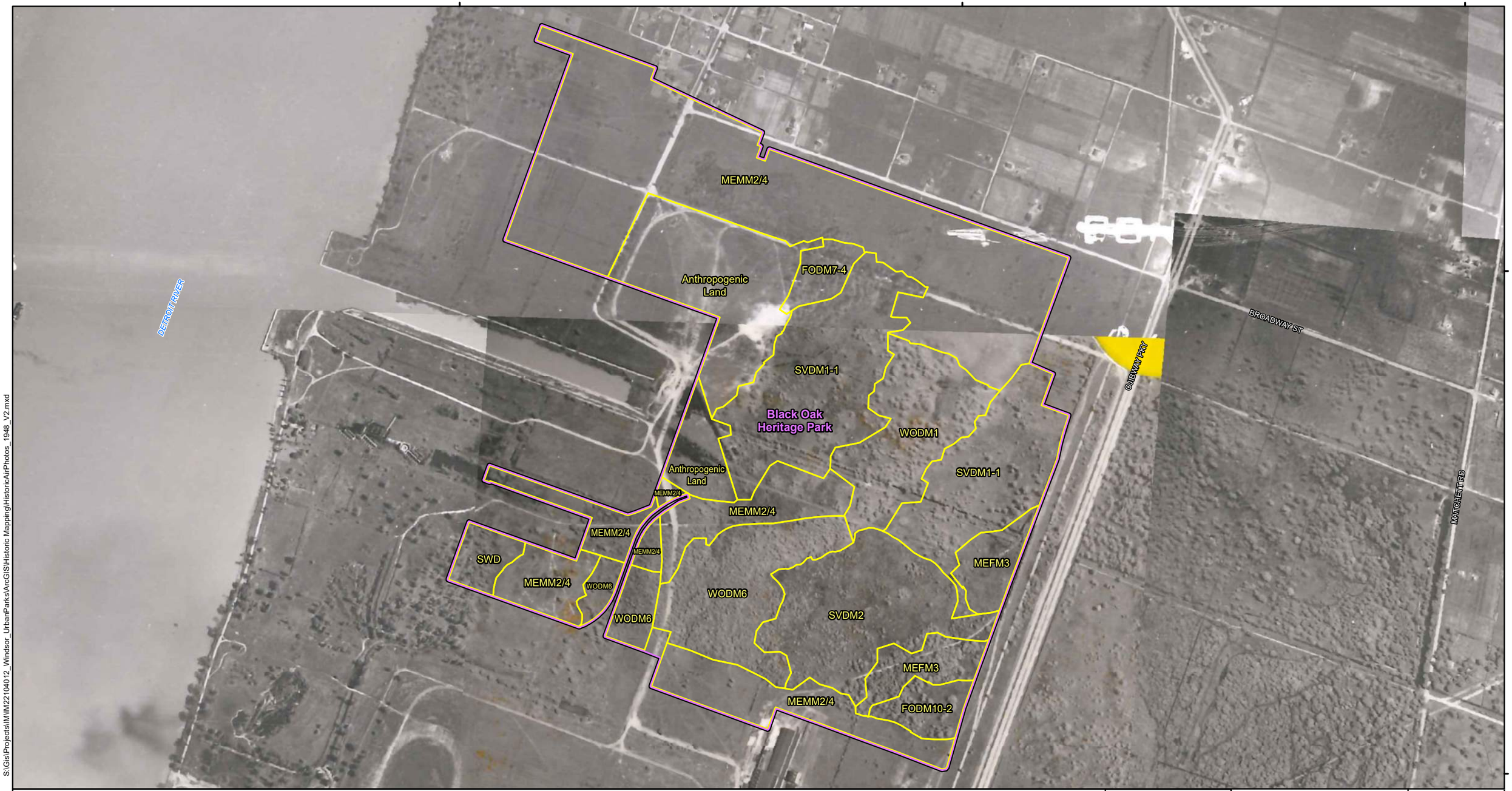
constructed by 1978 at the northeastern boundary of the Park, and additional agricultural and industrial uses occurred to the south and west. Residential development occurred to the north (Figure 3B).

A natural heritage assessment conducted in Black Oak Heritage Park around this time (the early 1980s) noted that plant communities were undergoing succession towards an Oak-Hickory woodland (Oldham 1983). Openings in the canopy still supported tallgrass prairie species, some of which were provincially rare like Purple Twayblade (*Liparis liliifolia*), Hairy Mountain-mint (*Pycnanthemum verticillatum var. pilosum*) and Arrowfeather Threeawn Grass (*Aristida purpurascens*) (Pratt 1979). A low sand dune, running parallel to the Detroit River and associated with the post-glacial Lake Rouge was identified as a significant natural heritage feature. One rare bird, one rare animal and 54 rare plants were identified in the Park. Five species of nesting raptors and four mammals were also recorded (Oldham1983).

By 2008, the land subjected to agricultural use in the 1970's had succeeded to a natural state, except for two areas disturbed by recreational vehicle activity. A small portion of land in the northeast corner of the Park was set aside as parkland, including a fenced dog park and parking lot. Soil disturbance and stockpiles of wood waste can be seen in the southern portion of the site (Figure 3C). Outside of Black Oak Heritage Park, the homes located to the north of Broadway Street were all removed.

Today, Black Oak Heritage Park remains surrounded by industrial uses, including construction of the new Canadian Inspection Plaza for the Gordie Howe Bridge. However, areas that were once subject to disturbance within the Park have now naturalized due to ongoing tallgrass prairie restoration and invasive species removals. A small portion remains for parking and infrastructure uses in the northeast corner of the Park along Broadway Street (Figure 3D).

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, rare species lists compiled for the Ojibway Prairie Complex, and site-specific reports and lists indicate that Black Oak Heritage Park and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Black Oak Heritage Park where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.



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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
FODM10-2	Fresh - Moist Oak Carolinian Deciduous Forest Type
FODM7-4	Fresh - Moist Black Walnut Lowland Deciduous Forest Type
MEFM3	Fresh - Moist Forb Tallgrass Prairie Ecosite
MEMM2/4	Fresh - Moist Mixed Tallgrass Prairie or Meadow Ecosite
SVDM1-1	Dry Black Oak Tallgrass Savanna Type
SVDM2	Fresh - Moist Tallgrass Deciduous Savanna Ecosite
SWD	Deciduous Swamp
WODM1	Dry - Fresh Oak Tallgrass Deciduous Woodland Ecosite
WODM6	Fresh - Moist Tallgrass Deciduous Woodland Ecosite

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Black Oak Heritage Park 1948

PROJECT N°:OMGS21045 | **FIGURE: 3A**

SCALE: 1:7,200 | DATE: October 2023

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DETROIT RIVER

Black Oak
Heritage Park

MAPLEWOOD DR

BROADWAY ST

E C WAY PKY

MATCHETT RD

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LEGEND

- Natural Heritage Review Boundary
- Agriculture
- Vegetation Clearing and/or Mowing
- Rail

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Black Oak Heritage Park 1978

PROJECT N^{O}:OMGS21045 | **FIGURE: 3B**

SCALE: 1:7,200 | DATE: October 2023

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DETROIT RIVER

Black Oak
Heritage Park

Wood dump

E C ROW EXPY

BROADWAY ST

BEECHWAVE

OLDE WAY FRY

MATCHETT RD

MAPLEWOOD DR

IRONWOOD DR

CHERRYBLOSSOM DR

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LEGEND

- Natural Heritage Review Boundary
- Rail
- Recreational Vehicles
- Vegetation Clearing and/or Mowing
- Park

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

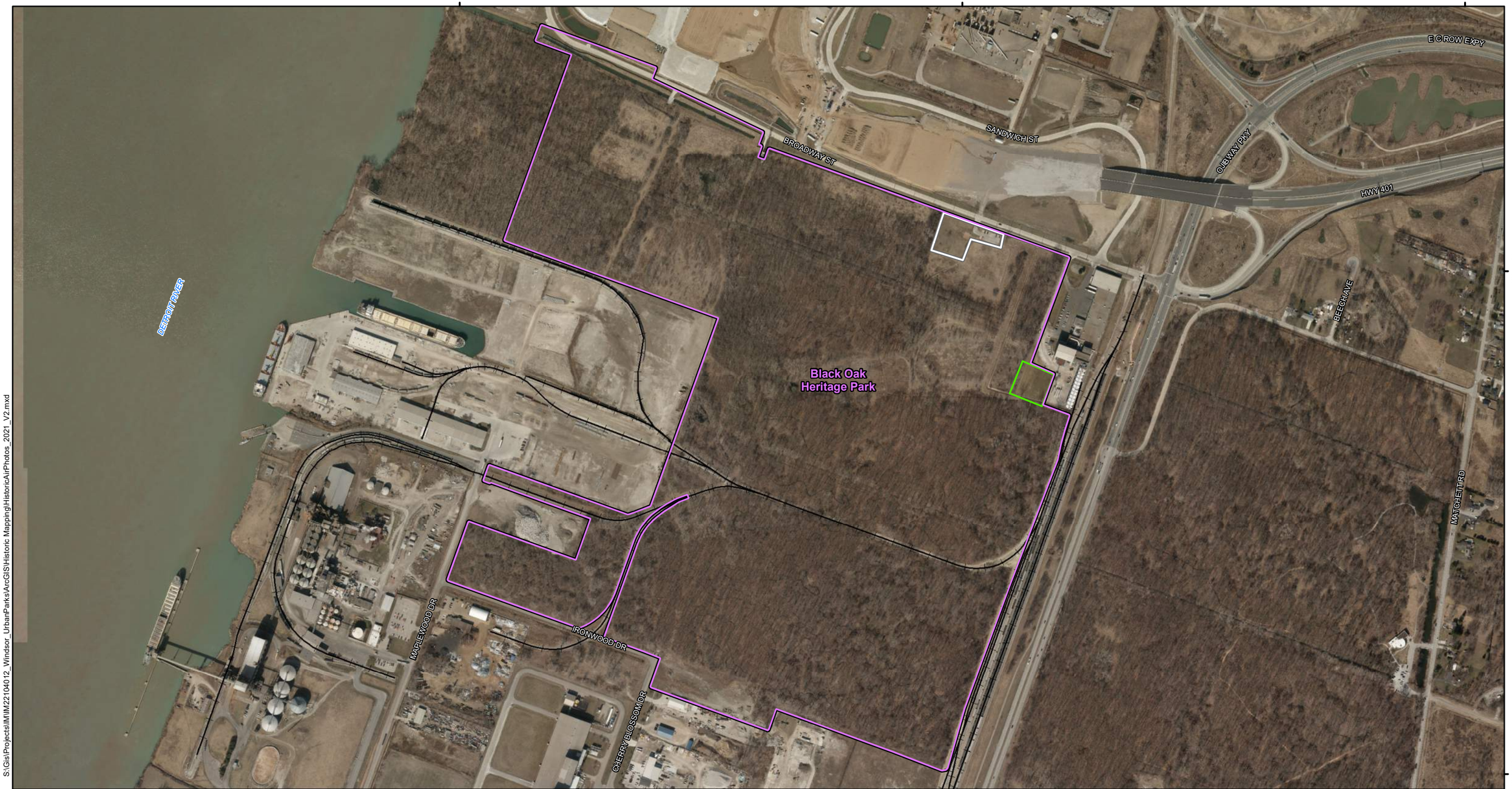
THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Black Oak Heritage Park 2008

PROJECT N°:OMGS21045 | **FIGURE: 3C**

SCALE: 1:7,200 | DATE: October 2023



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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing
- Rail

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Black Oak Heritage Park 2021

PROJECT N°:OMGS21045 | **FIGURE: 3D**

SCALE: 1:7,200 | DATE: October 2023

3.3.3 TALLGRASS PRAIRIE HERITAGE PARK AREA

The Tallgrass Prairie Heritage Park Area (the "Park Area") is located between Matchett Road and Malden Road, south of Armanda Street and north of the Ojibway Prairie Provincial Nature Reserve (Figure 1). Tallgrass Prairie Heritage Park was created in 1990 as a cooperative natural heritage protection project of the Carolinian Canada Program. Acquisition of the Park was through ERCA with the financial assistance of The Ontario Heritage Foundation, Wildlife Habitat Canada, The Nature Conservancy of Canada, Windsor Essex Community Foundation, John & Olga Partyka, and the City of Windsor. For the purpose of this study, the natural heritage review boundary is approximately 57 ha and includes Tallgrass Prairie Heritage Park and some areas immediately adjacent that remain privately held.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the pressure of early agricultural use and later residential development adjacent to the Park Area (Figures 4A, 4B, and 4C).

In 1948, signs of agricultural use can be seen within portions of the Tallgrass Prairie Heritage Park Area, particularly around the northern and eastern boundaries while large areas in the central and southern portions appear to be relatively undisturbed. An underground utility corridor traversed the Park diagonally southwest toward Matchett Road, creating a temporary disturbance (Figure 4A). Overall, based on this imagery and review of current and historical natural heritage information, the vegetation community most likely comprising the Park Area was Fresh – Moist Tallgrass Prairie Type (TPO2-1).

By 1978, residential growth had occurred primarily to the north and east of the Tallgrass Prairie Heritage Park Area (Figure 4B). The City had already acquired Ojibway Park to the west and the province had just legislated Ojibway Prairie Provincial Nature Reserve to the south. Within the Park Area, Ontario Power Generation erected electrical pylons that crossed the site diagonally and maintained a corridor clear of tall woody vegetation. Abandoned topsoil and sand quarries resulted in the creation of ponds of varying depths. Drains, dirt trails, and a horse training oval are also visible in the aerial imagery. Parts of the Park Area disturbed by past agricultural uses were undergoing succession while one area remained in agricultural use and other areas at the boundary with residences appeared to be mowed (Figure 4B).

In 1979, the City of Windsor and others conducted the first preliminary life sciences inventory of the Ojibway Prairie and surrounding area, including portions of Tallgrass Prairie Heritage Park Area (Pratt 1979). The Park Area was described as a combination of tallgrass and forb-dominated prairies, oak savannah, Swamp Pin Oak (*Quercus palustris*)/Black Oak (*Quercus velutina*) woodland, and Swamp Pin Oak forest. Successional thickets and forest comprised most of the eastern half of the site (Pratt 1979). Later the City conducted follow-up studies in support of natural heritage planning and preparation of their Environmental Evaluation Report (City of Windsor 2001). At the time, approximately 400 plant species and 41 wildlife species were recorded, many of which were identified as provincially rare and regionally significant. The City's recommendation was to retain as much of the Tallgrass Prairie Heritage Park Area in a natural state, as possible, and manage the lands to protect and

perpetuate the significant biological communities within the Park Area (City of Windsor 2001).

In 2008, a majority of the Tallgrass Prairie Heritage Park Area was undisturbed and undergoing successional processes. There were some minor disturbances from residences at the edges, but the interior was in a natural state (Figure 4C). The biological inventory conducted by ERCA in 2008 described significant areas of sensitive tallgrass prairie, meadow marsh, and woodland habitat. A total of 524 plant species were documented on the site, approximately one-third of all the species known to be growing in Essex County outside of cultivation (ERCA 2008). A total of 122 plant species had significant conservation designations. Significant dragonfly (14 species), butterfly (16 species) and other wildlife species (six birds, reptiles and mammals) were recorded at the time. Overall, the Park Area ranked the highest in diversity of all the natural heritage sites assessed at that time (ERCA 2008).

In 2021, the Tallgrass Prairie Heritage Park Area remains largely undisturbed by anthropogenic causes except for passive recreational use and the utility corridor maintenance (Figure 4D). Significant portions of the area remain as tallgrass prairie and woodland ecosystems that have been periodically maintained by prescribed fire and invasive species removal.

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, rare species lists compiled for the Ojibway Prairie Complex (i.e., not site specific), and site-specific reports and lists indicate that Tallgrass Prairie Heritage Park Area and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around the Park Area where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

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ARMANDA ST

CHAPPUS ST

SPRING GARDEN RD

MALDEN RD

MATCHETT RD

TITCOMBE RD

ELGIN ST

AG

TPO2-1

Tallgrass Prairie Heritage Park Area

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
AG	— Agriculture
TPO2-1	— Fresh - Moist Tallgrass Prairie Type

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Tallgrass Prairie Heritage Park Area 1948

PROJECT N°:OMGS21045 **FIGURE: 4A**

SCALE: 1:4,900 DATE: October 2023

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CHAPPUS ST

SPRING GARDEN RD

WENTWORTH ST

VERNER AVE

ARMANDA ST

MATCHETT RD

Tallgrass Prairie Heritage Park Area

Horse Training Oval

MALDEN RD

KENT ST

TITCOMBE RD

ELGIN ST

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Agriculture
- Vegetation Clearing and/or Mowing

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Tallgrass Prairie Heritage Park Area 1978

PROJECT N°:OMGS21045 | **FIGURE: 4B**

SCALE: 1:4,900 | DATE: October 2023

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CHAPPUS ST

SPRING GARDEN RD

WENTWORTH ST

VERNER AVE

ARMANDA ST

MALDEN RD

MATCHETT RD

Tallgrass Prairie Heritage Park Area

KENT ST

TITCOMBE RD

ELGIN ST

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Tallgrass Prairie Heritage Park Area 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

PROJECT N°:OMGS21045 | **FIGURE: 4C**

SCALE: 1:4,900 | DATE: October 2023

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WENTWORTH ST

VERNER AVE

ARMANDA ST

CHAPPUS ST

SPRING GARDEN RD

MATCHETT RD

MALDEN RD

KENT ST

TITCOMBE RD

ELGIN ST

Tallgrass Prairie Heritage Park Area

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Tallgrass Prairie Heritage Park Area 2021

PROJECT N°:OMGS21045 | **FIGURE: 4D**

SCALE: 1:4,900 | DATE: October 2023

3.3.4 SPRING GARDEN NATURAL AREA

The Spring Garden Natural Area (the "Natural Area") is the largest natural area of the Ojibway Prairie Complex. It is bound by Spring Garden Road to the north, Highway 401/Rt. Hon. Herb Gray Parkway (Parkway) to the east, Todd Lane to the south and Malden Road to the west (Figure 1). The City acquired many of the properties that comprise Spring Garden Natural Area from 1999 to 2008 after Council approved a change from a residential to natural heritage designation for the area in Windsor's Official Plan. Most recently, some lands located adjacent to the Parkway currently owned and actively managed by the MTO are planned for inclusion into the Natural Area. For the purpose of this study, the natural heritage review boundary is approximately 198 ha and includes City-owned lands and some areas immediately adjacent that remain privately held.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the pressure of early agricultural use and later residential development within and adjacent to the Natural Area (Figures 5A, 5B, and 5C).

In 1948, the land surrounding Spring Garden Natural Area was dominated by agricultural fields. Within the Natural Area, there was also agricultural use as well as clear plans for residential development with dirt roads and unopened rights-of-way visibly present. Still, large swaths of land were left in a natural state. Turkey Creek flowed through the center of the Natural Area, and other smaller drains ran through portions of the property. A historical ELC of the Spring Garden Natural Area was previously completed by LGL Limited (2011) in support of ESA permit requirements for construction of the Parkway project. WSP reviewed the ELC boundaries and descriptors made minor adjustments to polygons (Figure 5A). Based on this review and the results of current and historical natural heritage studies, Spring Garden Natural Area likely consisted of the following ELC communities:

- Fresh – Moist Tallgrass Prairie Type (TPO2-1)
- Fresh – Moist Tallgrass Woodland Ecosite (TPW2)
- Thicket Swamp (SWT)
- Oak Mineral Deciduous Swamp Ecosite (SWD1)
- Mineral Meadow Marsh Ecosite (MAM2)

By 1978, several major disturbance events occurred within the Natural Area boundaries. Turkey Creek (Grand Marais Drain) was channelized and a 4-ha pond (i.e., milk factory lagoon) was constructed in the center resulting in significant disturbance to the natural habitat. In addition, residential and commercial development began along Huron Church Road, as well as additional residential development along Malden Road. Dirt trails and unopened rights-of-way were still visible through the Natural Area. There was also mowing and other vegetation disturbance activities ongoing at the boundaries (Figure 5B).

ERCA evaluated the Spring Garden Natural Area twice between the early 1980s and 1990s as part of their long-range conservation planning and analysis of Environmentally Significant

Areas (Oldham 1983; ERCA 1992). The City of Windsor followed up these surveys with an Environmental Evaluation Report completed in 1996 (City of Windsor 1996). During this time, the site was described as having portions of open grassland and meadow with excellent representation of dry, mesic, and wet tallgrass prairie communities. Other parts of the site were Dogwood (*Cornus* sp.) thicket, and there were portions of upland Oak savannah, woodland and Oak forest as well. Mature lowland forests were dominated by Swamp Pin Oak, Swamp White Oak (*Quercus bicolor*), and Silver Maple (*Acer saccharinum*) (Oldham 1983; ERCA1992; City of Windsor 1996).

Despite the level of human use, the vegetation communities present were not severely affected. Many provincial SAR and rare species were recorded at this time, including five reptiles, one mammal, five insects, 21 bird species, and over 75 vascular plants, while suitable habitat for others was noted. Tallgrass prairie indicator species were also well represented, with 47% of the indicator species identified in the Natural Area (Bakowsky 1993; City of Windsor 1996). It was also noted that many plant species growing in the Spring Garden Natural Area have their entire Canadian range limited to the Windsor area (Oldham 1983; ERCA1992).

By 2008, a large residential development was built off Lambton Street and a smaller development was built off Bethlehem Avenue. Lands within the Natural Area boundary that were disturbed in the 1970s were in a natural state, specifically the Turkey Creek (Grand Marais Drain) corridor and constructed pond. There was still some encroachment by landowners at the edges of the Natural Area but overall, the interior of this site was natural and undisturbed (Figure 5C). At this time, the City began conducting invasive species control and prescribed burning in the Natural Area.

From 2008 to 2015, MTO conducted natural heritage inventories and surveys for wildlife and plant SAR in the Spring Garden Natural Area as part of the approval, permitting and construction of the Rt. Hon. Herb Gray Parkway. Two of these studies acknowledged that the traditional, open tallgrass communities that once dominated the area were being lost to natural succession (LGL Limited 2012; LGL and Sage Earth 2016). As a result, from 2016 to 2021, active vegetation management in the form of prescribed burns, woody brush removal, and invasive species control was undertaken annually in partial fulfillment of the Parkway's ESA permit requirements. Additionally, the creation of snake SAR habitat including hibernacula, live birthing sites, nesting sites, and thermoregulation sites occurred (MTO 2016).

Currently, the Spring Garden Natural Area remains largely undisturbed by anthropogenic causes (Figure 5D). There was an increase in the amount of habitat present along Huron Church Road after residential and commercial properties were expropriated and subsequently rehabilitated as part of Parkway construction (Figure 5D). The Parkway multi-use trail and two tunnel-top crossings are also present along the east side of the Natural Area. The tunnel top crossing just north of Todd Lane, called T5 Ecopassage, was designed as a movement corridor for wildlife and plant species between Spring Garden Natural Area and Oakwood Natural Area (Figure 5D). The Ecopassage was vegetated with native tallgrass prairie species. Studies conducted by MTO on wildlife movements across the Ecopassage

confirmed its use by mammals and snake SAR. Rare plants have also been documented colonizing the Ecopassage from the adjacent natural areas.

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, rare species lists compiled for the Ojibway Prairie Complex (i.e., not site specific), and site-specific reports and lists indicate that the Spring Garden Natural Area and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Spring Garden Natural Area where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

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SPRING GARDEN RD
ARMANDA ST
HWY 3
GRAND MARAIS RD W
TURKEY CREEK
RANDOLPH AVE
TITCOMBE RD
LAMBTON ST
MALDEN RD
ELGIN ST
RICKARD AVE
TODD LANE
CABANA RD W

TPO2-1
SWT
TPO2-1/MAM2
TPO2-1
AG
TPO2-1
AG
TPW2/SWD1
TPO2-1
TPO2-1/MAM2
AG
AG
Spring Garden Natural Area
TPS2/SWD1
TURKEY CREEK
TPO2-1
TPS2/ SWD1
HWY 3
AG
TPW2/SWD1
AG
MAM2

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification
- Watercourse

ELC Code	Desciption
AG	— Agriculture
MAM2	— Mineral Meadow Marsh Ecosite
SWD1	— Oak Mineral Deciduous Swamp Ecosite
SWT	— Thicket Swamp
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPS2	— Fresh - Moist Tallgrass Savannah Ecosite
TPW2	— Fresh - Moist Tallgrass Woodland Ecosite

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Spring Garden Natural Area 1948

PROJECT N°:OMGS21045 **FIGURE: 5A**

SCALE: 1:8,700 DATE: October 2023

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WENTWORTH ST

ARMANDA ST

SPRING GARDEN RD

HWY 3

LABELLE ST

CALIFORNIA AVE

RANDOLPH AVE

SKYLINE DR

RIVERMOR DR

ORION CRES

GLENWOOD AVE

MARK AVE

EVERTON AVE

GUPPY AVE

GRAND MARAIS RD W

KENT ST

7TH ST

LAMBTON ST

FAZIO DR

NORTHWAY AVE

NORFOLK ST

FRANKLIN AVE

ELGIN ST

MALDEN RD

Spring Garden
Natural Area

South Windsor
Arena

PULFORD ST

ASKIN AVE

ST PAUL CRES DR

LIBERTY ST

BEALS ST W

LANSING ST

TURKEY CREEK (GRAND MARAIS DRAIN)

HWY 3

CABANA RD W

3RD ST

4TH ST

5TH ST

6TH ST

BONDY AVE

TODD LANE

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing
- Municipal Drain

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR
ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Spring Garden Natural Area 1978

PROJECT N°:OMGS21045 | **FIGURE: 5B**

SCALE: 1:8,700 | DATE: October 2023

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4680000

WENTWORTH ST
ARMANDA ST
SPRING GARDEN RD
HWY 3
YOUNGSTOWN ST
LABELLE ST
BETHLEHEM AVE
LAMONT ST
MANGIN CRES
NORTHWAY AVE
BUTTERFLY CRT
ST CLAIR AVE
SKYLINE DR
RIVIERA DR
ORION CRES
GLENWOOD AVE
RIVERSIDE AVE
CURRY AVE
GRAND MARAIS RD W
W GRAND CRT
MARK AVE
MASSEY CRT
CALIFORNIA AVE
KENT ST
7TH ST
LAMBTON ST
VIA VITA ST
AVALON PARK DR
MARIO RD
EMILIA RD
NORALEE
FAZIO DR
NORFOLK ST
RANKIN AVE
RANDOLPH AVE
DAYTON AVE
PULFORD ST
ASKIN AVE
ST PATRICKS DR
LIBERTY ST
BEALS ST W
SPRING CRT
SUMMER CRT
AUTUMN CRT
TITCOMBE RD
MALDEN RD
ELGIN ST
Spring Garden
Natural Area
Capri Pizzeria
Recreation Complex
LANSING ST
TURKEY CREEK (GRAND MARAIS DRAIN)
CABANA RD W
CAMDEN ST
CONTE CRES
3RD ST
4TH ST
5TH ST
6TH ST
BONDY AVE
TODD LANE

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing
- Municipal Drain

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Spring Garden Natural Area 2008

PROJECT N°:OMGS21045 | **FIGURE: 5C**

SCALE: 1:8,600 | DATE: October 2023

330000 331000 332000

4681000

4680000

WENTWORTH ST
ARMANDA ST
SPRING GARDEN RD
BETHLEHEM AVE
LAMONT ST
YOUNGSTOWN ST
LABELLE ST
MANGIN CRES
SKYLINE DR
RIVIERA DR
ORION CRES
CLEVWOOD AVE
EVERTS AVE
CURRY AVE
GRAND MARAIS RD W
GALIFORNIA AVE
ST CLAIR AVE
BUTTERN CRT
NORTHMAYA AVE
W GRAND CRT
MARK AVE
MASSEY CRT
NORFOLK ST
KENT ST
MALDEN RD
7TH ST
LAMBTON ST
TITCOMBE RD
ELGIN ST
MARIO RD
AMY LYNN PARK DR
EMILIA RD
NORA PL
VIAVITA ST
FAZIO DR
HWY 401
HWY 3
DAYTONA AVE
PULFORD ST
RANDOLPH AVE
RANKIN AVE
ST PATRICKS DR
ASKIN AVE
LIBERTY ST
Spring Garden
Natural Area
Capri Pizzeria
Recreation Complex
LANSING ST
TURKEY CREEK (GRAND MARAIS DRAIN)
BEALS ST W
SPRING CRT
SUMMER CRT
AUTUMN CRT
Rt. Hon.
Herb Gray
Parkway
T5 Ecopassage
École Élementaire
Louise-Charron
CAMDEN ST
CONTE CRES
3RD ST
4TH ST
5TH ST
6TH ST
BONDY AVE
TODD LANE
CABANA RD W

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing
- Municipal Drain

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Spring Garden Natural Area 2021

PROJECT N°:OMGS21045 | **FIGURE: 5D**

SCALE: 1:8,600 | DATE: October 2023

3.3.5 OAKWOOD NATURAL AREA

The Oakwood Natural Area is located between Pulford Street and Cabana Road W., east of Highway 401/Highway 3 and west of Askin Avenue (Figure 1). In 1974 and 1975, the City of Windsor acquired wooded lots immediately adjacent to the existing Oakwood Park, which housed the South Windsor Arena and Community Centre. The wooded land was incorporated into the Park and was left in a natural state. Most recently, some lands located adjacent to the Parkway currently owned and actively managed by the MTO are planned for long-term conservation. For the purpose of this study, the natural heritage review boundary is approximately 28 ha and includes City-owned lands and some areas immediately adjacent that remain privately held.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the pressure of early agricultural use and later residential development adjacent to the Oakwood Natural Area (Figures 6A, 6B, and 6C).

In 1948, the land in and around Oakwood Natural area was either undisturbed or agricultural fields and farmsteads (Figure 6A). Plots of planned residential development and sidewalks laid earlier to supply homes for anticipated steelworkers are still visible in the aerial imagery; however, no further disturbance occurred and much of the land within the Oakwood Natural Area boundary remained natural. Based on this imagery and the results of current and historical natural heritage studies, Oakwood Natural Area was most likely comprised of Fresh – Moist Tallgrass Prairie Type (TPO2-1).

By 1978, the South Windsor Arena was constructed just north of the Oakwood Natural Area and the Oakwood Public School and Nature Sanctuary (circa 1968) was built at the edge of the southern woodlot (Figure 6B). There were areas of vegetation clearing and soil disturbance, likely associated with facility construction. A significant residential neighbourhood was built to the east, whereas agricultural uses and low-density homes were present to the north, south, and west. Portions of the open tallgrass prairie that comprised the area in the late 1940s were succeeding to shrub and woodland communities.

ERCA performed the first natural heritage evaluation of Oakwood Park in the early 1990s. At the time, tallgrass prairie indicator species were still found throughout the site, including numerous SAR and provincially rare species. However, the varied soil conditions resulted in the growth of upland hardwood forest containing Northern Red Oak (*Quercus rubra*), White Oak (*Quercus alba*), Red Maple (*Acer rubrum*), and Hickories (*Carya* sp.), as well as portions of lowland swamp forest containing Swamp Pin Oak, Swamp White Oak, Bur-oak (*Quercus macrocarpa),* and White Elm (*Ulmus americana*). In addition, portions of the tallgrass prairie were undergoing shrub succession from Dogwood, Sumac (*Rhus* sp.) and Willow (*Salix* sp.) species (ERCA 1992). Because of the diversity in natural communities and their generally good condition, the Natural Area was found to have high species diversity (ERCA 1992). Over 200 plants were recorded, 59 of which were considered rare in Essex County and/or Ontario (ERCA 1992; Lum et al. 1995). Over 200 wildlife species were observed, including 103 bird species (Lum et al. 1995).

In 2008, the Oakwood Natural Area was mostly deciduous forest and swamp (Figure 6C). The Sports Arena continued to operate and there were areas of mowed lawn associated with the facility. Along the western edge of the woodlot, remnant tallgrass prairie was present. In the south, the Oakwood Community Centre and parking lot was built adjacent to the Oakwood Public School. Outside the Natural Area, new residential developments were built north of Pulford Street and south of Cabana Road.

By 2021, the Parkway's T5 Ecopassage construction over Highway 401 was completed, effectively creating a movement corridor between the Spring Garden Natural Area and the Oakwood Natural Area (Figure 6D). The Ecopassage lands and restored tallgrass prairie associated with the Parkway multi-use trail are currently owned and actively managed by the MTO. Overall, the Oakwood Natural Area remains largely undisturbed by anthropogenic causes except for passive recreational use (Figure 6D).

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, rare species lists compiled for the Ojibway Prairie Complex (i.e., not site specific), and site-specific reports and lists indicate that Oakwood Natural Area and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Oakwood Natural Area where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

332000

333000

4680000

TPO2-1

Oakwood
Natural Area

AG

AG

HWY 3

CABANA RD W

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
AG	— Agriculture
TPO2-1	— Fresh - Moist Tallgrass Prairie Type

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

0 100 200 Metres

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Oakwood Natural Area 1948

PROJECT N°:OMGS21045 | **FIGURE: 6A**

SCALE: 1:3,900 | DATE: October 2023

332000

333000

4680000

PULFORD ST

South Windsor Arena

Snow Dump

HWY 3

Oakwood Natural Area

Oakwood Public School and Nature Sanctuary

RANKIN AVE

LIBERTY ST

RANDOLPH AVE

BEALS ST W

ST PATRICKS DR

ASKIN AVE

BETTS AVE

CABANA RD W

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Agriculture
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Oakwood Natural Area 1978

PROJECT N°:OMGS21045 | **FIGURE: 6B**

SCALE: 1:3,900 | DATE: October 2023

332000

333000

4680000

DAYTONA AVE

NORTHMAY AVE

PULFORD ST

Capri Pizzeria
Recreation Complex

Oakwood
Natural Area

Oakwood Public School and
Community Centre

LIBERTY ST

ROXBOROUGH BLVD

CLEMWOOD AVE

MARK AVE

BEALS ST W

ST PATRICKS DR

ASKIN AVE

SPRING CRT

SUMMER CRT

RANDOLPH AVE

RANKIN AVE

CHARLEMONT AVE

AUTUMN CRT

WINTER CRT

BETTS AVE

ST CLAIR AVE

CABANA RD W

RICHARDIE BLVD

PRAIRIE CRT

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Oakwood Natural Area 2008

PROJECT N°:OMGS21045 | **FIGURE: 6C**

SCALE: 1:3,900 | DATE: October 2023

332000

333000

4680000

DAYTONA AVE

NORTHWAY AVE

PULFORD ST

Capri Pizzeria
Recreation Complex

LIBERTY ST

ROXBOROUGH BLVD

GLENWOOD AVE

MARK AVE

ST PATRICKS DR

BEALS ST W

ASKIN AVE

SPRING CRT

SUMMER CRT

AUTUMN CRT

WINTER CRT

RANDOLPH AVE

RANKIN AVE

CHARLEVOIX AVE

HWY 401

HWY 3

Oakwood
Natural Area

Spring Garden
Natural Area

Rt. Hon.
Herb Gray
Parkway
T5 Ecopassage

École Élementaire
Louise-Charron

BETTS AVE

ST CLAIR AVE

CABANA RD W

RICHARDIE BLVD

PRAIRIE CRT

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Oakwood Natural Area 2021

PROJECT N°:OMGS21045 | **FIGURE: 6D**

SCALE: 1:3,900 | DATE: October 2023

3.3.6 SOUTH CAMERON WOODLOT AREA

The South Cameron Woodlot Area is comprised of two separate areas. The core area is approximately 100 ha and is located south of Totten Street, between Huron Church Road and Dominion Avenue, north of E.C. Row (Figure 1). It is a combination of both privately-owned and City-owned properties, including South Cameron Woodlot Park. A smaller area, approximately 25 ha, is located to the east of the core area and is bound by Arcadia Street to the north, Longfellow Ave. to the west, and South Cameron Boulevard to the east. A review of the historical aerial images from 1948, 1978, and 2008 illustrates the pressure of early agricultural use and later residential development adjacent to the natural area boundaries (Figures 7A, 7B, and 7C).

In 1948, land surrounding the South Cameron Woodlot Area was mostly agricultural fields and farmsteads (Figure 7A). Within both areas, there is clear agricultural use. In the core Woodlot Area, there is one area that contains large trees and appears undisturbed. There is a defined road that traverses the site north-south, and a smaller road runs east-west. Given the general lack of tree or shrub cover over a majority of the land, it was most likely a combination of fields or pasture and/or remnant Fresh – Moist Tallgrass Prairie (TPO2-1) habitat. In the eastern portion of the core Woodlot Area, the native vegetation present was likely the combination of Fresh - Moist Tallgrass Prairie Woodland Ecosite (TPW2) and Oak Mineral Deciduous Swamp Ecosite (SWD1) given the canopy cover and soil moisture regime. The eastern property along South Cameron Boulevard was also most likely a combination of fields or pastures and/or Fresh – Moist Tallgrass Prairie (TPO2-1). Areas that appear more recently disturbed may also contain species representing Dry – Moist Mineral Cultural Meadow (CUM1-1) habitat. During this time, a horse racing track or training oval was in the center of the property. Based on the imagery and review of current and historical natural heritage information, the South Cameron Woodlot Area likely consisted of the following ELC communities:

- Fresh – Moist Tallgrass Prairie Type (TPO2-1)
- Dry – Moist Mineral Cultural Meadow Type (CUM1-1)
- Fresh – Moist Tallgrass Prairie Woodland Ecosite (TPW2)
- Oak Mineral Deciduous Swamp Ecosite (SWD1)

By 1978, significant residential and commercial development had occurred around the South Cameron Woodlot Area. Homes were also built along Randolph Avenue through the center of the core area. Portions of the land appeared to be active agriculture and large areas appeared to be mowed. A horse training oval was present in the northeast portion of the Woodlot Area. In areas not subject to disturbance, successional communities were developing (Figure 7B). Farm fields appeared to be expanding to the east and south outside of the site.

In 1992, ERCA described the core South Cameron Woodlot Area as a mosaic of deciduous woodland, swamp, thicket, old fencerows, and abandoned agricultural fields. The abandoned

agricultural land regenerated back into natural habitats, including tallgrass prairie, both extensive and diverse. In the eastern portion of the site, poorly drained soils contained Oak-dominated woodland and mesic-wet areas contained Swamp Pin Oak swamp. The northwest section of the site consisted of a young deciduous forest. A significant portion of the southwest section of the site contained late-successional fields dominated by native shrub species (ERCA 1992).

By 2008, the core South Cameron Woodlot Area was increasingly bound by residential development along all sides. Mature woodland in the east contained numerous large, lowland species, including Swamp Pin Oak, Swamp White Oak, and Bur-oak in the ephemeral pools. Old field meadows in the northeastern and southern/southwestern portions of the natural area succeeded into mature shrub thickets (Figure 7C). Relatively small remnant tallgrass prairie openings existed at the edges. ERCA re-evaluated the natural heritage characteristics of the South Cameron Woodlot Area at this time. A total of 167 plant species were documented, of which 26 species were considered rare in Essex Region and/or Ontario. No significant wildlife species were noted, but over 35 bird species were recorded, 12 of which were confirmed breeding on-site. Outside the core area, some lands within the eastern property began to naturalize at this time; however, there was still active disturbance occurring over much of the area.

By 2021, additional homes were built completely surrounding the South Cameron Woodlot Area. Vegetation mowing and tree clearing still occurs along the periphery of the core Woodlot Area where access from private property is unencumbered. Otherwise, much of the land comprising the interior of the natural area has remained largely undisturbed by anthropogenic causes, except for passive recreational use (Figure 7D). Although much of the eastern property is no longer actively disturbed, the area is dominated by invasive species and early successional woody species such as Cottonwoods and Maples.

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, and site-specific reports and lists indicate that South Cameron Woodlot Area and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around South Cameron Woodlot where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

330000 331000 332000 333000 4683000

TOTTEN ST
PRINCE RD
RANDOLPH AVE
ARCADIA ST
DOMINION BLVD
LONGFELLOW AVE
DOUGALL AVE
S CAMERON BLVD
O'LIBWAY ST
MALDEN RD
E C ROW EXPY

TPO2-1/CUM1-1
AG
TPW2/SWD1
South Cameron Woodlot Area
Anthropogenic Land
TPO2-1

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
AG	— Agriculture
CUM1-1	— Dry - Moist Old Field Meadow Type
SWD1	— Oak Mineral Deciduous Swamp Ecosite
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPW2	— Fresh - Moist Tallgrass Woodland Ecosite

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

0 100 200 400 600 Metres

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

South Cameron Woodlot Area 1948

PROJECT N°:OMGS21045 **FIGURE: 7A**

SCALE: 1:8,700 DATE: October 2023

330000 331000 332000 333000

4683000

TOTTEN ST
FELIX AVE
PRINCE RD
CHAPPELL AVE
HURON CHURCH RD
MALDEN RD
INDUSTRIAL DR
AMBASSADOR DR
CONTINENTAL AVE
PARRINGTON AVE
RANDOLPH AVE
Horse Training Oval
South Cameron Woodlot Area
OJIBWAY ST
OJIBWAY ST
NORTHWOOD ST
ARCADIA ST
DOMINION BLVD
LONGFELLOW AVE
South Cameron Woodlot Area
S CAMERON BLVD
DOUGALL AVE
CLEARY ST
E C ROW EXPY
MICHIGAN CENTRAL

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Agriculture
- Vegetation Clearing and/or Mowing

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

South Cameron Woodlot Area 1978

PROJECT N°:OMGS21045 **FIGURE: 7B**

SCALE: 1:8,700 DATE: October 2023

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4683000

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South Cameron Woodlot Area

South Cameron Woodlot Area

South Cameron Woodlot Area

REDWOOD AVE
DORCHESTER RD
FELIX AVE
PRINCE RD
WHITNEY AVE
MYRTLE AVE
ST JAMES ST
POPLAR AVE
CHAPPELL AVE
HILLCREST BLVD
ROSEMOUNT AVE
BLACKBURN CRT
HURON CHURCH RD
BETTS AVE
NORTHWAY AVE
TOTTEN ST
MANITOBA ST
DAYTON AVE
RANDOLPH AVE
RAMSGATE AVE
ARCADIA ST
KENORA ST
MOY AVE
CIRAV AVE
EVERIS AVE
MARK AVE
LONGFELLOW AVE
DOMINION BLVD
OUELLETTE AVE
PELISSIER ST
EUGENIE ST W
DOUCAL AVE
OUELLETTE PL
S CAMERON BLVD
PIAZZA ST
BONADONNA CRT
BALSAMO CRT
DANDURAND AVE
VIRGINIA PARK AVE
BRUGEAVE
PARKWAY DR
SUN VALLEY DR
MALDEN RD
BRUNET DR
INDUSTRIAL DR
AMBASSADOR DR
FOOL AVE
CONTINENTAL AVE
OLIVEWAY ST
ROSEBOROUGH BLVD
DOERICH ST
ST CLAIR AVE
CALIFORNIA AVE
O'LEARY ST
ASKIN AVE
ST PATRICKS AVE
RAWAN AVE
GLENWOOD AVE
NORTHWOOD ST
ALEXANDRA AVE
ACADEMY DR
E C ROW AVE W
E C ROW EXPY
ROCKWELL BLVD
RADISSON AVE
AVONDALE AVE
LABELLE ST

LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Agriculture
- Vegetation Clearing and/or Mowing

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

South Cameron Woodlot Area 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

PROJECT N°:OMGS21045 | **FIGURE: 7C**

SCALE: 1:8,700 | DATE: October 2023

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South Cameron Woodlot Area

South Cameron Woodlot Area

South Cameron Woodlot Area

REDWOOD AVE
DORCHESTER RD
FELIX AVE
PRINCE RD
WHITNEY AVE
MYRTLE AVE
ST JAMES ST
POPLAR AVE
CHAPPELL AVE
HILLCREST BLVD
ROSEMOUNT AVE
BLACKBURN CRT
BETTS AVE
TOTTEN ST
NORTHWAY AVE
PARTINGTON AVE
RANDOLPH AVE
ARCADIA ST
MANITOBA ST
KENORA ST
CURRY AVE
MCKAY AVE
EVERTS AVE
MARK AVE
OJIBWAY ST
PIAZZA ST
BONADONNA CRT
BALSAMO CRT
LONGFELLOW AVE
DOMINION BLVD
VIRGINIA PARK AVE
DOBRICH ST
S CAMERON BLVD
PELISSIER ST
QUELLETTE AVE
EUGENIE ST W
DOUGALL AVE
QUELLETTE PL
NORTHWOOD ST
BRUCE AVE
ALEXANDRA AVE
ACADEMY DR
DANDURAND AVE
E C ROW AVE W
E C ROW EXPY
ROCKWELL BLVD
RADISSON AVE
AVONDALE AVE
LABELLE ST
PARKWAY DR
SUN VALLEY DR
BRUNET DR
MALDEN RD
INDUSTRIAL DR
AMBASSADOR DR
POOL AVE
HURON CHURCH RD
CONTINENTAL AVE
DAYTON AVE
ROYEBOROUGH BLVD
CLEARY ST
CLENWOOD AVE
RANKIN AVE
ST PATRICKS AVE
ASKIN AVE
CALIFORNIA AVE
ST CLAIR AVE

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

South Cameron Woodlot Area 2021

PROJECT N°:OMGS21045 **FIGURE: 7D**

SCALE: 1:8,700 DATE: October 2023

3.3.7 OJIBWAY SHORES

Ojibway Shores is approximately 11 ha and is bound to the west by the Detroit River, to the east by Black Oak Heritage Park, to the south by the Morterm Limited port terminal facility, and to the north by construction of the new Canadian Inspection Plaza and Gordie Howe Bridge (Figure 1). Ojibway Shores is owned by Parks Canada (April 2023) and contains approximately 500 linear meters of natural shoreline, representing the last remaining stretch of undeveloped shoreline in the City of Windsor.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the many changes that have occurred in land use along the Detroit River shoreline in the vicinity of Ojibway Shores, from early agricultural fields and farmsteads to residential development and industrial uses (Figures 8A, 8B and 8C).

In 1948, the land around Ojibway Shores was primarily undeveloped, with some agriculture present to the north and the port/barge terminal present to the south. There was very little disturbance visible within the boundaries of the property, other than a dirt/gravel access road that bisected the site and one that ran south through the site (Figure 8A). There was one relatively small area of vegetation clearing. Given the natural state of the land at this time, Ojibway Shores was most likely a combination of Fresh – Moist Tallgrass Prairie Type (TPO2-1) in the southern portion of the site and a drier woodland community representing a Dry Tallgrass Woodland Ecosite (TPW1) in the northern portion of the site (Figure 8A).

By 1978, portions of the tallgrass prairie had succeeded to a young forest and the existing woodland had matured and expanded in canopy cover. A significant vegetation disturbance, likely from fill placement along the shoreline, occurred over half of the site. There was also construction of a jetty (created by fill placement in the Detroit River) and a pond in the southwest corner. Informal trails can be seen accessing the shoreline in the aerial image (Figure 8B). Outside Ojibway Shores, residential development occurred to the north, agriculture was still present in adjacent portions of Black Oak Heritage Park, and the port terminal and other industrial facilities were developed to the south (Figure 8B).

Ojibway Shores was first examined as a candidate natural heritage site by ERCA in 1992. The results of their field evaluation indicated the property was comprised of a young woodland dominated by pioneer tree species such as Maples, Cottonwoods and Elms. The southern portion of the site was mesic and contained a Poplar-Elm dominated swamp. Open habitat was described as early successional, with a variety of native and non-native forbs and grasses. SAR and provincially rare species included Field Thistle (*Cirsium discolor*), Tall Tickseed (*Coreopsis tripteris*), Dense Blazing-star (*Liatris spicata*) and Giant Ironweed.

By 2008, Ojibway Shores was almost entirely forest and woodland habitat. There were a few relatively small openings where grasses and forbs appear dominant, however trails were also clearly visible through these areas and throughout the property (Figure 8C). Unauthorized access to Ojibway Shores was through Black Oak Heritage Park where trails are clearly visible on aerial images at this time (Figure 3C).

In 2017, ERCA and the Essex County Field Naturalists Club revisited Ojibway Shores to undertake follow-up surveys to the 1992 natural heritage evaluation. Several important ecological characteristics and conditions were noted. Anthropogenic disturbance was not a major factor affecting vegetation or wildlife, only the persistence of unauthorized trails was noted. All other disturbance factors were natural (i.e. windthrow, insect and disease outbreaks, etc.). A high number of different plant communities were documented (8 in total; 1 considered provincially significant) which reflected the varied micro-topography, soils, and hydrology across the site. Over 260 plant species were identified, including 13 listed as provincially rare and/or SAR. Another 293 fauna species were identified, including 15 listed as provincially rare and/or SAR (mostly terrestrial insects and birds). Ojibway Shores was determined to meet nine out of 10 significant natural heritage features/criteria and was acknowledged to be an important ecological link in the chain of natural areas across Windsor, from the Detroit River to Oakwood Park (Gardener-Costa et al. 2017).

Today, Ojibway Shores remains in a natural state (Figure 8D). The shoreline and improved Broadway Drain to the north (due to construction of the Gordie Howe Bridge) provide important movement corridors, nesting habitat and overwintering habitat within the site. The complexity of vegetation communities also provides habitat for a wide diversity of resident wildlife, as well as a significant number of migratory species.

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, and site-specific reports and lists indicate that Ojibway Shores and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Ojibway Shores where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

327000

TPW1

Ojibway Shores

TPO2-1

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPW1	— Dry - Fresh Oak Tallgrass Woodland Ecosite

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

0 100 200 Metres

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Shores 1948

PROJECT N°:OMGS21045 **FIGURE: 8A**

SCALE: 1:2,300 DATE: October 2023

327000

Ojibway Shores

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LEGEND

- Natural Heritage Review Boundary
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Shores 1978

PROJECT N°:OMGS21045 | **FIGURE: 8B**

SCALE: 1:2,300 | DATE: October 2023

327000

Ojibway Shores

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LEGEND

Natural Heritage Review Boundary

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Shores 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

PROJECT N°:OMGS21045 | **FIGURE: 8C**

SCALE: 1:2,300 | DATE: October 2023

0 100 200 Metres

327000

BROADWAY ST

Ojibway
Shores

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LEGEND

Natural Heritage Review Boundary

Rail

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Shores 2021

PROJECT N°:OMGS21045 | **FIGURE: 8D**

SCALE: 1:2,300 | DATE: October 2023

3.3.8 OJIBWAY PRAIRIE PROVINCIAL NATURE RESERVE

The Ojibway Prairie Provincial Nature Reserve (the "Nature Reserve") is approximately 140 ha and bound by Matchett Road to the west, Malden Road to the east, Sprucewood Avenue to the south, and Tallgrass Prairie Heritage Park Area to the north (Figure 1). Although tallgrass prairie ecosystems had been described historically by other botanists that visited the area, it wasn't until Dr. Paul Maycock visited in 1969 that the ecological significance of the habitat was brought to the attention of the City, provincial government, and property owner (Morton Salt Co. of Canada). Over the following years, many individuals and organizations in both Ontario and Michigan petitioned the provincial government to protect the site. In 1973, with support from the Nature Conservancy of Canada, acquisitions for the Ojibway Prairie Provincial Nature Reserve began. On August 30, 1977, a 65-ha portion of tallgrass habitat was legislated under the Provincial Parks Act. Acquisitions continued after this time and the Nature Reserve remains one of the largest protected tracts of native tallgrass prairie, savannah and woodland in Ontario.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the land use changes that have occurred in and around the Nature Reserve, from early agricultural fields and farmsteads to residential development. Despite these changes, disturbance within the Nature Reserve has been relatively minimal over the decades (Figures 9A, 9B, and 9C).

In 1948, the land in and around the Nature Reserve was either undisturbed or agricultural fields and farmsteads. Agricultural activity stemmed primarily from farmsteads along Malden Road, although some fields appeared to be less intensely disturbed than others. Turkey Creek flowed through the southeastern portion of the site (Figure 9A). Given the largely undisturbed state of the land at this time, and review of current and historical natural heritage studies, the Ojibway Prairie Provincial Nature Reserve was most likely a combination of the following ELC communities:

- Fresh – Moist Tallgrass Prairie Type (TPO2-1)
- Fresh – Moist Tallgrass Savannah Ecosite (TPS2)
- Fresh – Moist Tallgrass Woodland Ecosite (TPW2)

In 1978, agricultural activity was still common along Malden Road but the large fields along Matchett Road were no longer farmed. Residential development had occurred to the east of the Nature Reserve and the Windsor Raceway complex was operational to the west (Figure 9B). Within the Nature Reserve, agricultural fields were present in the center of the site. Old fields, open tallgrass prairie and savannah ecosystems were present throughout most of the site, with exception of a forest community that developed in the southeastern portion of the site. There were also two areas of vegetation disturbance in the center of the Nature Reserve from sand and topsoil removal.

In 1979, the City of Windsor and others conducted the first preliminary life sciences inventory of the Nature Reserve and surrounding area (Pratt 1979). Most plant species found in recently disturbed areas were typical of old field sites, with some early successional tallgrass prairie

species scattered throughout (e.g., common Asters and Goldenrods). Areas subject to less disturbance than the old fields contained a greater abundance and density of conservative prairie plants, including Tall Tickseed, Dense Blazing-star, Prairie Rosinweed (*Silphium terebinthinaceum*) and Stiff Goldenrod (*Solidago rigida*). Where the least historical disturbance had occurred, a mix of native grasses such as Yellow Indiangrass (*Sorghastrum nutans*), Big Bluestem (*Andropogon gerardii)* and Little Bluestem (*Schizachyrium scoparium*) co-existed with rare forbs such as Ohio Spiderwort (*Tradescantia ohiensis*), Field Thistle, Culver's Root, White Colicroot (*Aletris farinosa*), and Ironweed. There were relatively small areas succeeding from tallgrass prairie to shrub thicket. Both mesic Swamp Pin Oak and dry Black Oak savannah and woodland were present with native shrubs beginning to form thickets at the edges and in the understory. The first prescribed burn was conducted in the Nature Reserve in 1978 to help control woody plant succession and stimulate the tallgrass prairie plant community (Pratt 1979). Follow-up monitoring was conducted in the Ojibway Prairie Provincial Nature Reserve by Pratt in 1984-1985, 1990-1992 and 2008.

The Ministry of Natural Resources compiled two General Natural Areas Reports for the Ojibway Provincial Prairie Nature Reserve from studies completed by Pratt (1979) and subsequent updates from Ministry staff (MNRF 2021a and 2021b). In the reports, the Nature Reserve was described as containing extensive areas of tallgrass prairie, oak savannah and woodland, successional forb prairies and other community types. Prairie associations occurred in wet-mesic to dry-mesic areas. Where savannahs and woodlands occurred, Swamp Pin Oak was the dominant tree species, with Black Oak and White Oak (*Quercus alba)* present on dry sandy ridges (e.g., woodland comprising the northwest corner of the Nature Reserve).

In 2002, Ontario Parks completed the Ojibway Prairie Park Management Plan to further the province's objectives to protect and perpetuate the tallgrass prairie and oak savannah vegetation communities. An integrated ecosystem management approach was described for the Nature Reserve, including prescribed fire, control of exotic species, seed collection and monitoring of rare species (Ontario Parks 2002). The province conducted eight prescribed burns in the Nature Reserve between 1978 and 1993, and again in 2003.

By 2008, the Ojibway Prairie Provincial Nature Reserve was in a natural state. Only a few small areas of encroachment occurred from residences along Malden Road. Otherwise, the Nature Reserve was maintained as tallgrass prairie and savannah habitat through routine prescribed fire, with exception of the forest community in the southeastern portion of the site (dominated by Black Oak, Swamp Pin Oak and Pignut Hickory (*Carya glabra*)).

Today the Nature Reserve remains in a natural, undisturbed state (Figure 9D). There are a few recreational trails that allow for hiking and nature appreciation only. No cycling or motorized vehicle use is permitted. The City's Nature Centre located in adjacent Ojibway Park provides the educational and interpretive resources for Nature Reserve visitors.

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, rare species lists compiled for the Ojibway Prairie Complex (i.e., not site specific), and site-specific reports and lists indicate that the Ojibway Prairie Provincial Nature Reserve and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species

(including SAR) occur within and/or around Nature Reserve where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

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OJIBWAY PKY

TITCOMBE RD

ELGIN ST

MALDEN RD

RICKARD AVE

SPRUCEWOOD AVE

MATCHETT RD

TODD LANE

TURKEY CREEK

TPW2

TPO2-1

AG

TPO2-1

AG

TPO2-1

Ojibway Prairie
Provincial
Nature Reserve

TPS2

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification
- Watercourse

ELC Code	Desciption
AG	— Agriculture
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPS2	— Fresh - Moist Tallgrass Savannah Ecosite
TPW2	— Fresh - Moist Tallgrass Woodland Ecosite

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Prairie Provincial Nature Reserve 1948

PROJECT N°:OMGS21045 **FIGURE: 9A**

SCALE: 1:7,500 DATE: October 2023

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OJIBWAY PKY

WEAVER RD

MARIGOLD DR

SPRUCEWOOD AVE

MARCHETTI RD

KINGSLEY AVE

CAMEOS CRES

ABBOTT ST

ORFORD ST

Ojibway Prairie
Provincial
Nature Reserve

KENT ST

ELGIN ST

MALDEN RD

LANSING ST

REDDOCK AVE

TURKEY CREEK (GRAND MARAIS DRAIN)

TODD LANE

3RD ST

4TH ST

5TH ST

ELMDALE AVE

HASTINGS ST

WAYNE ST

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Agriculture
- Vegetation Clearing and/or Mowing
- Municipal Drain
- Rail

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Prairie Provincial Nature Reserve 1978

PROJECT N°:OMGS21045 | **FIGURE: 9B**

SCALE: 1:7,500 | DATE: October 2023

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OJIBWAY PKY

WEAVER RD

MARIGOLD DR

SPRUCEWOOD AVE

MATCHETT RD

KINGSLEY AVE

CAMEOS CRES

CONTE CRES

CAMDEN ST

ABBOTT ST

ORFORD ST

Ojibway Prairie
Provincial
Nature Reserve

TITCOMBE RD

KENT ST

ELGIN ST

MALDEN RD

LANSING ST

REDDOCK AVE

TURKEY CREEK (GRAND MARAIS DRAIN)

3RD ST

4TH ST

5TH ST

TODD LANE

ELMDALE AVE

HASTINGS ST

WAYNE ST

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LEGEND

- Natural Heritage Review Boundary
- Vegetation Clearing and/or Mowing
- Municipal Drain
- Rail

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Prairie Provincial Nature Reserve 2008

PROJECT N°:OMGS21045 | **FIGURE: 9C**

SCALE: 1:7,500 | DATE: October 2023

328000

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4681000

4680000

OJIBWAY PKY

WEAVER RD

MARIGOLD DR

SPRUCEWOOD AVE

MATCHETT RD

KINGSLEY AVE

CAMEOS CRES

CONTE CRES

CAMDEN ST

ABBOTT ST

ORFORD ST

TITCOMBE RD

KENT ST

ELGIN ST

MALDEN RD

LANSING ST

REDDOCK AVE

TURKEY CREEK (GRAND MARAIS DRAIN)

TODD LANE

3RD ST

4TH ST

5TH ST

ELMDALE AVE

HASTINGS ST

WAYNE ST

Ojibway Prairie Provincial Nature Reserve

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LEGEND

- Natural Heritage Review Boundary
- Vegetation Clearing and/or Mowing
- Municipal Drain
- Rail

0 100 200 400 600 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Ojibway Prairie Provincial Nature Reserve 2021

PROJECT N^{O}:OMGS21045 | **FIGURE: 9D**

SCALE: 1:7,500 | DATE: October 2023

3.3.9 MALDEN PARK

Malden Park is approximately 66 ha and is bound by Malden Road to the east, Matchett Road to the west, and E.C. Row Expressway to the south. Malden Park was acquired by the City in 1956 and was a City-owned and operated landfill for the disposal of domestic and industrial waste until 1973. Between 1973 and 1993, the landfill was used for the disposal of earth or rock fill until it was formally closed. With assistance from the National Infrastructure Program in 1994, the City's Department of Parks and Recreation assumed responsibility for converting the former landfill into a public park.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the history of disturbance on the site, followed by more recent development of recreational uses and naturalization of the land within the Park (Figures 10A, 10B, and 10C).

In 1948, the land surrounding Malden Park appeared to be mostly natural with some active agricultural fields present (Figure 10A). Within the Park, land was almost entirely undisturbed with exception of informal dirt roads or tracks and vegetation clearing in two areas. Given the general lack of tree or shrub cover over much of the land, Malden Park was most likely a combination of the Fresh – Moist Tallgrass Prairie Type (TPO2-1) and Fresh – Moist Tallgrass Savannah Ecosite (TPS2). A Meadow Marsh (MAM) and other low-lying mesic areas can also be seen on the aerial imagery.

In 1978, Malden Park was extensively disturbed by landfill activities. By this time, the landfill had been in operation for about 20 years. There were two wooded areas that remained undisturbed, a relatively small remnant in the northeast portion of the Park and a larger remnant in the southeast portion of the Park (Figure 10B). Land surrounding the Park was being developed for industrial, residential, and agricultural purposes. Construction of the E.C. Row Expressway, which would eventually border the southern portion of Malden Park was underway (i.e., construction occurred from 1971 to 1983).

Toward the end of landfill operations in 1992, ERCA included the southeast section of Malden Park in its candidate natural heritage biological inventory (ERCA 1992). ERCA noted that the remnant woodland possessed good natural understory despite decades of adjacent disturbance. The woodland was characterized as a diverse upland Black Oak community and a deciduous, wet-mesic lowland community. An undisturbed grassy meadow north of the southeastern woodland contained tallgrass prairie indictor species such as Giant Ironweed, Tall Tickseed, and Dense Blazing-star. Other open areas that were subjected to landfill operations were very weedy. A pond in the south section of the Park was surrounded by invasive European Reed (*Phragmites australis ssp. australis*), Box Elder (*Acer negundo*) and Eastern Cottonwood (*Populus deltoides*).

Several years later in 1996, the City began developing the public amenities described in the Park's Master Plan, including the Malden Park Visitor's Centre (opened in 1998), a new tobogganing hill, skating, lighting and creation of a trail system that linked the ponds (i.e. stormwater management ponds) and hills. Other open areas of the Park that were previously disturbed were to be naturalized.

By 2008, Malden Park was surrounded by residential and industrial development and the E.C. Row Expressway to the south. Within the Park, the Visitor's Centre, parking lots, ponds, and hiking/biking trails were open to the public (Figure 10C). The City of Windsor operated their Parks Yard in the southwest corner. There were also small brine wells established by Windsor Salt Ltd. in the mowed field north of the Parks facility. Other areas of Malden Park continued to undergo naturalization, supported by tree planting undertaken by the City and ERCA.

Today Malden Park is used by the public for a variety of active and passive recreational purposes. Windsor Trail winds through the Park connecting it to other trails throughout the City. The Park also routinely hosts shows and special events. Planted trees have matured and natural succession has resulted in additional tree, shrub, and grass cover (Figure 10D). Most recently, the City Council approved entering into a licensing agreement with Windsor Salt Ltd. for the placement of additional brine wells. The company owns the mineral rights beneath the Park, although the City owns the property. The licensing agreement would include environmental mitigation agreed upon through consultation with the City, as well as other terms and conditions indicated in provincial regulatory permits.

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, and site-specific reports and lists indicate that Malden Park and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Malden Park where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

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TPS2

TPO2-1

TPS2

Malden Park

MAM

MATCHETT RD

MALDEN RD

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
MAM	— Meadow Marsh
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPS2	— Fresh - Moist Tallgrass Savannah Ecosite

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

0 100 200 400 Metres

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Malden Park
1948

PROJECT N^{O}:OMGS21045 | **FIGURE: 10A**

SCALE: 1:5,600 | DATE: October 2023

329000

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4683000

CARMICHAEL RD

MAICHETT RD

CHAPPELL AVE

MYRTLE AVE

WHITNEY AVE

GREENVIEW CRES

SUN VALLEY DR

MALDEN RD

HURON CHURCH RD

AMBASSADOR DR

N DUSTRIAL DR

CONTINENTAL AVE

4th St

Malden Park

Malden Landfill

S:\Gis\Projects\MM\22104012_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_1978_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Landfill Operations

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Malden Park 1978

PROJECT N^{O}:OMGS21045 | **FIGURE: 10B**

SCALE: 1:5,600 | DATE: October 2023

329000

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4683000

CARMICHAEL RD

MARCHETT RD

Malden Park

E C ROW EXPY

HWY 401

WALKLEY AVE

GREENVIEW CRES

MYRTLE AVE

CHAPPELL AVE

POPLAR AVE

HILLCREST BLVD

ROSEMOUNT AVE

BLACKBURN CRT

SUNVALLEY DR

PARKWAY DR

MALDEN RD

BRUNET DR

INDUSTRIAL DR

MANITOBA ST

DAYTON AVE

HURON CHURCH RD

AMBASSADOR DR

POOL AVE

CONTINENTAL AVE

4TH ST

S:\Gis\Projects\IM\M2210401 2_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_2008_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Malden Park 2008

PROJECT N°:OMGS21045 | **FIGURE: 10C**

SCALE: 1:5,600 | DATE: October 2023

329000

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4683000

CARMICHAEL RD

MATCHETT RD

WHITNEY AVE

MYRTLE AVE

CHAPPELL AVE

POPLAR AVE

HILLCREST BLVD

ROSEMOUNT AVE

BLACKBURN CRT

GREENVIEW CRES

PARKWAY DR

SUN VALLEY DR

MALDEN RD

BRUNET DR

Malden Park

HWY 401

E C ROW EXPY

MANITOBA ST

NORTHWAY AVE

DAYTONA AVE

HURON CHURCH RD

AMBASSADOR DR

POOL AVE

INDUSTRIAL DR

CONTINENTAL AVE

4TH ST

S:\Gis\Projects\MM\22104012_Windsor_UrbanParks\ArcGIS\Historic Mapping\HistoricAirPhotos_2021_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 400 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Malden Park 2021

PROJECT N°:OMGS21045 | **FIGURE: 10D**

SCALE: 1:5,600 | DATE: October 2023

3.3.10 ST. CLAIR COLLEGE PRAIRIE AND WOODS

The St. Clair College Prairie and Woods is located on the west side of St. Clair College campus. The property is surrounded by infastructure, with the College to the east, residential development to the north, and the Rt. Hon. Herb Gray Parkway and multi-use trail to the west/southwest. The natural area is approximately 17 ha and is currently owned by St. Clair College and others.

The St. Clair College Prairie and Woods has been through significant change since 1948 as it transitioned from agriculture, open tallgrass prairie, and woodland to mostly deciduous forest and thicket (Figures 11A to 11D). Although the area is still commonly referred to as a "prairie", it is primarily deciduous forest with only small pockets of prairie species present.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the land use changes and disturbances that have occurred in and around St. Clair College Prairie and Woods. In 1948, the site was surrounded by agricultural activity with a large portion of the southeast corner being farmed. The north and west portions of the property were open and likely contained Fresh – Moist Tallgrass Prairie Type (TPO2-1), while Fresh – Moist Tallgrass Woodland Ecosite (TPW2) likely comprised the center portion of the site (Figure 11A). Within the woodland ecosite, it appears the western half was more mature than the eastern half based on the canopy of individual trees.

By 1978, agricultural activity to the east of St. Clair College Prairie and Woods had been replaced by construction of the St. Clair College campus. Within the site, farming had ceased, and a few homes were built at the western edge along Highway 3. A small access road was established to accommodate a topsoil quarry in the northeast corner of the site. This quarry disturbed a portion of the tallgrass prairie that bordered the woodland. Areas not developed were maturing as evident from the development of the woodland canopy.

Remnant tallgrass prairie would have comprised the remaining openings and the woodland understory. Tallgrass prairie indicator species were also present in the retired agricultural fields. According to Pratt (1979), a significant population of rare Prairie Rosinweed was present in a disturbed, wet-mesic prairie in the southern portion of the site. The area was sampled by P. Maycock in 1975 and a total of 69 plant species were recorded. The dominant species, in addition to Prairie Rosinweed, included a variety of cool-season grasses, native forbs such as New England Aster (*Symphyotrichum novae-angliae*), Virginia Mountain-mint, and White Heath Aster (*Symphyotrichum ericoides),* and native Dogwoods (Pratt 1979).

By 2008, St. Clair College expanded its footprint to the east, with a paved roadway now bordering the southeast portion of the natural area. Lennon Drain along the northern boundary of the site was channelized to accommodate new residential development. At this time, very few areas of original tallgrass prairie remained (Figure 11C). ERCA reported the occurrence of tallgrass prairie indicators in the old agricultural fields in the south and in small open areas in the northeast corner. Otherwise, the site was composed of upland and lowland forest communities and shrub thickets (ERCA 2008). The upland and lowland communities occurred along variations in terrain that had resulted from post-glacial Lake Rouge (ERCA 2008). The upland knolls supported forest dominated by Black Oak, White Oak, Red Maple,

and Shagbark Hickory (*Carya ovata*). The forested swales were dominated by Swamp Pin Oak, Swamp White Oak, Bur-oak and White Elm. The shrub thickets were dominated by native Gray Dogwood (*Cornus racemosa*).

Today, the St. Clair College Prairie and Woods is largely undisturbed and unmanaged. The homes that were present along Highway 3 were demolished as part of Parkway construction. Woody plant succession continues to advance in the southern portion of the property, which is now dominated by small trees and shrubs. The rest of the site is almost entirely deciduous forest and swamp habitat (Figure 11D).

A review of secondary source information from the NHIC, on-line databases, wildlife atlases, and site-specific reports and lists indicate that St. Clair College Prairie and Woods and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around the property where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

333000

4679000

TPO2-1

St. Clair College
Prairie and Woods

TPW2

TPO2-1

AG

AG

HWY 3

HURON CHURCH LINE RD

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
AG	— Agriculture
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPW2	— Fresh - Moist Tallgrass Woodland Ecosite

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

0 100 200 Metres

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

St. Clair College Prairie and Woods 1948

PROJECT N°:OMGS21045 | **FIGURE: 11A**

SCALE: 1:2,900 | DATE: October 2023

333000

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HWY 3

St. Clair College
Prairie and Woods

HURON CHURCH LINE RD

BROOKLYN AVE

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

St. Clair College Prairie and Woods 1978

PROJECT N°:OMGS21045 | **FIGURE: 11B**

SCALE: 1:2,900 | DATE: October 2023

333000

4679000

DAYTONA AVE
MARGURET CT
NORTHWAY AVE
VILLA BORGHESE CRT
VILLA BORGHESE DR
BORGELLI DR
ORA ST
SANTO DR
HWY 3
BRIDGEWAY BLVD
HURON CHURCH LINE RD
BROOKLYN AVE

St. Clair College
Prairie and Woods

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

St. Clair College Prairie and Woods 2008

PROJECT N°:OMGS21045 | **FIGURE: 11C**

SCALE: 1:2,900 | DATE: October 2023

333000

4679000

DAYTONA AVE
MARGURET ST
NORTHWAY AVE
VILLA BORGHESSE CRT
VILLA BORGHESSE DR
BORRELLI DR
ORA ST
SAMO DR
HWY 3
HWY 401
HURON CHURCH LINE RD
BRIDGEWAY BLVD
BROOKLYN AVE

St. Clair College
Prairie and Woods

S:\Gis\Projects\IMM22104012_Windsor_UrbanParksvArcGIS\Historic Mapping\HistoricAirPhotos_2021_V2.mxd

LEGEND

- Natural Heritage Review Boundary
- Infrastructure

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

St. Clair College Prairie and Woods 2021

PROJECT N°:OMGS21045 | **FIGURE: 11D**

SCALE: 1:2,900 | DATE: October 2023

3.3.11 CHAPPUS NATURAL AREA

The Chappus Natural Area is approximately 46 ha located north of Armanda Street, east of Matchett Road, west of Malden Road, and south of E.C. Row Expressway (Figure 1). The property is comprised of restored tallgrass prairie, Black Oak woodland, deciduous swamp, and successional forest communities. A majority of the site was acquired by MTO as part of Rt. Hon. Herb Gray Parkway construction and is protected and restored as habitat for SAR plants and snakes. The site is routinely managed (i.e., woody plant control and prescribed burns) and there are ongoing plant and wildlife studies conducted by MTO and their consultants in accordance with ESA permit requirements. The results of these studies are not publicly available; therefore, data on the natural heritage values associated with this property are limited at this time.

A review of the historical aerial images from 1948, 1978, and 2008 illustrates the land use changes and disturbances that have occurred in and around the Chappus Natural Area. Disturbance to the interior of the site was primarily due to agricultural activity, with residential development occurring along Malden and Matchett Roads and Armanda Street. The entire property was likely comprised of open tallgrass prairie before it was converted to agricultural uses and later, back to restored native communities (Figures 12A to 12D).

In 1948, most of the interior habitat in the Chappus Natural Area was relatively undisturbed while large agricultural fields were present at the edges of the site along Malden and Matchett Roads. A few farmsteads were also present along Armanda Street to the south (Figure 12A). Based on the imagery and review of publicly available natural heritage information, the Chappus Natural Area most likely consisted of Fresh – Moist Tallgrass Prairie Type (TPO2-1) and Fresh – Moist Tallgrass Savannah Ecosite (TPS2).

By 1978, agricultural activity had expanded through the interior of the site, with most of the open habitat and remnant savannah being cleared and actively farmed. Areas between the agricultural fields that were not actively used showed signs of woody plant succession, with many trees and shrubs now visible in those areas. Residential development also expanded at the property boundaries as larger homes replaced the early farmsteads along Armanda Street, Malden Road and Matchett Road (Figure 12B).

By 2008, agricultural activity across the property had ceased and a majority of the area was undergoing natural succession (Figure 12C). There was new residential development that extended into the site from Matchett Road. Disturbance created from planned additional housing was evident along the newly paved extension of Chappus Street and the road base along Waterloo Avenue. Some homeowners were routinely encroaching into natural areas by mowing beyond their property boundaries. Further, trails and tracks throughout the natural area were known to be used by people on motorized vehicles. At this time, the property had also been subject to natural heritage studies as part of the environmental approvals process for construction of the Parkway project (URS 2008; Canada-United States-Ontario-Michigan Border Transportation Partnership 2008). The results of those studies indicated significant natural heritage features, including provincially rare plants and plant communities, provincially significant wetlands, significant wildlife habitat and many SAR occurrences.

Between 2008 and 2021, portions of the Chappus Natural Area were acquired by the MTO and protected from further development. Homes and other built structures within the site boundary were demolished and the paved portion of Chappus Street was removed. These developed areas were actively restored with native tallgrass prairie species and routine invasive species control and prescribed burns. Other areas that were previously farmed and undergoing succession to shrub thicket were cleared of woody species (Figure 12D). Woody brush removal first occurred in 2010 across much of the Chappus Natural Area, followed by prescribed burns in spring 2012. Over the next 10 years, invasive plant control, woody plant removal and prescribed burns were conducted annually to maintain the rare plant communities and high-quality habitat for SAR. Floristic quality assessments and extensive SAR studies were also completed on the lands, in accordance with the provincial ESA permits obtained by MTO for Parkway construction.

Today Chappus Natural Area is still owned and actively managed by the MTO. A review of secondary source information from the NHIC, on-line databases, wildlife atlases, and available reports and lists indicate that the Chappus Natural Area and adjacent lands contain a large diversity of rare flora and fauna. Many provincially rare species (including SAR) occur within and/or around Chappus Natural Area where suitable habitat exists. These species, their status, and corresponding citations are provided in Appendix A.

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330000

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MATCHETT RD

MALDEN RD

BROADWAY ST

CHAPPUS ST

SPRING GARDEN RD

ARMANDA ST

AG

Chappus Natural Area

TPS2

TPO2-1

CUM1-1

AG

AG

TPO2-1

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LEGEND

- Natural Heritage Review Boundary
- Ecological Land Classification

ELC Code	Desciption
AG	— Agriculture
CUM1-1	— Dry - Moist Old Field Meadow Type
TPO2-1	— Fresh - Moist Tallgrass Prairie Type
TPS2	— Fresh - Moist Tallgrass Savannah Ecosite

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

0 100 200 Metres

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Chappus Natural Area 1948

PROJECT N°:OMGS21045 | **FIGURE: 12A**

SCALE: 1:3,500 | DATE: October 2023

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Chappus Natural Area

MACHETT RD

BROADWAY ST

ARNANDA ST

WERNER AVE

WENTWORTH ST

CHAPPUS ST

MALDEN RD

CONTINENTAL AVE

SPRING GARDEN RD

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Agriculture
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 1978

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Chappus Natural Area 1978

PROJECT N°:OMGS21045 | **FIGURE: 12B**

SCALE: 1:3,500 | DATE: October 2023

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CHAPPUS ST

WELLAND AVE

WATERLOO AVE

MATCHETT RD

BROADWAY ST

HWY 401

CONTINENTAL AVE

MALDEN RD

Chappus
Natural
Area

ARMANDA ST

WERNER AVE

WENTWORTH ST

SPRING GARDEN RD

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LEGEND

- Natural Heritage Review Boundary
- Infrastructure
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2023
- Imagery Obtained from Essex County, 2008

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

WSP

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Chappus Natural Area 2008

PROJECT N^{O}:OMGS21045 | **FIGURE: 12C**

SCALE: 1:3,500 | DATE: October 2023

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330000

4682000

CONTINENTAL AVE

HWY 401

E C ROW EXPY

CHAPPUS ST

Chappus
Natural
Area

MATCHETT RD

WATERLOO AVE

MALDEN RD

BROADWAY ST

ARMANDA ST

WERNER AVE

WENTWORTH ST

SPRING GARDEN RD

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LEGEND

- Natural Heritage Review Boundary
- Vegetation Clearing and/or Mowing

0 100 200 Metres

NOTES:
- Base data aquired from Land Information Ontario, 2021
- Imagery Obtained from Essex County, 2021

Datum: NAD83
Projection: UTM Zone 17N

N W E S

THE CITY OF WINDSOR ONTARIO, CANADA

HISTORICAL ELC AND NATURAL HERITAGE REVIEW

Chappus Natural Area 2021

PROJECT N^{O}:OMGS21045 | **FIGURE: 12D**

SCALE: 1:3,500 | DATE: October 2023

4 CONCLUSION

The results presented in this historical ELC and natural heritage desktop review represent the first task in a larger natural heritage assessment of environmentally significant areas for consideration in the Ojibway National Urban Park. In summer 2022, additional site-specific surveys were completed in selected natural areas to fill ecological information gaps, including current ELC mapping, amphibian and bat monitoring, and natural heritage policy considerations. Results of these recent studies were referred to in the preparation of this report to better inform the historical environmental descriptions and conclusions. Consultations with the City of Windsor naturalists and historical reports prepared by ERCA, the City of Windsor, the Ministry of Natural Resources and Forestry, and others were instrumental in providing the historical context described in this report. Overall, the results of this historical analysis indicate that despite the common environmental stressors of agricultural use, vegetation clearing and mowing, and successional processes, the City's natural areas continue to represent ecologically significant and diverse plant and wildlife habitats from a natural heritage perspective.

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Appendix A

Provincially Rare Species and Species at Risk

Appendix A1: Ojibway Park

Ojibway Park

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
Large-flowered Purple False Foxglove	*Agalinis purpurea var. purpurea*	S1				NHIC; Ojibway Nature Centre
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; Ojibway Nature Centre; iNaturalist
Slim-spike Threeawn Grass	*Aristida longespica*	S2				NHIC; Ojibway Nature Centre
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC; Ojibway Nature Centre
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Ojibway Nature Centre; iNaturalist
Green Cornet Milkweed	*Asclepias viridiflora*	S2				NHIC; Ojibway Nature Centre
Pawpaw	*Asimina triloba*	S3				NHIC; Ojibway Nature Centre
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC; Ojibway Nature Centre
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC; Ojibway Nature Centre; iNaturalist
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC; Ojibway Nature Centre
Bicknell's Sedge	*Carex bicknellii*	S2				NHIC; Ojibway Nature Centre
Field Sedge	*Carex conoidea*	S3				NHIC; Ojibway Nature Centre
Mead's Sedge	*Carex meadii*	S2				NHIC; Ojibway Nature Centre
Prairie Straw Sedge	*Carex suberecta*	S2				NHIC; Ojibway Nature Centre
Rigid Sedge	*Carex tetanica*	S3?				NHIC; Ojibway Nature Centre
Pignut Hickory	*Carya glabra*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021b
Shellbark Hickory	*Carya laciniosa*	S3				NHIC; Ojibway Nature Centre
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC; Ojibway Nature Centre
Spotted Wintergreen	*Chimaphila maculata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; Wood 2021b

Ojibway Park

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Field Thistle	*Cirsium discolor*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Ojibway Nature Centre; iNaturalist
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; Ojibway Nature Centre
Hazel Dodder	*Cuscuta coryli*	S1				NHIC; Ojibway Nature Centre
Commons' Panicgrass	*Dichanthelium commonsianum*	SH				NHIC; Ojibway Nature Centre
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC; Ojibway Nature Centre
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC; Ojibway Nature Centre
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC; Ojibway Nature Centre
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; Ojibway Nature Centre
Blue Ash	*Fraxinus quadrangulata*	S2?	THR	SC	THR	NHIC; Ojibway Nature Centre
Bowman's-root	*Gillenia trifoliata*	SX				NHIC; Ojibway Nature Centre
Kentucky Coffee-tree	*Gymnocladus dioicus*	S2	THR	THR	THR	iNaturalist
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC; Ojibway Nature Centre
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; Ojibway Nature Centre; iNaturalist
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC; Ojibway Nature Centre
Greater Poverty Rush	*Juncus anthelatus*	S1				NHIC; Ojibway Nature Centre
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Greene's Rush	*Juncus greenei*	S3				NHIC; Ojibway Nature Centre
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC; Ojibway Nature Centre
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC; Ojibway Nature Centre
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; Ojibway Nature Centre

Ojibway Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC; Ojibway Nature Centre
Slender Bush-clover	*Lespedeza virginica*	S1	END	END	END	NHIC; Ojibway Nature Centre; Wood 2021b
Rough Blazing-star	*Liatris aspera*	S2				NHIC; Ojibway Nature Centre
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021b
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; Ojibway Nature Centre; Wood 2021b
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC; Ojibway Nature Centre
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021b
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
American Lotus	*Nelumbo lutea*	S2S3				NHIC; Ojibway Nature Centre
Large Yellow Pond-lily	*Nuphar advena*	S3				NHIC; Ojibway Nature Centre
Black Gum	*Nyssa sylvatica*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021b
Biennial Gaura	*Oenothera gaura*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Meadow Evening-primrose	*Oenothera pilosella*	S2				NHIC; Ojibway Nature Centre
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC; Ojibway Nature Centre
Slender Paspalum	*Paspalum setaceum*	S2				NHIC; Ojibway Nature Centre
Cross-leaved Milkwort	*Polygala cruciata*	SX				NHIC
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; Ojibway Nature Centre
Whorled Milkwort	*Polygala verticillata*	S3?				NHIC; Ojibway Nature Centre
Slender Knotweed	*Polygonum tenue*	S2				NHIC; Ojibway Nature Centre

Ojibway Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Slender Mountain-mint	*Pycnanthemum tenuifolium*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC; Ojibway Nature Centre
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; Ojibway Nature Centre
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Cup Plant	*Silphium perfoliatum*	S2				NHIC; Ojibway Nature Centre
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; Ojibway Nature Centre; iNaturalist
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC; Ojibway Nature Centre
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC; Ojibway Nature Centre
Illinois Carrionflower	*Smilax illinoensis*	S2?				NHIC; Ojibway Nature Centre
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; Ojibway Nature Centre; iNaturalist
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC; Ojibway Nature Centre
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC; Ojibway Nature Centre
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC; Ojibway Nature Centre
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021b
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; Ojibway Nature Centre
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC; Ojibway Nature Centre
Wingstem	*Verbesina alternifolia*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Ojibway Nature Centre; iNaturalist; Pratt 1979; Wood 2021b
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; Ojibway Nature Centre; iNaturalist
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Ojibway Nature Centre; iNaturalist; Pratt 1979; Wood 2021b

Ojibway Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Northern Fox Grape	*Vitis labrusca*	S1				NHIC; Ojibway Nature Centre
Total[5]		91	14	12	12	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; iNaturalist
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird; Ojibway Nature Centre
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Great Egret	*Ardea alba*	S2B,S3M				ebird; Ojibway Nature Centre
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	ebird; Ojibway Nature Centre
Canvasback	*Aythya valisineria*	S1B,S3N, S4M				ebird
Redhead	*Aythya americana*	S2B,S4N				ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				NHIC; OBBA; Ojibway Nature Centre; ebird; iNaturalist
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Ojibway Nature Centre; iNaturalist
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird; Ojibway Nature Centre
Northern Bobwhite	*Colinus virginianus*	S1?	END	END	END	ebird; Ojibway Nature Centre
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird; Ojibway Nature Centre
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				iNaturalist
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	OBBA; ebird; Ojibway Nature Centre

Ojibway Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA, ebird; iNaturalist
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	OBBA, ebird, Ojibway Nature Centre
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		OBBA, ebird; Ojibway Nature Centre; iNaturalist
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird; Ojibway Nature Centre
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird; iNaturalist
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	ebird; Ojibway Nature Centre
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	NHIC; OBBA; ebird; Ojibway Nature Centre
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; Ojibway Nature Centre
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	NHIC; OBBA; ebird; Ojibway Nature Centre
Great Black-backed Gull	*Larus marinus*	S1B,S4N				ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	NHIC; OBBA; ebird; Ojibway Nature Centre
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird; Ojibway Nature Centre
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA
Fox Sparrow	*Passerella iliaca*	S5B,S3N				OBBA; ebird; iNaturalist
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird; iNaturalist
Horned Grebe	*Podiceps auritus*	S1B,S3N, S4M	SC	SC		ebird; Ojibway Nature Centre
Purple Martin	*Progne subis*	S3B				ebird; Ojibway Nature Centre
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird; Ojibway Nature Centre
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird; NHIC; Ojibway Nature Centre

Ojibway Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird; Ojibway Nature Centre
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				iNaturalist
Pine Warbler	*Setophaga pinus*	S5B,S3N				iNaturalist
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird; iNaturalist
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird; iNaturalist
Forster's Tern	*Sterna forsteri*	S3B				ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird; Ojibway Nature Centre
White-eyed Vireo	*Vireo griseus*	S1B				NHIC; Ojibway Nature Centre
White-crowned sparrow	*Zonotrichia leucophrys*	S5B,S3N				iNaturalist
Total[5]		42	24	22	23	
Reptiles and Ampibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre; iNaturalist
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; Ojibway Nature Centre; iNaturalist
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC; ORAA; Ojibway Nature Centre; K. Cedar 2023 (personal communication)
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre
Eastern Hog-nosed Snake	*Heterodon platirhinos*	S3	THR	THR	THR	ORAA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; Ojibway Nature Centre; K. Cedar 2023 (personal communication)
Massasauga (Carolinian population)	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC; Ojibway Nature Centre
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre

Ojibway Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; Ojibway Nature Centre; ORAA
Total[5]		7	9	8	8	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994; Ojibway Nature Centre
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994; Ojibway Nature Centre
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Orange-tipped Oakworm Moth	*Anisota senatoria*	S3				iNaturalist
Spiny Oakworm Moth	*Anisota stigma*	S2				iNaturalist
Spotted Apatelodes Moth	*Apatelodes torrefacta*	S3				iNaturalist
Unicorn Clubtail	*Arigomphus villosipes*	S3				iNaturalist
Hackberry Emperor	*Asterocampa celtis*	S3				NHIC; Ojibway Nature Centre; Butterfly Atlas; iNaturalist
Tawny Emperor	*Asterocampa clyton*	S3				NHIC; Ojibway Nature Centre; Butterfly Atlas; iNaturalist
Serene Underwing	*Catocala serena*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; Ojibway Nature Centre; iNaturalist
Walnut Caterpillar Moth	*Datana integerrima*	S3S4				iNaturalist
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Ivory-marked Borer	*Eburia quadrigeminata*	S3				iNaturalist
Azure Bluet	*Enallagma aspersum*	S4				NHIC

Ojibway Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Double-striped Bluet	*Enallagma basidens*	S3				NHIC; Ojibway Nature Centre
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC; Ojibway Nature Centre; iNaturalist
Sleepy Duskywing	*Erynnis brizo*	S1				NHIC; Butterfly Atlas; Ojibway Nature Centre
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas; Ojibway Nature Centre
Cobra Clubtail	*Gomphurus vastus*	S2				NHIC; Ojibway Nature Centre
Clymene Moth	*Haploa clymene*	S3S4				iNaturalist
Reversed Haploa Moth	*Haploa reversa*	S1	END			NHIC; iNaturalist
Giant Leopard Moth	*Hypercompe scribonia*	S3S4				iNaturalist
Paintedhand Mudbug	*Lacunicambarus polychromatus*	S1S2				NHIC; Ojibway Nature Centre
Painted Skimmer	*Libellula semifasciata*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Great Blue Skimmer	*Libellula vibrans*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Differential Grasshopper	*Melanoplus differentialis*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; Ojibway Nature Centre
Northern Mole Cricket	*Neocurtilla hexadactyla*	S2S3				NHIC; Ojibway Nature Centre; iNaturalist
Narrow-winged Tree Cricket	*Oecanthus niveus*	S3S4				iNaturalist
Faint-spotted Palthis Moth	*Palthis asopialis*	S3S4				iNaturalist
Red-lined Panopoda Moth	*Panopoda rufimargo*	S3S4				iNaturalist
A Potter Wasp	*Parancistrocerus perennis*	S2				NHIC; Ojibway Nature Centre
Proud Globelet	*Patera pennsylvanica*	S1	END	END	END	NHIC; Ojibway Nature Centre
Pronghorn Clubtail	*Phanogomphus graslinellus*	S3				NHIC; Ojibway Nature Centre
Moonseed Moth	*Plusiodonta compressipalpis*	S3S4				iNaturalist

Ojibway Park

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Skiff Moth	*Prolimacodes badia*	S3S4				iNaturalist
Common Sanddragon	*Progomphus obscurus*	S2				NHIC; Ojibway Nature Centre
False-foxglove Sun Moth	*Pyrrhia aurantiago*	S1	END			NHIC
Northern Bush Katydid	*Scudderia septentrionalis*	S3?				NHIC; Ojibway Nature Centre; iNaturalist
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC; Ojibway Nature Centre
Black Purseweb Tarantula	*Sphodros niger*	S3				NHIC; Ojibway Nature Centre
Common Sprague ia Moth	*Spragueia leo*	S2				iNaturalist
Elusive Clubtail	*Stylurus notatus*	S3				iNaturalist
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; Ojibway Nature Centre; iNaturalist
Globose Dome Snail	*Ventridens ligera*	S2				NHIC; Ojibway Nature Centre
Striped Whitelip	*Webbhelix multilineata*	S2S3	END			NHIC
Tiger Bee Fly	*Xenox tigrinus*	S3S4				iNaturalist
Total[5]		48	6	2	3	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A2: Black Oak Heritage Park

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; Ojibway Nature Centre
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Ojibway Nature Centre; Pratt 1979
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC; Ojibway Nature Centre
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; Sage Earth 2019; ERCA 1992; iNaturalist
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Ojibway Nature Centre; Sage Earth 2019
Green Cornet Milkweed	*Asclepias viridiflora*	S2				NHIC; Ojibway Nature Centre
Pawpaw	*Asimina triloba*	S3				NHIC; Ojibway Nature Centre
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC; Oldham 1983
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC; Ojibway Nature Centre; Oldham 1983
Trumpet Creeper	*Campsis radicans*	S2?				Sage Earth 2019
Closely-covered Sedge	*Carex albicans var. albicans*	S3				Sage Earth 2019
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Field Sedge	*Carex conoidea*	S3				NHIC; Ojibway Nature Centre
Fescue Sedge	*Carex festucacea*	S1				NHIC; Ojibway Nature Centre
Mead's Sedge	*Carex meadii*	S2				NHIC; Ojibway Nature Centre
Rigid Sedge	*Carex tetanica*	S3?				NHIC; Ojibway Nature Centre; Oldham 1983
Pignut Hickory	*Carya glabra*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; ERCA 1992; Sage Earth 2019
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC; Ojibway Nature Centre; Oldham 1983
Spotted Wintergreen	*Chimaphila maculata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre
Field Thistle	*Cirsium discolor*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; ERCA 1992; Sage Earth 2019
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Ojibway Nature Centre; Oldham 1983; Sage Earth 2019

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Field Dodder	*Cuscuta campestris*	S2				NHIC; Ojibway Nature Centre
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; Ojibway Nature Centre
Smooth-bracted Tick-trefoil	*Desmodium cuspidatum var. cuspidatum*	S3				Sage Earth 2019
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC; Ojibway Nature Centre
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; Ojibway Nature Centre
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; Ojibway Nature Centre; Sage Earth 2019
Blue Ash	*Fraxinus quadrangulata*	S2?	THR	SC	THR	NHIC; Ojibway Nature Centre
Black Ash	*Fraxinus nigra*	S4	THR			Sage Earth 2019
Biennial Gaura	*Gaura biennis*	S3				Sage Earth 2019
Honey Locust	*Gleditsia triacanthos*	S2				Sage Earth 2019
Kentucky Coffee-tree	*Gymnocladus dioicus*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC; Ojibway Nature Centre
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; Ojibway Nature Centre
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC; Ojibway Nature Centre
Greater Poverty Rush	*Juncus anthelatus*	S1				NHIC; Ojibway Nature Centre
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; Ojibway Nature Centre
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; Ojibway Nature Centre
Greene's Rush	*Juncus greenei*	S3				NHIC; Ojibway Nature Centre
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC; Ojibway Nature Centre
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC; Ojibway Nature Centre; Oldham 1983
Woodland Lettuce	*Lactuca floridana var. floridana*	S1S2				Sage Earth 2019
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; Ojibway Nature Centre
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC; Ojibway Nature Centre

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Slender Bush-clover	*Lespedeza virginica*	S1	END	END	END	NHIC; Ojibway Nature Centre
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; Sage Earth 2019
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; Ojibway Nature Centre; Pratt 1979; Oldham 1983; Sage Earth 2019
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC; Ojibway Nature Centre; Oldham 1983
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; Ojibway Nature Centre
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC; Ojibway Nature Centre
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC; Ojibway Nature Centre
Virginia Bugleweed	*Lycopus virginicus*	S3				Sage Earth 2019
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Sage Earth 2019
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
Woodland Satin Grass	*Muhlenbergia sylvatica var. sylvatica*	S2				Ojibway Nature Centre; Sage Earth 2019
American Lotus	*Nelumbo lutea*	S2S3				NHIC; Ojibway Nature Centre
Black Gum	*Nyssa sylvatica*	S3				NHIC; Ojibway Nature Centre
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC; Ojibway Nature Centre
Broadleaf Panic Grass	*Panicum clandestinum*	S2				Sage Earth 2019
Slender Paspalum	*Paspalum setaceum*	S2				NHIC; Ojibway Nature Centre; Sage Earth 2019
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; Ojibway Nature Centre
Whorled Milkwort	*Polygala verticillata*	S3?				NHIC; Ojibway Nature Centre
Erect Knotweed	*Polygonum erectum*	SH				NHIC; Ojibway Nature Centre
Slender Knotweed	*Polygonum tenue*	S2				NHIC; Ojibway Nature Centre
Slender Mountain-mint	*Pycnanthemum tenuifolium*	S3				NHIC; Ojibway Nature Centre
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; Sage Earth 2019
Shumard Oak	*Quercus shumardii*	S3	SC		SC	Ojibway Nature Centre; Sage Earth 2019

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Bristly Buttercup	*Ranunculus hispidus var. hispidus*	S3				Sage Earth 2019
Gray-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; Ojibway Nature Centre; Oldham 1983; iNaturalist
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; Ojibway Nature Centre; Sage Earth 2019
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; Ojibway Nature Centre
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; Ojibway Nature Centre
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC; Ojibway Nature Centre; Sage Earth 2019
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC; Ojibway Nature Centre; Sage Earth 2019
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; Ojibway Nature Centre; Sage Earth 2019
Eastern Stiff-leaved Goldenrod	*Solidago rigida ssp. rigida*	S3				NHIC; Ojibway Nature Centre
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC; Ojibway Nature Centre
Prairie Wedgegrass	*Sphenopholis obtusata*	S1				NHIC; Ojibway Nature Centre
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC; Ojibway Nature Centre
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC; Ojibway Nature Centre
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; iNaturalist; Ojibway Nature Centre; Sage Earth 2019
Wax-leaved Meadowrue	*Thalictrum revolutum*	S2				ERCA 1992; Sage Earth 2019
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; Ojibway Nature Centre; Oldham 1983
Wingstem	*Verbesina alternifolia*	S3				NHIC; Ojibway Nature Centre
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Ojibway Nature Centre; Oldham 1983; ERCA 1992
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; Ojibway Nature Centre; Sage Earth 2019; iNaturalist
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; ERCA 1992; Sage Earth 2019
Total[5]		87	15	12	13	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird; Ojibway Nature Centre
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Great Egret	*Ardea alba*	S2B,S3M				ebird; Ojibway Nature Centre
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	ebird; Ojibway Nature Centre
Redhead Duck	*Aythya americana*	S2B,S4N				ebird
Canvasback	*Aythya valisineria*	S1B,S4N				ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				NHIC; OBBA; ebird; FBMP 1988-1994; Ojibway Nature Centre; iNaturalist
Red-shouldered Hawk	*Buteo lineatus*	S4B,S2N				ebird
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Ojibway Nature Centre
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird; iNaturalist
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird; Ojibway Nature Centre
Northern Bobwhite	*Colinus virginianis*	S1?	END	END	END	ebird
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird; Ojibway Nature Centre
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	OBBA; ebird; Ojibway Nature Centre; FBMP 1988-1994; Sage Earth 2019; iNaturalist
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird; iNaturalist

Black Oak Heritage Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird; FBMP 1988-1994
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	ebird; Ojibway Nature Centre
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird; Ojibway Nature Centre; iNaturalist
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird; Ojibway Nature Centre
American Coot	*Fulica americana*	S3B,S4N				ebird
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird; FBMP 1988-1994
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	ebird; Ojibway Nature Centre; Sage Earth 2019
Barn Swallow	*Hirundo rustica*	S4B	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre; Gardner-Costa et al. 2017
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; FBMP 1988-1994; Ojibway Nature Centre; Sage Earth 2019
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	OBBA; ebird; Ojibway Nature Centre; K. Cedar 2023 (personal communication)
Lesser Black-backed Gull	*Larus fuscus*	S3N,S4M				ebird
Great Black-backed Gull	*Larus marinus*	S1B,S4N				ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	NHIC; OBBA; ebird; Ojibway Nature Centre; URS 2008
Black-crowned Night Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird
Ruddy Duck	*Oxyura jamaicensis*	S3B,S4N, S5M				ebird
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird; Ojibway Nature Centre
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird

Black Oak Heritage Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird
American White Pelican	*Pelecanus erythrorhynchos*	S3B,S4M			THR	ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird
Summer Tanager	*Piranga rubra*	S1M				ebird; FBMP 1998-1994
Horned Grebe	*Podiceps auratus*	S1B,S3N, S4M	SC	SC		ebird
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird
Purple Martin	*Progne subis*	S3B				ebird; Ojibway Nature Centre; FBMP 1988-1994; Sage Earth 2019
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird; Ojibway Nature Centre
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird; Ojibway Nature Centre; K. Cedar 2023 (personal communication)
Yellow-throated Warbler	*Setophaga dominica*	S1M				ebird
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird; iNaturalist
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird; iNaturalist
Foster's Tern	*Sterna forsteri*	S3B				ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird
Western Kingbird	*Tyrannus verticalis*	S1B				ebird

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird; Ojibway Nature Centre
White-eyed Vireo	*Vireo griseus*	S1B				NHIC; ebird; Ojibway Nature Centre
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird
Total[5]		57	24	22	24	
Reptiles and Amphibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; Ojibway Nature Centre
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; Ojibway Nature Centre; Sage Earth 2019
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC; ORAA; Ojibway Nature Centre
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre; Sage Earth 2019
Eastern Hog-nosed Snake	*Heterodon platirhinos*	S3	THR	THR	THR	ORAA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; Ojibway Nature Centre; Sage Earth 2019
Massasauga (Carolinian population)	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC; Ojibway Nature Centre
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	ORAA; Ojibway Nature Centre
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORAA; Ojibway Nature Centre
Total[5]		7	9	8	8	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994; Ojibway Nature Centre
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994; Ojibway Nature Centre
Total[5]		2	5	2	2	

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Fish						
Lake Sturgeon (Great Lakes - Upper St. Lawrence River population)	*Acipenser fulvescens pop. 3*	S2	THR		THR	NHIC
Channel Darter	*Percina copelandi pop. 1*	S1	END	END	SC	NHIC; DFO Aquatic SAR Map 2023
Total[5]		2	2	1	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Orange-tipped Oakworm Moth	*Anisota senatoria*	S3				iNaturalist
Gray Marvel Moth	*Anterastria teratophora*	S3S4				iNaturalist
A Bee Fly	*Anthrax argyropygus*	SH				NHIC; Ojibway Nature Centre
Spotted Apatelodes Moth	*Apatelodes torrefacta*	S3				iNaturalist
Hackberry Emperor	*Asterocampa celtis*	S3				NHIC; Butterfly Atlas; iNaturalist; Ojibway Nature Centre
Tawny Emperor	*Asterocampa clyton*	S3				NHIC; Butterfly Atlas; iNaturalist; Ojibway Nature Centre
Slowpoke Moth	*Athetis tarda*	S3				iNaturalist
Scarlet Underwing Moth	*Catocala coccinata*	S3S4				iNaturalist
Betrothed Underwing Moth	*Catocala innubens*	S3				iNaturalist
Inconsolable Underwing Moth	*Catocala insolabilis*	S3				iNaturalist
Clouded Underwing Moth	*Catocala nebulosa*	S2S3				iNaturalist
Obscure Underwing Moth	*Catocala obscura*	S3				iNaturalist
Oldwife Underwing Moth	*Catocala palaeogama*	S3				iNaturalist
Penitent Underwing Moth	*Catocala piatrix*	S3				iNaturalist
Yellow-Gray Underwing Moth	*Catocala retecta*	S3S4				iNaturalist
Serene Underwing	*Catocala serena*	S3				NHIC; Ojibway Nature Centre

Black Oak Heritage Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Youthful Underwing Moth	*Catocala subnata*	S3				iNaturalist
Widow Underwing Moth	*Catocala vidua*	S3S4				iNaturalist
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; iNaturalist; Sage Earth 2019
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC; Ojibway Nature Centre
Double-striped Bluet	*Enallagma basidens*	S3				NHIC; Ojibway Nature Centre
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC; Ojibway Nature Centre; Sage Earth 2019
Sleepy Duskywing	*Erynnis brizo*	S1				Butterfly Atlas; Ojibway Nature Centre
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				Butterfly Atlas; Ojibway Nature Centre
Cobra Clubtail	*Gomphurus vastus*	S2				NHIC; iNaturalist; Ojibway Nature Centre; Sage Earth 2019
Reversed Haploa Moth	*Haploa reversa*	S1	END			NHIC
Giant Leopard Moth	*Hypercompe scribonia*	S3S4				iNaturalist
Painted Skimmer	*Libellula semifasciata*	S3				NHIC; Ojibway Nature Centre
Great Blue Skimmer	*Libellula vibrans*	S1				NHIC; Ojibway Nature Centre
Eastern Pondmussel	*Ligumia nasuta*	S1	SC	SC	SC	NHIC
Differential Grasshopper	*Melanoplus differentialis*	S3				NHIC; Ojibway Nature Centre
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; Ojibway Nature Centre
Common Fungus Moth	*Metalectra discalis*	S3				iNaturalist
White-banded Crab Spider	*Misumenoides formosipes*	S2S3				iNaturalist
Northern Mole Cricket	*Neocurtilla hexadactyla*	S2S3				NHIC; Ojibway Nature Centre
Faint-spotted Palthis Moth	*Palthis asopialis*	S3S4				iNaturalist
Proud Globelet	*Patera pennsylvanica*	S1	END	END	END	NHIC; Ojibway Nature Centre

Black Oak Heritage Park

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Pronghorn Clubtail	*Phanogomphus graslinellus*	S3				NHIC; Ojibway Nature Centre
Moonseed Moth	*Plusiodonta compressipalpis*	S3S4				iNaturalist
Common Sanddragon	*Progomphus obscurus*	S2				NHIC; Ojibway Nature Centre
Skiff Moth	*Prolimacodes badia*	S3S4				iNaturalist
False Foxglove Sun Moth	*Pyrrhia aurantiago*	S1	END			NHIC
Discolored Renia Moth	*Renia discoloralis*	S3S4				iNaturalist
Northern Bush Katydid	*Scudderia septentrionalis*	S3?				NHIC; Ojibway Nature Centre
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC; Ojibway Nature Centre; iNaturalist
Black Purseweb Tarantula	*Sphodros niger*	S3				NHIC; Ojibway Nature Centre
Common Sprague's Moth	*Spragueia leo*	S2				iNaturalist
Elusive Clubtail	*Stylurus notatus*	S3				NHIC; iNaturalist; Ojibway Nature Centre; Sage Earth 2019
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; Ojibway Nature Centre
Globose Dome Snail	*Ventridens ligera*	S2				NHIC; iNaturalist; Ojibway Nature Centre
Total[5]		53	6	3	4	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A3: Tallgrass Prairie Heritage Park Area

Tallgrass Prairie Heritage Park Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
Large-flowered Purple False Foxglove	*Agalinis purpurea var. purpurea*	S1				NHIC; Ojibway Nature Centre; ERCA 2008; iNaturalist
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Slim-spike Three-awn Grass	*Aristida longespica*	S2				NHIC; Ojibway Nature Centre; ERCA 2008
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Pawpaw	*Asimina triloba*	S3				NHIC; Ojibway Nature Centre
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC; City of Windsor 2001; ERCA 2008; iNaturalist
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC; Ojibway Nature Centre; ERCA 2008
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC; Ojibway Nature Centre
Bicknell's Sedge	*Carex bicknellii*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Field Sedge	*Carex conoidea*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Mead's Sedge	*Carex meadii*	S2				NHIC; Ojibway Nature Centre; ERCA 2008
Few-fruited Sedge	*Carex oligocarpa*	S3				City of Windsor 2001; ERCA 2008
Prairie Straw Sedge	*Carex suberecta*	S2				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Rigid Sedge	*Carex tetanica*	S3?				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Pignut Hickory	*Carya glabra*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Shellbark Hickory	*Carya laciniosa*	S3				NHIC; Ojibway Nature Centre
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC; Ojibway Nature Centre; ERCA 2008

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Spotted Wintergreen	*Chimaphila maculata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre
Field Thistle	*Cirsium discolor*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Hoary Frostweed	*Crocanthemum bicknellii*	S3				City of Windsor 2001
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Hazel Dodder	*Cuscuta coryli*	S1				NHIC; Ojibway Nature Centre
Commons' Panicgrass	*Dichanthelium commonsianum*	SH				NHIC; Ojibway Nature Centre
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC; Ojibway Nature Centre; ERCA 2008
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC; Ojibway Nature Centre; ERCA 2008; ERCA 1992
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC; Ojibway Nature Centre
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; Ojibway Nature Centre; ERCA 2008; iNaturalist
Bowman's-root	*Gillenia trifoliata*	SX				NHIC; Ojibway Nature Centre
Honey Locust	*Gleditsia triaconthos*	S2				ERCA 2008; ERCA 1992
Kentucky Coffee-tree	*Gymnocladus dioicus*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Greater Poverty Rush	*Juncus anthelatus*	S1				NHIC; Ojibway Nature Centre
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Greene's Rush	*Juncus greenei*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Butternut	*Juglans cinerea*	S2	END	END	END	City of Windsor 2001; iNaturalist
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008
Slender Bush-clover	*Lespedeza virginica*	S1	END	END	END	NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008
Rough Blazing-star	*Liatris aspera*	S2				NHIC; Ojibway Nature Centre
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; Ojibway Nature Centre; ERCA 2008; iNaturalist
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC; Ojibway Nature Centre; ERCA 2008; iNaturalist
Virginia Water-horehound	*Lycopus virginicus*	S3				City of Windsor 2001; ERCA 2008
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
American Lotus	*Nelumbo lutea*	S2S3				NHIC; Ojibway Nature Centre
Large Yellow Pond-lily	*Nuphar advena*	S3				NHIC; Ojibway Nature Centre
Black Gum	*Nyssa sylvatica*	S3				NHIC; Ojibway Nature Centre; ERCA 2008
Biennial Gaura	*Oenothera gaura*	S2				ERCA 2008; iNaturalist

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Meadow Evening-primrose	*Oenothera pilosella*	S2				NHIC; Ojibway Nature Centre
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Streambank Groundsel	*Packera pseudaurea*	S2				NHIC; Ojibway Nature Centre
Slender Paspalum	*Paspalum setaceum*	S2				NHIC; Ojibway Nature Centre; ERCA 2008
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	S1	END	END	END	Ojibway Nature Centre; City of Windsor 2001
Cross-leaved Milkwort	*Polygala cruciata*	SX				NHIC
Pink Milkwort	*Polygala incarnata*	S1	END	END	END	NHIC; Ojibway Nature Centre
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Whorled Milkwort	*Polygala verticillata*	S3?				NHIC; Ojibway Nature Centre; iNaturalist
Slender Knotweed	*Polygonum tenue*	S2				NHIC; Ojibway Nature Centre; ERCA 2008
Slender Mountain-mint	*Pycnanthemum tenuifolium*	S3				NHIC; Ojibway Nature Centre
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC; Ojibway Nature Centre
Shumard Oak	*Quercus shumardii*	S3	SC		SC	NHIC; Ojibway Nature Centre; ERCA 2008
Bristly Buttercup	*Ranunculus hispidus*	S3				ERCA 2008
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Cup Plant	*Silphium perfoliatum*	S2				NHIC; Ojibway Nature Centre
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC; Ojibway Nature Centre
Illinois Carrionflower	*Smilax illinoensis*	S2?				NHIC; Ojibway Nature Centre

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC; Ojibway Nature Centre
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; ERCA 2008; iNaturalist
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; Ojibway Nature Centre; iNaturalist
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001; ERCA 2008; iNaturalist
Northern Fox Grape	*Vitis labrusca*	S1				NHIC; Ojibway Nature Centre
Total[5]		98	17	14	15	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird; Ojibway Nature Centre
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre
Great Egret	*Ardea alba*	S2B,S3M				ebird; Ojibway Nature Centre; ERCA 2008
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	ebird; Ojibway Nature Centre; ERCA 2008

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Redhead	*Aythya americana*	S2B,S4N				ebird
Canvasback	*Aythya valisineria*	S1B,S3N, S4M				ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				OBBA; ebird; iNaturalist; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Red-shouldered Hawk	*Buteo lineatus*	S4B,S2N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Ojibway Nature Centre
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird; Ojibway Nature Centre
Northern Bobwhite	*Colinus virginianus*	S1?	END	END	END	ebird; Ojibway Nature Centre; City of Windsor 2001
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird; Ojibway Nature Centre
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird; iNaturalist
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird; iNaturalist; ERCA 2008
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	ebird; Ojibway Nature Centre
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird; Ojibway Nature Centre

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird; Ojibway Nature Centre; ERCA 2008
American Coot	*Fulica americana*	S3B,S4N				ebird
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird; iNaturalist
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	ebird; iNaturalist; Ojibway Nature Centre
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	NHIC; OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; iNaturalist; Ojibway Nature Centre; ERCA 2008
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	NHIC; OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Lesser Black-backed Gull	*Larus fuscus*	S3N,S4M				ebird
Great Black-backed Gull	*Larus marinus*	S1B,S4N				ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird; iNaturalist; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird
Ruddy Duck	*Oxyura jamaicensis*	S3B,S4N, S5M				ebird
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird; Ojibway Nature Centre
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird
American White Pelican	*Pelecanus erythrorhynchos*	S3B,S4M			THR	ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird; ERCA 2008
Summer Tanager	*Piranga rubra*	S1M				ebird
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Purple Martin	*Progne subis*	S3B				ebird; Ojibway Nature Centre
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird; Ojibway Nature Centre
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird; Ojibway Nature Centre
Yellow-throated Warbler	*Setophaga dominica*	S1M				ebird
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird; iNaturalist; ERCA 2008
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird; ERCA 2008
Forster's Tern	*Sterna forsteri*	S3B				ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre; ERCA 2008
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird; Ojibway Nature Centre
White-eyed Vireo	*Vireo griseus*	S1B				ebird; Ojibway Nature Centre
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird
Total[5]		55	23	21	24	
Reptiles and Amphibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre; iNaturalist
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; Ojibway Nature Centre
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC; ORAA; Ojibway Nature Centre; iNaturalist
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Eastern Hog-nosed Snake	*Heterodon platirhinos*	S3	THR	THR	THR	ORAA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; Ojibway Nature Centre; ERCA 1992; City of Windsor 2001
Massasauga (Carolinian population)	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC; Ojibway Nature Centre; City of Windsor 2001
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	ORAA; Ojibway Nature Centre
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; Ojibway Nature Centre; ORAA; ERCA 1992; City of Windsor 2001
Total[5]		9	9	8	8	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994; Ojibway Nature Centre
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994; Ojibway Nature Centre
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Orange-tipped Oakworm Moth	*Anisota senatoria*	S3				iNaturalist
Spiny Oakworm Moth	*Anisota stigma*	S3				iNaturalist
Spotted Apatelodes Moth	*Apatelodes torrefacta*	S2				iNaturalist
A Bee Fly	*Anthrax argyropygus*	SH				NHIC; Ojibway Nature Centre
Lattice Orbweaver	*Araneus thaddeus*	S3S4				iNaturalist
Great Spreadwing	*Archilestes grandis*	S1				NHIC; Ojibway Nature Centre
Hackberry Emperor	*Asterocampa celtis*	S3				Butterfly Atlas; Ojibway Nature Centre
Tawny Emperor	*Asterocampa clyton*	S3				Butterfly Atlas; Ojibway Nature Centre

Tallgrass Prairie Heritage Park Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Rusty-patched Bumble Bee	*Bombus affinis*	S1	END	END	END	NHIC
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Walnut Caterpillar Moth	*Datana integerrima*	S3S4				iNaturalist
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC; Ojibway Nature Centre
Double-striped Bluet	*Enallagma basidens*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Sleepy Duskywing	*Erynnis brizo*	S1				NHIC; Butterfly Atlas; Ojibway Nature Centre
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Locust Underwing Moth	*Euparthenos nubilis*	S3S4				iNaturalist
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas; Ojibway Nature Centre
Pronghorn Clubtail	*Gomphus graslinellus*	S3				NHIC; City of Windsor 2001; ERCA 2008
Reversed Haploa Moth	*Haploa reversa*	S1	END			NHIC; iNaturalist
Paintedhand Mudbug	*Lacunicambarus polychromatus*	S1S2				NHIC; Ojibway Nature Centre
Painted Skimmer	*Libellula semifasciata*	S3				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Great Blue Skimmer	*Libellula vibrans*	S1				NHIC; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
White-banded crab spider	*Misumenoides formosipes*	S2S3				iNaturalist
Texas Mocis Moth	*Mocis texana*	S1S2				iNaturalist
Differential Grasshopper	*Melanoplus differentialis*	S3				NHIC; Ojibway Nature Centre
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; Ojibway Nature Centre
A Potter Wasp	*Parancistrocerus perennis*	S2				NHIC; Ojibway Nature Centre
Proud Globelet	*Patera pennsylvanica*	S1	END	END	END	NHIC; Ojibway Nature Centre
Pronghorn Clubtail	*Phanogomphus graslinellus*	S3				ERCA 2008

Tallgrass Prairie Heritage Park Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Common Sanddragon	*Progomphus obscurus*	S2				NHIC; Ojibway Nature Centre
False-foxglove Sun Moth	*Pyrrhia aurantiago*	S1	END			NHIC
Rabid Wolf Spider	*Rabidosa rabida*	S3?				iNaturalist
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC; Ojibway Nature Centre
Black Purseweb Tarantula	*Sphodros niger*	S3				NHIC; Ojibway Nature Centre
Elusive Clubtail	*Stylurus notatus*	S3				Ojibway Nature Centre; City of Windsor 2001; ERCA 2008
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; Ojibway Nature Centre; City of Windsor 2001; ERCA 2008; iNaturalist
Globose Dome Snail	*Ventridens ligera*	S2				NHIC; Ojibway Nature Centre
Long Yellowjacket	*Vespula vidua*	S3				NHIC; Ojibway Nature Centre
Striped Whitelip	*Webbhelix multilineata*	S2S3	END			NHIC
Tiger Bee Fly	*Xenox tigrinus*	S3S4				iNaturalist
Total[5]		43	7	3	4	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A4: Spring Garden Natural Area

Spring Garden Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
Large-flowered Purple False Foxglove	*Agalinis purpurea var. purpurea*	S1				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; iNaturalist; Wood 2021a
Green Dragon	*Arisaema dracontium*	S3	SC		SC	NHIC; Ojibway Nature Centre; iNaturalist
Slim-spike Threeawn Grass	*Aristida longespica*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; ERCA 1992; City of Windsor 1996; iNaturalist
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist; Wood 2021a
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist; Wood 2021a
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC; City of Windsor 1996
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC; Ojibway Nature Centre; ERCA 1992; City of Windsor 1996
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC; Ojibway Nature Centre
Bicknell's Sedge	*Carex bicknellii*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Field Sedge	*Carex conoidea*	S3				NHIC; City of Windsor 1996; Ojibway Nature Centre
Mead's Sedge	*Carex meadii*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996
Prairie Straw Sedge	*Carex suberecta*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996
Pignut Hickory	*Carya glabra*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; Wood 2021a
Shellbark Hickory	*Carya laciniosa*	S3				NHIC; Ojibway Nature Centre
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC; iNaturalist; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; LGL Limited and Sage Earth 2016; Wood 2021a
Spotted Wintergreen	*Chimaphila maculata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; Wood 2021a
Field Thistle	*Cirsium discolor*	S3				NHIC; Ojibway Nature Centre; Pratt 1979; City of Windsor 1996; iNaturalist; Wood 2021a

Spring Garden Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; iNaturalist, Wood 2021a
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Deer-tongue Panicgrass	*Dichanthelium clandestinum*	S2				Wood 2021a
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC; Ojibway Nature Centre; City of Windsor 1996
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; Wood 2021a
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021a
Pumpkin Ash	*Fraxinus profunda*	S1				NHIC; Ojibway Nature Centre
Honey-locust	*Gleditsia triacanthos*	S2				iNaturalist; Wood 2021a
Hoary Frostweed	*Helianthemum bicknellii*	S3				Oldham 1983; City of Windsor 1996
Swamp Rose-mallow	*Hibiscus moscheutos*	S3	SC	SC	SC	NHIC; iNaturalist
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC; Ojibway Nature Centre; Oldham 1983
Shrubby St. John's-wort	*Hypericum prolificum*	S2				NHIC
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Butternut	*Juglans cinerea*	S2?	END	END	END	NHIC; Ojibway Nature Centre; LGL Limited and Sage Earth 2016; Wood 2021a
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996
Greater Poverty Rush	*Juncus anthelatus*	S1				NHIC; Ojibway Nature Centre
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; ERCA 1992; City of Windsor 1996; iNaturalist; Wood 2021a
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; ERCA 1992; City of Windsor 1996
Greene's Rush	*Juncus greenei*	S3				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; iNaturalist

Spring Garden Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; City of Windsor 1996; Wood 2021a
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; Ojibway Nature Centre; Pratt 1979; Oldham 1983; City of Windsor 1996; Wood 2021a
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC; Ojibway Nature Centre; City of Windsor 1996
Rough Blazing-star	*Liatris aspera*	S2				NHIC; Ojibway Nature Centre; iNaturalist; Pratt 1979; Oldham 1983; City of Windsor 1996; Wood 2021a
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; iNaturalist; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; Wood 2021a
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; Ojibway Nature Centre; City of Windsor 1996; LGL Limited and Sage Earth 2016; iNaturalist; Wood 2021a
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; ERCA 1992; City of Windsor 1996; iNaturalist
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; City of Windsor 1996; Wood 2021a
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
American Lotus	*Nelumbo lutea*	S2S3				NHIC; Ojibway Nature Centre
Black Gum	*Nyssa sylvatica*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996
Biennial Gaura	*Oenothera gaura*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; iNaturalist
Streambank Groundsel	*Packera pseudaurea*	S2				NHIC; Ojibway Nature Centre
Slender Paspalum	*Paspalum setaceum*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	S2	END	END	END	iNaturalist

Spring Garden Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Pink Milkwort	*Polygala incarnata*	S1	END	END	END	NHIC; Ojibway Nature Centre
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; iNaturalist
Whorled Milkwort	*Polygala verticillata*	S3?				Oldham 1983; City of Windsor 1996
Slender Knotweed	*Polygonum tenue*	S2				NHIC; Ojibway Nature Centre; Pratt 1979; Oldham 1983; City of Windsor 1996
Slender Mountain-mint	*Pycnanthemum tenuifolium*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC; Ojibway Nature Centre; City of Windsor 1996
Shumard Oak	*Quercus shumardii*	S3	SC		SC	City of Windsor 1996
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC, Ojibway Nature Centre; City of Windsor 1996; iNaturalist; Wood 2021a
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; iNaturalist; Ojibway Nature Centre; City of Windsor 1996; Wood 2021a
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; City of Windsor 1996; Wood 2021a
Cup Plant	*Silphium laciniatum*	S2				Wood 2021a
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; iNaturalist; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; Wood 2021a
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Illinois Carrionflower	*Smilax illinoensis*	S2?				NHIC; Ojibway Nature Centre; Oldham 1983
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist; Wood 2021a
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; Ojibway Nature Centre; iNaturalist; Pratt 1979; Oldham 1983; City of Windsor 1996; Wood 2021a
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; iNaturalist; Ojibway Nature Centre; City of Windsor 1996; Wood 2021a
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist

Spring Garden Natural Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; Ojibway Nature Centre; City of Windsor 1996; iNaturalist; Wood 2021a
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; City of Windsor 1996; Wood 2021a
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; Ojibway Nature Centre; iNaturalist; Wood 2021a
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Ojibway Nature Centre; iNaturalist; Oldham 1983; City of Windsor 1996; Wood 2021a
Northern Fox Grape	*Vitis labrusca*	S1				NHIC; Ojibway Nature Centre; Oldham 1983; City of Windsor 1996; iNaturalist
Total[5]		87	17	13	15	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				ebird; City of Windsor 1996; iNaturalist
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird; Ojibway Nature Centre
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird; iNaturalist
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	ebird; Ojibway Nature Centre
Great Egret	*Ardea alba*	S2B,S3M				ebird; Ojibway Nature Centre; City of Windsor 1996
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	OBBA; Ojibway Nature Centre; ebird
Redhead	*Aythya americana*	S2B,S4N				ebird
Canvasback	*Aythya valisineria*	S1B,S3N, S4M				ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Red-shouldered Hawk	*Buteo lineatus*	S4B,S2N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird

Spring Garden Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Ojibway Nature Centre
Turkey Vulture	*Cathartes aura*	S5B,S3N				ebird; iNaturalist
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird; City of Windsor 1996
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird; Ojibway Nature Centre
Northern Bobwhite	*Colinus virginianus*	S1?	END	END	END	ebird; Ojibway Nature Centre; City of Windsor 1996
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird; Ojibway Nature Centre
Eastern Wood-pewee	*Contopus virens*	S4B	SC	SC	SC	NHIC; OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird; City of Windsor 1996; iNaturalist
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				ebird; iNaturalist
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	OBBA; ebird; Ojibway Nature Centre
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird; Ojibway Nature Centre
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird; Ojibway Nature Centre
American Coot	*Fulica americana*	S3B,S4N				ebird; City of Windsor 1996
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				ebird; City of Windsor 1996
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	OBBA; ebird; iNaturalist; Ojibway Nature Centre
Worm-eating Warbler	*Helmitheros vermivorum*	S1M				ebird; City of Windsor 1996
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	NHIC; OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996

Spring Garden Natural Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	NHIC; OBBA; ebird; Ojibway Nature Centre; LGL Limited Sage Earth 2016
Least Bittern	*Ixobrychus exilis*	S4B	THR	THR	THR	Ojibway Nature Centre; iNaturalist; Wood 2021a
Great Black-backed Gull	*Larus marinus*	S1B,S4N				ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird; City of Windsor 1996
Ruddy Duck	*Oxyura jamaicensis*	S3B,S4N, S5M				ebird
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird; Ojibway Nature Centre
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				ebird; City of Windsor 1996
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird
American White Pelican	*Pelecanus erythrorhynchos*	S3B,S4M			THR	ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird; iNaturalist
Summer Tanager	*Piranga rubra*	S1M				ebird
American Golden-Plover	*Pluvialis dominica*	S2B,S4M				ebird
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird; iNaturalist
Purple Martin	*Progne subis*	S3B				OBBA; ebird; Ojibway Nature Centre
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird; Ojibway Nature Centre
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird; Ojibway Nature Centre
Prairie Warbler	*Setophaga discolor*	S2B				ebird
Yellow-throated Warbler	*Setophaga dominica*	S1M				ebird

Spring Garden Natural Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird; iNaturalist
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				ebird; City of Windsor 1996
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird; City of Windsor 1996
Forster's Tern	*Sterna forsteri*	S3B				ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird; Ojibway Nature Centre
White-eyed Vireo	*Vireo griseus*	S1B				OBBA; ebird; Ojibway Nature Centre; City of Windsor 1996
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird; iNaturalist
Total[5]		57	24	22	25	
Reptiles and Amphibians						
Spiny Softshell	*Apalone spinifera*	S2	END	END	END	NHIC; Ojibway Nature Centre, LGL Limited Sage Earth 2016
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; ORAA; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC; ORAA; Ojibway Nature Centre; City of Windsor 1996
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; Ojibway Nature Centre; City of Windsor 1996; Wood 2021a; iNaturalist
Common Five-lined Skink (Carolinian population	*Plestiodon fasciatus pop. 2*	S2	END	END	END	ORAA; Ojibway Nature Centre; NHIC
Massasauga (Carolinian population)	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC; ORAA; Ojibway Nature Centre; ERCA 1992; City of Windsor 1996

Spring Garden Natural Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	ORAA; Ojibway Nature Centre
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORAA; Ojibway Nature Centre; iNaturalist; Oldham 1983; ERCA 1992; City of Windsor 1996; Wood 2021a
Total[5]		8	10	9	9	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994; Ojibway Nature Centre
Gray Fox	*Urocyon cinereoargenteus*	S1	END	END	END	Dobbyn 1994; City of Windsor 1996; Ojibway Nature Centre; K. Cedar 2023 (personal communication)
Total[5]		2	5	2	2	
Fish						
Pugnose Minnow	*Opsopoeodus emiliae*	S2	THR	THR	THR	NHIC
Total[5]		1	1	1	1	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Orange-tipped Oakworm Moth	*Anisota senatoria*	S3				iNaturalist
Great Spreadwing	*Archilestes grandis*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Hackberry Emperor	*Asterocampa celtis*	S3				Butterfly Atlas; Ojibway Nature Centre
Golden Northern Bumble Bee	*Bombus fervidus*	S3S4				iNaturalist
Little Underwing Moth	*Catocala minuta*	S3				iNaturalist
Oldwife Underwing Moth	*Catocala palaeogama*	S3				iNaturalist
Widow Underwing Moth	*Catocala vidua*	S3S4				iNaturalist

Spring Garden Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Black-sided Meadow Katydid	*Conocephalus nigropleurum*	S3S4				iNaturalist
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; Ojibway Nature Centre; City of Windsor 1996; iNaturalist
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC; iNaturalist; Ojibway Nature Centre
Ivory-marked Borer	*Eburia quadrigeminata*	S3				iNaturalist
Double-striped Bluet	*Enallagma basidens*	S3				NHIC; Ojibway Nature Centre
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC; iNaturalist; Ojibway Nature Centre
Sleepy Duskywing	*Erynnis brizo*	S1				NHIC; Butterfly Atlas; Ojibway Nature Centre
Black Dash	*Euphyes conspicua*	S3				NHIC; Butterfly Atlas; City of Windsor 1996; iNaturalist
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas; Ojibway Nature Centre; ERCA 1992; City of Windsor 1996; iNaturalist
Spotted Peppergrass Moth	*Eustixia pupula*	S2S4				iNaturalist
Giant Leopard Moth	*Hypercompe scribonia*	S3S4				iNaturalist
Thinker Moth	*Lacinipolia meditata*	S3S4				iNaturalist
Great Blue Skimmer	*Libellula vibrans*	S1				NHIC; Ojibway Nature Centre
Differential Grasshopper	*Melanoplus differentialis*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; iNaturalist; Ojibway Nature Centre
Texas Mocis Moth	*Mocis texana*	S1S2				iNaturalist
Four-toothed Mason Wasp	*Monobia quadridens*	S3				NHIC
Syrphe brillant	*Orthonevra nitida*	S3				NHIC
Faint-spotted Palthis Moth	*Palthis asopialis*	S3S4				iNaturalist
A Potter Wasp	*Parancistrocerus perennis*	S2				NHIC; Ojibway Nature Centre
Zabulon Skipper	*Poanes zabulon*	S1				Butterfly Atlas; City of Windsor 1996; iNaturalist
False-foxglove Sun Moth	*Pyrrhia aurantiago*	S1	END			NHIC

Spring Garden Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Oak Hairstreak	*Satyrium favonius*	S1				NHIC; Butterfly Atlas
Common Sprague's Moth	*Spragueia leo*	S2				iNaturalist
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC; Ojibway Nature Centre
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; Ojibway Nature Centre; City of Windsor 1996
Symmetric Hunchback Bee Fly	*Toxophora amphitea*	S1				NHIC
Tiger Bee Fly	*Xenox tigrinus*	S3S4				iNaturalist
Total[5]		36	2	1	1	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A5: Oakwood Natural Area

Oakwood Natural Area
Rare Species and Species at Risk

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Slim-spike Threeawn Grass	*Aristida longespica*	S2				NHIC; Ojibway Nature Centre
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Purple Milkweed	*Asclepias purpurascens*	S1				Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Ojibway Nature Centre; iNaturalist
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC; Lum et al. 1995
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC; Ojibway Nature Centre
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Bicknell's Sedge	*Carex bicknellii*	S2				NHIC; Ojibway Nature Centre
Field Sedge	*Carex conoidea*	S3				NHIC; Ojibway Nature Centre
Mead's Sedge	*Carex meadii*	S2				NHIC; Ojibway Nature Centre
Prairie Straw Sedge	*Carex suberecta*	S2				NHIC; Ojibway Nature Centre
Pignut Hickory	*Carya glabra*	S3				NHIC; Ojibway Nature Centre
Shellbark Hickory	*Carya laciniosa*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC; Ojibway Nature Centre
Field Thistle	*Cirsium discolor*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; Ojibway Nature Centre
Forked Panicgrass	*Dichanthelium dichotomum*	S2				Lum et al. 1995
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC; Ojibway Nature Centre
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC; Ojibway Nature Centre
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; Ojibway Nature Centre

Oakwood Natural Area Rare Species and Species at Risk						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC; Ojibway Nature Centre
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Pumpkin Ash	*Fraxinus profunda*	S1				NHIC; Ojibway Nature Centre
Swamp Rose-mallow	*Hibiscus moscheutos*	S3	SC	SC	SC	NHIC
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC; Ojibway Nature Centre
Shrubby St. John's-wort	*Hypericum prolificum*	S2				NHIC
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC; Ojibway Nature Centre
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; Ojibway Nature Centre
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; Ojibway Nature Centre
Greene's Rush	*Juncus greenei*	S3				NHIC; Ojibway Nature Centre; ERCA 1992
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC; Ojibway Nature Centre; ERCA 1992
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; Ojibway Nature Centre
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC; Ojibway Nature Centre
Rough Blazing-star	*Liatris aspera*	S2				NHIC; Ojibway Nature Centre
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995; iNaturalist
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; Ojibway Nature Centre; Pratt 1979; ERCA 1992
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC; Ojibway Nature Centre
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; Ojibway Nature Centre
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC; Ojibway Nature Centre; ERCA 1992
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC; Ojibway Nature Centre; Lum et al. 1995
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995

Oakwood Natural Area Rare Species and Species at Risk						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Red Mulberry	*Morus rubra*	S2	END	END	END	Lum et al. 1995
Black Gum	*Nyssa sylvatica*	S3				NHIC; Ojibway Nature Centre; Lum et al. 1995
Biennial Gaura	*Oenothera gaura*	S3				NHIC; Ojibway Nature Centre; ERCA 1992
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC; Ojibway Nature Centre; ERCA 1992
Tubercled Orchid	*Platanthera flava*	S3				NHIC
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; Ojibway Nature Centre; ERCA 1992
Whorled Milkwort	*Polygala verticillata*	S3?				Ojibway Nature Centre; Lum et al. 1995; ERCA 1992
Slender Knotweed	*Polygonum tenue*	S2				NHIC; Ojibway Nature Centre
Shumard Oak	*Quercus shumardii*	S3	SC		SC	NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; Ojibway Nature Centre
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; Ojibway Nature Centre; ERCA 1992
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC; Ojibway Nature Centre; ERCA 1992
Illinois Carrionflower	*Smilax illinoensis*	S2?				NHIC; Ojibway Nature Centre
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; iNaturalist
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC; Ojibway Nature Centre
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre; iNaturalist
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995; iNaturalist
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; Ojibway Nature Centre; ERCA 1992; iNaturalist
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC; Ojibway Nature Centre
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Ojibway Nature Centre; ERCA 1992; Lum et al. 1995

Oakwood Natural Area Rare Species and Species at Risk						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; Ojibway Nature Centre
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Ojibway Nature Centre; ERCA 1992
Palmate-leaved Violet	*Viola palmata*	S2				Lum et al. 1995
Northern Fox Grape	*Vitis labrusca*	S1				NHIC; Ojibway Nature Centre
Frost Grape	*Vitis vulpina*	S1				Lum et al. 1995
Total[5]		73	12	9	10	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird; Lum et al. 1995
Great Egret	*Ardea alba*	S2B,S3M				ebird; Ojibway Nature Centre
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	OBBA; Ojibway Nature Centre
Tufted Titmouse	*Baeolophus bicolor*	S3				OBBA; Ojibway Nature Centre; Lum et. al. 1995
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Ojibway Nature Centre; Lum et. al. 1995; iNaturalist
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; Lum et al. 1995
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre; Lum et al. 1995
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre; Lum et al. 1995
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird; Ojibway Nature Centre; Lum et al. 1995
Eastern Wood-pewee	*Contopus virens*	S4B	SC	SC	SC	NHIC; OBBA; ebird; Ojibway Nature Centre; Lum et al. 1995; iNaturalist
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				Ojibway Nature Centre; Lum et. al. 1995; iNaturalist
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; Ojibway Nature Centre
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; Lum et al. 1995; iNaturalist

Oakwood Natural Area Rare Species and Species at Risk						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	OBBA; ebird; Ojibway Nature Centre
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird; Ojibway Nature Centre; Lum et al. 1995
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; Ojibway Nature Centre
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; Lum et al. 1995
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	OBBA; ebird; Ojibway Nature Centre
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; Lum et. al. 1995; iNaturalist
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	NHIC; OBBA; e-Bid; Ojibway Nature Centre; Lum et al. 1995
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird; Ojibway Nature Centre
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird; Ojibway Nature Centre
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird; Ojibway Nature Centre
Fox Sparrow	*Passerella iliaca*	S5B,S3N				Lum et al. 1995
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird; Lum et. al 1995
Purple Martin	*Progne subis*	S3B				OBBA; ebird; Ojibway Nature Centre
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird; Ojibway Nature Centre
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird; Ojibway Nature Centre
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird; Lum et al. 1995
Prairie Warbler	*Setophaga discolor*	S2B				Lum et al. 1995
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; Lum et al. 1995
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA

Oakwood Natural Area Rare Species and Species at Risk						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre; Lum et al. 1995
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				Lum et al. 1995
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird; Ojibway Nature Centre; Lum et. al. 1995
White-eyed Vireo	*Vireo griseus*	S1B				OBBA; ebird; Ojibway Nature Centre
Yellow-headed Blackbird	*Xanthocephalus xanthocephalus*	S2B				Lum et. al. 1995
Total[5]		34	19	18	20	
Reptiles and Amphibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		ORAA; Ojibway Nature Centre
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC; ORAA; Ojibway Nature Centre
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; Ojibway Nature Centre; iNaturalist
Common Five-lined Skink (Carolinian population)	*Plestiodon fasciatus pop. 1*	S2	END	END	END	NHIC; ORAA; Ojibway Nature Centre
Massasauga (Carolinian population)	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC; ORAA; Ojibway Nature Centre
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	ORAA; Ojibway Nature Centre
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORAA; Ojibway Nature Centre
Total[5]		7	9	8	8	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994; Ojibway Nature Centre
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994; Ojibway Nature Centre

Oakwood Natural Area
Rare Species and Species at Risk

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Great Spreadwing	*Archilestes grandis*	S1				NHIC; Ojibway Nature Centre
Hackberry Emperor	*Asterocampa celtis*	S3				Butterfly Atlas; Ojibway Nature Centre
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; Ojibway Nature Centre; Lum et al. 1995
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC; Ojibway Nature Centre
Sleepy Duskywing	*Erynnis brizo*	S1				Butterfly Atlas; Ojibway Nature Centre
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				Butterfly Atlas; Ojibway Nature Centre
Differential Grasshopper	*Melanoplus differentialis*	S3				iNaturalist; Ojibway Nature Centre
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; Ojibway Nature Centre
Four-toothed Mason Wasp	*Monobia quadridens*	S3				NHIC
Zabulon Skipper	*Poanes zabulon*	S1				Butterfly Atlas
Oak Hairstreak	*Satyrium favonius*	S1				Butterfly Atlas
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; Ojibway Nature Centre
Symmetric Hunchback Bee Fly	*Toxophora amphitea*	S1				NHIC
Total[5]		15	1	1	1	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A6: South Cameron Woodlot Area

South Cameron Woodlot Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
Slim-spike Threeawn Grass	*Aristida longespica*	S2				NHIC
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; ERCA 2008
Purple Milkweed	*Asclepias purpurascens*	S1				ERCA 2008
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; ERCA 1992; ERCA 2008
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC
Field Sedge	*Carex conoidea*	S3				NHIC
Mead's Sedge	*Carex meadii*	S2				NHIC
Pignut Hickory	*Carya glabra*	S3				NHIC; ERCA 1992; ERCA 2008
Shellbark Hickory	*Carya laciniosa*	S3				NHIC; ERCA 1992; ERCA 2008
Field Thistle	*Cirsium discolor*	S3				NHIC; ERCA 2008
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; ERCA 1992; ERCA 2008
Plum-leaved Hawthorn	*Crataegus persimilis*	S1				ERCA 2008
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; ERCA 1992
Biennial Gaura	*Gaura biennis*	S3				ERCA 1992; iNaturalist

South Cameron Woodlot Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Honey Locust	*Gleditsia triacanthos*	S2?				NHIC
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC
Two-flowered Rush	*Juncus biflorus*	S1				NHIC
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC
Greene's Rush	*Juncus greenei*	S3				NHIC
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC
Hairy Pinweed	*Lechea mucronata*	S3				NHIC
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC
Rough Blazing-star	*Liatris aspera*	S2				NHIC
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; ERCA 1992; iNaturalist
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; ERCA 1992; ERCA 2008
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
Black Gum	*Nyssa sylvatica*	S3				NHIC
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC

South Cameron Woodlot Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Streambank Groundsel	*Packera pseudaurea*	S2				NHIC
Whorled Milkwort	*Polygala verticillata*	S3?				ERCA 1992; ERCA 2008
Slender Knotweed	*Polygonum tenue*	S2				NHIC
Shumard Oak	*Quercus shumardii*	S3	SC		SC	NHIC; ERCA 1992; ERCA 2008
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; ERCA 1992; ERCA 2008
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; ERCA 1992; ERCA 2008; iNaturalist
Whip Nutrush	*Scleria triglomerata*	S1				NHIC
Compass Plant	*Silphium laciniatum*	S1				NHIC
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; ERCA 1992; ERCA 2008; iNaturalist
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; ERCA 1992; ERCA 2008
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; ERCA 1992; ERCA 2008; iNaturalist
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; ERCA 1992; ERCA 2008; iNaturalist
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; ERCA 2008
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; ERCA 1992; ERCA 2008; iNaturalist
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; ERCA 2008
Northern Fox Grape	*Vitis labrusca*	S1				ERCA 2008
Total[5]		65	9	6	7	

South Cameron Woodlot Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	ebird
Great Egret	*Ardea alba*	S2B,S3M				ebird
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	OBBA
Tufted Titmouse	*Baeolophus bicolor*	S3				OBBA; ebird
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird; ERCA 2008
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; ERCA 2008
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	OBBA; ebird
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird; ERCA 2008
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird; ERCA 2008
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	OBBA; ebird

South Cameron Woodlot Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	OBBA; ebird
Worm-eating Warbler	*Helmitheros vermivorum*	S1M				ebird
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	NHIC; OBBA; ebird
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird; ERCA 2008
Summer Tanager	*Piranga rubra*	S1M				ebird
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird
Purple Martin	*Progne subis*	S3B				OBBA; ebird
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	ebird
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird

South Cameron Woodlot Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird; ERCA 2008
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird
Total[5]		42	21	20	21	
Reptiles and Ampibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; ORAA
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	ORAA
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; iNaturalist
Common Five-lined Skink (Carolinian population)	*Plestiodon fasciatus pop. 1*	S2	END	END	END	ORAA
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORAA; iNaturalist
Total[5]		5	7	6	6	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994

South Cameron Woodlot Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Great Spreadwing	*Archilestes grandis*	S1				iNaturalist
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Double-striped Bluet	*Enallagma basidens*	S3				NHIC
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas
Hackberry Emperor	*Asterocampa celtis*	S3				Butterfly Atlas
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; iNaturalist
Northern Bush Katydid	*Scudderia septentrionalis*	S3?				NHIC
Sleepy Duskywing	*Erynnis brizo*	S1				Butterfly Atlas
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas
Zabulon Skipper	*Poanes zabulon*	S1				Butterfly Atlas
Total[5]		11	1	1	1	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A7: Ojibway Shores

Ojibway Shores

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC
Rigid Sedge	*Carex tetanica*	S3?				NHIC
Pignut Hickory	*Carya glabra*	S3				NHIC
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC
Field Thistle	*Cirsium discolor*	S3				NHIC; iNaturalist; ERCA 1992; Gardner-Costa et al. 2017
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; ERCA 1992; Gardner-Costa et al. 2017
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC
Two-flowered Rush	*Juncus biflorus*	S1				NHIC
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC
Woodland Lettuce	*Lactuca floridana var. floridana*	S1S2				NHIC
Hairy Pinweed	*Lechea mucronata*	S3				NHIC
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC
Hairy Pinweed	*Lechea mucronata*	S3				NHIC
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; ERCA 1992; Gardner-Costa et al. 2017
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC

Ojibway Shores Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Gardner-Costa et al. 2017
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
Black Gum	*Nyssa sylvatica*	S3				NHIC
Biennial Gaura	*Oenothera gaura*	S3				NHIC; Gardner-Costa et al. 2017
Slender Paspalum	*Paspalum setaceum*	S2				NHIC
Erect Knotweed	*Polygonum erectum*	SH				NHIC
Bristly Buttercup	*Ranunculus hispidus var. hispidus*	S3				Gardner-Costa et al. 2017
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; Gardner-Costa et al. 2017
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	Gardner-Costa et al. 2017
Whip Nutrush	*Scleria triglomerata*	S1				NHIC
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC
Stiff Goldenrod	*Solidago rigida ssp. rigida*	S3				Gardner-Costa et al. 2017
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; Gardner-Costa et al. 2017
Wax-leaved Meadowrue	*Thalictrum revolutum*	S2				NHIC
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC
Wingstem	*Verbesina alternifolia*	S3				NHIC
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; ERCA 1992; Gardner-Costa et al. 2017

Ojibway Shores Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Gardner-Costa et al. 2017
Total		45	6	6	6	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	OBBA; ebird
Great Egret	*Ardea alba*	S2B,S3M				ebird; Gardner-Costa et al. 2017
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	ebird
Redhead Duck	*Aythya americana*	S2B,S4N				ebird; Gardner-Costa et al. 2017
Canvasback	*Aythya valisineria*	S1B,S4N				ebird; Gardner-Costa et al. 2017
Tufted Titmouse	*Baeolophus bicolor*	S3				OBBA; ebird; Gardner-Costa et al. 2017
Red-shouldered Hawk	*Buteo lineatus*	S4B,S2N				ebird; Gardner-Costa et al. 2017
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Gardner-Costa et al. 2017
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Gardner-Costa et al. 2017
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird

Ojibway Shores Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Northern Bobwhite	*Colinus virginianis*	S1?	END	END	END	ebird
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	OBBA; ebird; Gardner-Costa et al. 2017
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Palm Warbler	*Dendroica palmarum*	S1B				Gardner-Costa et al. 2017
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird; Gardner-Costa et al. 2017
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	ebird
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		Gardner-Costa et al. 2017
Peregrine Falcon	*Falco peregrinus*	S4			SC	ebird; Gardner-Costa et al. 2017
American Coot	*Fulica americana*	S3B,S4N				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird
Bald Eagle	*Haliaeetus leucocephalus*	S2N,S4B			SC	ebird; Gardner-Costa et al. 2017
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	OBBA; ebird; Gardner-Costa et al. 2017
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; Gardner-Costa et al. 2017
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	ebird
Lesser Black-backed Gull	*Larus fuscus*	S3N,S4M				ebird
Great Black-backed Gull	*Larus marinus*	S1B,S4N				ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird; Gardner-Costa et al. 2017
Black-crowned Night Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird
Ruddy Duck	*Oxyura jamaicensis*	S3B,S4N, S5M				ebird

Ojibway Shores Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird
American White Pelican	*Pelecanus erythrorhynchos*	S3B,S4M			THR	ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird
Summer Tanager	*Piranga rubra*	S1M				ebird
Horned Grebe	*Podiceps auratus*	S1B,S3N, S4M	SC	SC		ebird; iNaturalist
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird
Purple Martin	*Progne subis*	S3B				ebird
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA, ebird
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird
Yellow-throated Warbler	*Setophaga dominica*	S1M				ebird
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird
Foster's Tern	*Sterna forsteri*	S3B				ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird

Ojibway Shores Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Western Kingbird	*Tyrannus verticalis*	S1B				ebird
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird
White-eyed Vireo	*Vireo griseus*	S1B				ebird
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird
Total[5]		57	24	22	24	
Reptiles and Ampibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; iNaturalist; ORAA
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	ORAA
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	ORAA
Eastern Hog-nosed Snake	*Heterodon platirhinos*	S3	THR	THR	THR	ORAA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA; Gardner-Costa et al. 2017
Western Chorus Frog	*Pseudacris triseriata*	S4	THR	THR		ORRA
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	ORAA
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	ORAA
Total[5]		6	9	8	7	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994
Total[5]		2	5	2	2	

Ojibway Shores Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Fish						
Lake Sturgeon (Great Lakes - Upper St. Lawrence River population)	*Acipenser fulvescens pop. 3*	S2	THR		THR	NHIC
Northern Sunfish	*Lepomis peltastes*	S3				DFO Aquatic SAR Map 2023
Channel Darter	*Percina copelandi pop. 1*	S1	END	END	SC	NHIC; DFO Aquatic SAR Map 2023
Total[5]		3	2	1	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Hackberry Emperor	*Asterocampa celtis*	S3				NHIC; Butterfly Atlas; Gardner-Costa et al. 2017
Tawny Emperor	*Asterocampa clyton*	S3				NHIC; Butterfly Atlas; Gardner-Costa et al. 2017
A Crayfish	*Cambarus robustus*	S3				Gardner-Costa et al. 2017
Euphorbia Bug	*Chariesterus antennator*	S1S2				Gardner-Costa et al. 2017
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC
Sleepy Duskywing	*Erynnis brizo*	S1				Butterfly Atlas
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				Butterfly Atlas
Cobra Clubtail	*Gomphurus vastus*	S2				NHIC; iNaturalist; Gardner-Costa et al. 2017
Eastern Pondmussel	*Ligumia nasuta*	S1	SC	SC	SC	NHIC
Proud Globelet	*Patera pennsylvanica*	S1	END	END	END	NHIC
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC
Elusive Clubtail	*Stylurus notatus*	S3				NHIC
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas

Ojibway Shores

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Globose Dome Snail	*Ventridens ligera*	S2				NHIC
Total[5]		18	4	3	4	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A8: Ojibway Prairie Provincial Nature Reserve

Ojibway Prairie Provincial Nature Reserve
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
Black Snakeroot	*Actaea racemosa*	S2				iNaturalist
Large-flowered Purple False Foxglove	*Agalinis purpurea var. purpurea*	S1				NHIC; Ojibway Nature Centre; iNaturalist
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; iNaturalist; Pratt 1979; Ojibway Nature Centre; MNRF 2021a
Scarlett Ammannia	*Ammannia robusta*	S1	END	END	END	NHIC
Green Dragon	*Arisaema dracontium*	S3	SC		SC	NHIC; Ojibway Nature Centre
Slim-spike Three-awn Grass	*Aristida longespica*	S2				NHIC; Ojibway Nature Centre
Kearney's Threeawn Grass	*Aristida longespica var. geniculata*	S2				NHIC
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021b
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Green Cornet Milkweed	*Asclepias viridiflora*	S2				NHIC; Pratt 1979; Ojibway Nature Centre
Pawpaw	*Asimina triloba*	S3				NHIC; Ojibway Nature Centre
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC; Pratt 1979; iNaturalist
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC; Ojibway Nature Centre
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC; Pratt 1979; Ojibway Nature Centre; iNaturalist
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Bicknell's Sedge	*Carex bicknellii*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Field Sedge	*Carex conoidea*	S3				NHIC; Ojibway Nature Centre
Mead's Sedge	*Carex meadii*	S2				NHIC; Ojibway Nature Centre
Prairie Straw Sedge	*Carex suberecta*	S2				NHIC; Ojibway Nature Centre
Rigid Sedge	*Carex tetanica*	S3?				NHIC; Ojibway Nature Centre

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Pignut Hickory	*Carya glabra*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Shellbark Hickory	*Carya laciniosa*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
American Chestnut	*Castanea dentata*	S1S2	END	END	END	NHIC; Ojibway Nature Centre
Eastern Redbud	*Cercis canadensis*	SX				Ojibway Nature Centre
Spotted Wintergreen	*Chimaphila maculata*	S2	THR	THR	THR	NHIC; Ojibway Nature Centre
Field Thistle	*Cirsium discolor*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; Ojibway Nature Centre
Hazel Dodder	*Cuscuta coryli*	S1				NHIC; Ojibway Nature Centre
Commons' Panicgrass	*Dichanthelium commonsianum*	SH				NHIC; Ojibway Nature Centre
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC; Ojibway Nature Centre
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC; Pratt 1979; Ojibway Nature Centre
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; Pratt 1979; Ojibway Nature Centre
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC; Ojibway Nature Centre
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Pumpkin Ash	*Fraxinus profunda*	S1				NHIC; Ojibway Nature Centre
Blue Ash	*Fraxinus quadrangulata*	S2?	THR	SC	THR	NHIC; Ojibway Nature Centre
Hairy Bedstraw	*Galium pilosum*	S3				NHIC
Bowman's-root	*Gillenia trifoliata*	SX				NHIC; Ojibway Nature Centre
Honey Locust	*Gleditsia triaconthos*	S2				iNaturalist
Kentucky Coffee-tree	*Gymnocladus dioicus*	S2	THR	THR	THR	NHIC; iNaturalist; Ojibway Nature Centre
Swamp Rose-mallow	*Hibiscus moscheutos*	S3	SC	SC	SC	NHIC
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC; Pratt 1979; Ojibway Nature Centre; iNaturalist

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Shrubby St. John's-wort	*Hypericum prolificum*	S2				NHIC; iNaturalist
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Butternut	*Juglans cinerea*	S2?	END	END	END	NHIC; Ojibway Nature Centre
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC; Ojibway Nature Centre
Greater Poverty Rush	*Juncus anthelatus*	S1				NHIC; Ojibway Nature Centre
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; Pratt 1979; Ojibway Nature Centre; iNaturalist
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Greene's Rush	*Juncus greenei*	S3				NHIC; Pratt 1979; Ojibway Nature Centre
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC; iNaturalist; Ojibway Nature Centre
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Slender Bush-clover	*Lespedeza virginica*	S1	END	END	END	NHIC; Pratt 1979; Ojibway Nature Centre
Rough Blazing-star	*Liatris aspera*	S2				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; Ojibway Nature Centre
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021b
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; Ojibway Nature Centre; iNaturalist
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC; Ojibway Nature Centre
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
American Lotus	*Nelumbo lutea*	S2S3				NHIC; Ojibway Nature Centre

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Large Yellow Pond-lily	*Nuphar advena*	S3				NHIC; Ojibway Nature Centre
Black Gum	*Nyssa sylvatica*	S3				NHIC; Ojibway Nature Centre
Biennial Gaura	*Oenothera biennis*	S2				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre
Meadow Evening-primrose	*Oenothera pilosella*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC; Pratt 1979; Ojibway Nature Centre; iNaturalist
Streambank Groundsel	*Packera pseudaurea*	S2				NHIC
Slender Paspalum	*Paspalum setaceum*	S2				NHIC; Pratt 1979; Ojibway Nature Centre
Tubercled Orchid	*Platanthera flava*	S3				Pratt 1979
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	S2	END	END	END	Pratt 1979; Ojibway Nature Centre
Northern Milkwort	*Polygala aquilonia*	SX	END	END	END	NHIC; Ojibway Nature Centre
Pink Milkwort	*Polygala incarnata*	S1	END	END	END	NHIC; Pratt 1979; Ojibway Nature Centre
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Whorled Milkwort	*Polygala verticillata*	S3?				NHIC; Ojibway Nature Centre; iNaturalist
Slender Knotweed	*Polygonum tenue*	S2				NHIC; Pratt 1979; Ojibway Nature Centre
Slender Mountain-mint	*Pycnanthemum tenuifolium*	S3				NHIC; iNaturalist; Ojibway Nature Centre
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC; Pratt 1979; Ojibway Nature Centre
Shumard Oak	*Quercus shumardii*	S3	SC		SC	NHIC; Ojibway Nature Centre
Bristly Buttercup	*Ranunculus hispidus*	S3				iNaturalist
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; iNaturalist; Ojibway Nature Centre
Few-flowered Nutrush	*Scleria pauciflora*	S1				NHIC
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021b
Low Nutrush	*Scleria verticillata*	S3				Pratt 1979

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Compass Plant	*Silphium laciniatum*	S1				Pratt 1979
Cup Plant	*Silphium perfoliatum*	S2				NHIC; Pratt 1979; Ojibway Nature Centre
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC; Pratt 1979; Ojibway Nature Centre; iNaturalist
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC; Ojibway Nature Centre
Illinois Carrionflower	*Smilax illinoensis*	S2?				NHIC; Ojibway Nature Centre
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; iNaturalist; Ojibway Nature Centre
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC; Ojibway Nature Centre
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC; Pratt 1979; Ojibway Nature Centre; iNaturalist
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC; Ojibway Nature Centre; iNaturalist
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; iNaturalist; Ojibway Nature Centre
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; Ojibway Nature Centre; iNaturalist
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; Pratt 1979; Ojibway Nature Centre; MNRF 2021a
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC; Pratt 1979; Ojibway Nature Centre
Wingstem	*Verbesina alternifolia*	S3				NHIC; Ojibway Nature Centre
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; iNaturalist; Ojibway Nature Centre
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; Pratt 1979; iNaturalist; Ojibway Nature Centre; MNRF 2021a
Northern Fox Grape	*Vitis labrusca*	S1				NHIC; iNaturalist; Ojibway Nature Centre
Total[5]		111	22	18	20	

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird iNaturalist
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird; Ojibway Nature Centre
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre
Great Egret	*Ardea alba*	S2B,S3M				ebird; Ojibway Nature Centre
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	ebird; Ojibway Nature Centre
Redhead	*Aythya americana*	S2B,S4N				OBBA; ebird
Canvasback	*Aythya valisineria*	S1B,S3N, S4M				ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				NHIC; OBBA; ebird; iNaturalist; Ojibway Nature Centre
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Red-shouldered Hawk	*Buteo lineatus*	S4B,S2N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird; Ojibway Nature Centre
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird; iNaturalist
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	ebird; Ojibway Nature Centre
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird; Ojibway Nature Centre
Marsh Wren	*Cistothorus palustris*	S4B,S3N				OBBA; ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird; Ojibway Nature Centre
Northern Bobwhite	*Colinus virginianus*	S1?	END	END	END	Ojibway Nature Centre; K. Cedar 2023 (personal communication)

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird; iNaturalist; Ojibway Nature Centre
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	NHIC; OBBA; ebird; iNaturalist; Ojibway Nature Centre
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird, iNaturalist
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird; Ojibway Nature Centre
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird; iNaturalist
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	ebird; Ojibway Nature Centre
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird; iNaturalist; Ojibway Nature Centre
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird; Ojibway Nature Centre
American Coot	*Fulica americana*	S3B,S4N				ebird
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird; iNaturalist
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	OBBA; ebird; iNaturalist; Ojibway Nature Centre
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				OBBA; ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird; Ojibway Nature Centre
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	NHIC; OBBA; ebird; Ojibway Nature Centre; K. Cedar 2023 (personal communication)
Least Bittern	*Ixobrychus exilis*	S4B	THR	THR	THR	Ojibway Nature Centre
Lesser Black-backed Gull	*Larus fuscus*	S3N,S4M				ebird
Great Black-backed Gull	*Larus marinus*	S1B,S4N				ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	NHIC; iNaturalist; Ojibway Nature Centre
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				OBBA; ebird; iNaturalist
Ruddy Duck	*Oxyura jamaicensis*	S3B,S4N, S5M				ebird

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird; iNaturalist; Ojibway Nature Centre
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird; iNaturalist
American White Pelican	*Pelecanus erythrorhynchos*	S3B,S4M			THR	ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird; iNaturalist
Summer Tanager	*Piranga rubra*	S1M				ebird
Horned Grebe	*Podiceps auritus*	S1B,S3N, S4M	SC		SC	Ojibway Nature Centre
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				OBBA; ebird
Purple Martin	*Progne subis*	S3B				OBBA; ebird; Ojibway Nature Centre
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird; Ojibway Nature Centre
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird; Ojibway Nature Centre
Yellow-throated Warbler	*Setophaga dominica*	S1M				ebird
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				OBBA; ebird
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird; iNaturalist
Forster's Tern	*Sterna forsteri*	S3B				OBBA; ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird; Ojibway Nature Centre
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird; Ojibway Nature Centre
White-eyed Vireo	*Vireo griseus*	S1B				NHIC; ebird; Ojibway Nature Centre
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird; iNaturalist
Total[5]		56	24	21	25	
Reptiles and Amphibians						
Spiny Softshell	*Apalone spinifera*	S2	END	END	END	NHIC; Ojibway Nature Centre
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA; Ojibway Nature Centre; iNaturalist
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; ORRA; Ojibway Nature Centre; iNaturalist
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC; ORRA; Ojibway Nature Centre
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORRA; Ojibway Nature Centre
Eastern Hog-nosed Snake	*Heterodon platirhinos*	S3	THR	THR	THR	ORRA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORRA; Ojibway Nature Centre; iNaturalist
Common Five-lined Skink (Carolinian population)	*Plestiodon fasciatus pop. 2*	S2	END	END	END	NHIC; Ojibway Nature Centre
Queensnake	*Regina septemvittata*	S2	END	END	END	ORRA
Massasauga (Carolinian population)	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC; Ojibway Nature Centre
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	NHIC; ORRA; Ojibway Nature Centre
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORRA; Ojibway Nature Centre; iNaturalist
Total[5]		10	12	11	11	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994; Ojibway Nature Centre

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994; Ojibway Nature Centre
Total[5]		2	5	2	2	
Fish						
Northern Sunfish	*Lepomis peltastes*	S3				DFO Aquatic SAR Map 2023
Spotted Sucker	*Minytrema melanops*	S2	SC	SC	SC	DFO Aquatic SAR Map 2023
Pugnose Minnow	*Opsopoeodus emiliae*	S2	THR	THR	THR	NHIC; DFO Aquatic SAR Map 2023
Total[5]		3	2	2	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Orange-tipped Oakworm Moth	*Anisota senatoria*	S3				iNaturalist
Spiny Oakworm Moth	*Anisota stigna*	S2				iNaturalist; Ojibway Nature Centre
A Bee Fly	*Anthrax argyropygus*	SH				Ojibway Nature Centre
Spotted Apatelodes Moth	*Apatelodes torrefacta*	S3				iNaturalist
Great Spreadwing	*Archilestes grandis*	S1				NHIC; iNaturalist; Ojibway Nature Centre
Unicorn Clubtail	*Arigomphus villosipes*	S3				Ojibway Nature Centre
Hackberry Emperor	*Asterocampa celtis*	S3				NHIC; Butterfly Atlas; Ojibway Nature Centre
Tawny Emperor	*Asterocampa clyton*	S3				NHIC; Butterfly Atlas; Ojibway Nature Centre
Slowpoke Moth	*Athetis tarda*	S3				iNaturalist; Ojibway Nature Centre
Rusty-patched Bumble Bee	*Bombus affinis*	S1	END	END	END	NHIC
Golden Northern Bumble Bee	*Bombus fervidus*	S3S4				iNaturalist
Serene Underwing	*Catocala serena*	S3				NHIC; Ojibway Nature Centre
Digger Crayfish	*Creaserinus fodiens*	S3				Ojibway Nature Centre
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; iNaturalist; Ojibway Nature Centre

Ojibway Prairie Provincial Nature Reserve Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Walnut Caterpillar Moth	*Datana integerrima*	S3S4				iNaturalist
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC; iNaturalist; Ojibway Nature Centre
Double-striped Bluet	*Enallagma basidens*	S3				NHIC; Ojibway Nature Centre
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC; Ojibway Nature Centre
Sleepy Duskywing	*Erynnis brizo*	S1				NHIC; Butterfly Atlas; Ojibway Nature Centre
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Black Dash	*Euphyes conspicua*	S3				NHIC; Butterfly Atlas; iNaturalist
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas; Ojibway Nature Centre
Pronghorn Clubtail	*Gomphus graslinellus*	S3				NHIC
Cobra Clubtail	*Gomphus vastus*	S2				NHIC; Ojibway Nature Centre
Reversed Haploa Moth	*Haploa reversa*	S1	END			NHIC; iNaturalist
Giant Leopard Moth	*Hypercompe scribonia*	S3S4				iNaturalist
Paintedhand Mudbug	*Lacunicambarus polychromatus*	S1S2				NHIC; Ojibway Nature Centre
Painted Skimmer	*Libellula semifasciata*	S3				NHIC; Ojibway Nature Centre
Great Blue Skimmer	*Libellula vibrans*	S1				NHIC; iNaturalist; Ojibway Nature Centre
Differential Grasshopper	*Melanoplus differentialis*	S3				NHIC; iNaturalist; Ojibway Nature Centre
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; iNaturalist; Ojibway Nature Centre
White-banded Crab Spider	*Mismuenoides formosipes*	S3				iNaturalist
Texas Mocis Moth	*Mocis texana*	S1S2				iNaturalist; Ojibway Nature Centre
Northern Mole Cricket	*Neocurtilla hexadactyla*	S2S3				NHIC; Ojibway Nature Centre
Indigo Stem Borer Moth	*Papaipema baptisiae*	S3S4				iNaturalist
A Potter Wasp	*Parancistrocerus perennis*	S2				Ojibway Nature Centre
Proud Globelet	*Patera pennsylvanica*	S1	END	END	END	NHIC; Ojibway Nature Centre

Ojibway Prairie Provincial Nature Reserve
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Pronghorn Clubtail	*Phanogomphus graslinellus*	S3				NHIC; Ojibway Nature Centre
Sciff Moth	*Prolimacodes badia*	S3S4				iNaturalist
Common Sanddragon	*Progomphus obscurus*	S2				NHIC; Ojibway Nature Centre
False-foxglove Sun Moth	*Pyrrhia aurantiago*	S1	END			NHIC
Rabid Wolf Spider	*Rabidosa rabida*	S3?				iNaturalist
Four-lined Borer Moth	*Resapamea stipata*	S3S4				iNaturalist; Ojibway Nature Centre
Northern Bush Katydid	*Scudderia septentrionalis*	S3?				Ojibway Nature Centre
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC; iNaturalist; Ojibway Nature Centre
Black Purseweb Tarantula	*Sphodros niger*	S3				NHIC; Ojibway Nature Centre
Common Sprague ia Moth	*Spragueia leo*	S2				iNaturalist
Elusive Clubtail	*Stylurus notatus*	S3				iNaturalist; Ojibway Nature Centre
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; iNaturalist; Ojibway Nature Centre
Symmetric Hunchback Bee Fly	*Toxophora amphitea*	S1				NHIC
Globose Dome Snail	*Ventridens ligera*	S2				NHIC; Ojibway Nature Centre
Striped Whitelip	*Webbhelix multilineata*	S2S3	END			NHIC
Tiger Bee Fly	Xenox tigrinus	S3S4				iNaturalist
Total[5]		54	7	3	4	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A9: Malden Park

Malden Park

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC
Slim-spike Threeawn Grass	*Aristida longespica*	S2				NHIC
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC
Field Sedge	*Carex conoidea*	S3				NHIC
Mead's Sedge	*Carex meadii*	S2				NHIC
Rigid Sedge	*Carex tetanica*	S3?				NHIC
Pignut Hickory	*Carya glabra*	S3				NHIC
Shellbark Hickory	*Carya laciniosa*	S3				NHIC
American Chestnut	*Castanea dentata*	S1S2	END	END	END	ERCA 1992
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; iNaturalist; ERCA 1992
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC
Honey Locust	*Gleditsia triacanthos*	S2?				iNaturalist

Malden Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Kentucky Coffee-tree	*Gymnocladus dioicus*	S2	THR	THR	THR	iNaturalist
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC
Two-flowered Rush	*Juncus biflorus*	S1				NHIC
Greene's Rush	*Juncus greenei*	S3				NHIC
Grass-leaved Rush	*Juncus marginatus*	S3				NHIC
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC
Hairy Pinweed	*Lechea mucronata*	S3				NHIC
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC
Rough Blazing-star	*Liatris aspera*	S2				NHIC
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; ERCA 1992
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC
Winged Loosestrife	*Lythrum alatum*	S3				NHIC
Red Mulberry	*Morus rubra*	S2	END	END	END	NHIC
American Lotus	*Nelumbo lutea*	S2S3				NHIC
Black Gum	*Nyssa sylvatica*	S3				NHIC
Biennial Gaura	*Oenothera biennis*	S3				NHIC; ERCA 1992
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC

Malden Park
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Streambank Groundsel	*Packera pseudaurea*	S2				NHIC
Slender Paspalum	*Paspalym setaceum*	S2				NHIC
Blood Milkwort	*Polygala sanguinea*	S3				NHIC
Whorled Milkwort	*Polygala verticillata*	S3?				NHIC
Erect Knotweed	*Polygonum erectum*	SH				NHIC
Slender Knotweed	*Polygonum tenue*	S2				NHIC
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC
Shumard Oak	*Quercus shumardii*	S3	SC		SC	NHIC
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC
Whip Nutrush	*Scleria triglomerata*	S1				NHIC
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC
Stiff Goldenrod	*Solidago rigida*	S3				NHIC
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC
Bushy Aster	*Symphyotrichum dumodum*	S2				NHIC
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC; ERCA 1992
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC

Malden Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; ERCA 1992
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC
Culver's Root	*Veronicastrum virginicum*	S2				NHIC
Total[5]		71	10	8	9	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	OBBA; ebird
Great Egret	*Ardea alba*	S2B,S3M				ebird; iNaturalist
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	OBBA; ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				OBBA; ebird
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird; iNaturalist
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	OBBA; ebird; iNaturalist
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird, iNaturalist

Malden Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Tundra Swan	*Cygnus columbianus*	S2B,S4N, S3M				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird; iNaturalist
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	OBBA; ebird
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird; iNaturalist
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	OBBA; ebird; iNaturalist
Worm-eating Warbler	*Helmitheros vermivorum*	S1M				ebird
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	NHIC; OBBA; ebird; iNaturalist
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	OBBA; ebird
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird; iNaturalist
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird
Wilson's Phalarope	*Phalaropus tricolor*	S2B,S4M				ebird
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird
Summer Tanager	*Piranga rubra*	S1M				ebird
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird

Malden Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Purple Martin	*Progne subis*	S3B				OBBA; ebird
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Blue-winged Teal	*Spatula discors*	S3B,S4M				ebird
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA; ebird
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird
Total[5]		42	21	20	21	
Reptiles and Ampibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA; iNaturalist
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; ORAA; iNaturalist
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	ORAA
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC; ORAA
Eastern Hog-nosed Snake	*Heterodon platirhinos*	S3	THR	THR	THR	ORAA
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	THR	END	END	ORAA
Common Five-lined Skink (Carolinian population)	*Plestiodon fasciatus pop. 1*	S2	END	END	END	ORAA
Eastern Musk Turtle	*Sternotherus odoratus*	S3	SC	SC	SC	ORAA

Malden Park Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORAA
Total[5]		7	9	8	8	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Orange-tipped Oakworm Moth	*Anisota senatoria*	S3				iNaturalist
Great Spreadwing	*Archilestes grandis*	S1				NHIC; iNaturalist
Hackberry Emperor	*Asterocampa celtis*	S3				Butterfly Atlas
Tawny Emperor	*Asterocampa clyton*	S3				Butterfly Atlas
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; iNaturalist
Double-striped Bluet	*Enallagma basidens*	S3				NHIC
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC
Sleepy Duskywing	*Erynnis brizo*	S1				Butterfly Atlas
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas
Differential Grasshopeer	*Melanoplus differentialis*	S3				iNaturalist

Malden Park

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Zabulon Skipper	*Poanes zabulon*	S1				Butterfly Atlas
Common Sanddragon	*Progomphus obscurus*	S2				NHIC
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC
Globose Dome Snail	*Ventridens ligera*	S2				NHIC
Total[5]		17	2	1	2	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A10: St. Clair College Prairie and Woods

St. Clair College Prairie and Woods Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Smooth Yellow False Foxglove	*Aureolaria flava*	S2	THR			NHIC
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC
Squarrose Sedge	*Carex squarrosa*	S2				ERCA 2008; iNaturalist
Pignut Hickory	*Carya glabra*	S3				NHIC; ERCA 2008
Shellbark Hickory	*Carya laciniosa*	S3				NHIC
Field Thistle	*Cirsium discolor*	S3				Pratt 1991; ERCA 1992
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC
Pumpkin Ash	*Fraxinus profunda*	S1				NHIC
Shrubby St. John's-wort	*Hypericum prolificum*	S2				NHIC; ERCA 1992; ERCA 2008
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; ERCA 2008
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC
Greene's Rush	*Juncus greenei*	S3				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Grass-leaved Rush	*Juncus marginatus*	S3				ERCA 1992; ERCA 2008
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC
Hairy Pinweed	*Lechea mucronata*	S3				NHIC
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; Pratt 1991; ERCA 1992; ERCA 2008; iNaturalist
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC

St. Clair College Prairie and Woods Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Biennial Gaura	*Oenothera gaura*	S3				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC
Tubercled Orchid	*Platanthera flava*	S3				NHIC
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	S1	END	END	END	NHIC
Whorled Milkweed	*Polygala verticillata*	S3?				ERCA 1992
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC; ERCA 2008
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Whip Nutrush	*Scleria triglomerata*	S1				NHIC
Prairie Dock	*Silphium terebinthinaceum*	S1				iNaturalist; Pratt 1979; Pratt 1991; ERCA 1992; ERCA 2008
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC
Illinois Carrionflower	*Smilax illinoensis*	S2				ERCA 1992; ERCA 2008
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC
Eastern Stiff Goldenrod	*Solidago rigida* ssp. *rigida*	S3				NHIC; ERCA 1992; ERCA 2008
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3				NHIC; ERCA 2008
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; Pratt 1991; ERCA 1992; ERCA 2008; iNaturalist
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC; Pratt 1991; ERCA 1992; ERCA 2008
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; ERCA 1992; ERCA 2008

St. Clair College Prairie and Woods Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Southern Arrowwood	*Viburnum recognitum*	S2				ERCA 2008
Total[5]		46	8	7	7	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ERCA 2008
Great Egret	*Ardea alba*	S2B,S3M				OBBA; ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				NHIC; OBBA; ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ERCA 2008
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	NHIC; OBBA; ebird; ERCA 2008
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				OBBA; ebird; ERCA 2008
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird; ERCA 2008
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		OBBA; ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ERCA 2008
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	OBBA; ERCA 2008
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; ERCA 2008
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	OBBA
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	THR	SC	OBBA
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird
Purple Martin	*Progne subis*	S3B				OBBA
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ERCA 2008
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ERCA 2008

St. Clair College Prairie and Woods Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	OBBA
White-eyed Vireo	*Vireo griseus*	S1B				OBBA
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				OBBA; ebird
Total[5]		20	9	8	8	
Reptiles and Ampibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC
Blanding's Turtle	*Emydoidea blandingii*	S3	END		THR	NHIC
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	END	END	END	NHIC
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC
Total[5]		3	4	3	4	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; iNaturalist
Duke's Skipper	*Euphyes dukesi dukesi*	S2				Butterfly Atlas
Zabulon Skipper	*Poanes zabulon*	S1				Butterfly Atlas
Oak Hairstreak	*Satyrium favonius*	S1				Butterfly Atlas

St. Clair College Prairie and Woods
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas
Total[5]		5	1	1	1	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species

Appendix A11: Chappus Natural Area

Chappus Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Plants						
Large-flowered Purple False Foxglove	*Agalinis purpurea var. purpurea*	S1				NHIC; iNaturalist
White Colicroot	*Aletris farinosa*	S2	END	END	END	NHIC; MTO 2016; MNRF 2017; iNaturalist
Slim-spike Three-awn Grass	*Aristida longespica*	S2				NHIC
Arrowfeather Threeawn Grass	*Aristida purpurascens*	S1				NHIC; iNaturalist
Tall Green Milkweed	*Asclepias hirtella*	S1				NHIC
Purple Milkweed	*Asclepias purpurascens*	S1				NHIC
Prairie Milkweed	*Asclepias sullivantii*	S2S3				NHIC
Smooth Yellow False Foxglove	*Aureolaria flava*	S2?	THR			NHIC
Fern-leaved Yellow False Foxglove	*Aureolaria pedicularia*	S2?	THR			NHIC
Yellow Wild Indigo	*Baptisia tinctoria*	S1S2				NHIC
Yellow-fruited Sedge	*Carex annectens*	S2				NHIC
Bicknell's Sedge	*Carex bicknellii*	S2				NHIC
Field Sedge	*Carex conoidea*	S3				NHIC
Mead's Sedge	*Carex meadii*	S2				NHIC
Prairie Straw Sedge	*Carex suberecta*	S2				NHIC
Rigid Sedge	*Carex tetanica*	S3?				NHIC
Pignut Hickory	*Carya glabra*	S3				NHIC
Spotted Wintergreen	*Chimaphila maculata*	S2	THR	THR	THR	NHIC
Field Thistle	*Cirsium discolor*	S3				NHIC; iNaturalist
Tall Tickseed	*Coreopsis tripteris*	S1S2				NHIC; iNaturalist
Buttonbush Dodder	*Cuscuta cephalanthi*	S2				NHIC; iNaturalist
Hazel Dodder	*Cuscuta coryli*	S1				NHIC
Commons' Panicgrass	*Dichanthelium commonsianum*	SH				NHIC
Matted Panicgrass	*Dichanthelium meridionale*	S1				NHIC
Early-branching Panicgrass	*Dichanthelium praecocius*	S3				NHIC

Chappus Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Round-fruited Panicgrass	*Dichanthelium sphaerocarpon*	S3				NHIC; iNaturalist
Fall Crabgrass	*Digitaria cognata*	S1?				NHIC
Slender Fragrant Goldenrod	*Euthamia caroliniana*	S1				NHIC; iNaturalist
Bowman's-root	*Gillenia trifoliata*	SX				NHIC
Gentian-leaved St. John's-wort	*Hypericum gentianoides*	S1				NHIC
Eastern Yellow Stargrass	*Hypoxis hirsuta*	S2S3				NHIC; iNaturalist
Sharp-fruited Rush	*Juncus acuminatus*	S3				NHIC
Greater Poverty Rush	*Juncus anthelatus*	S1				NHIC
Two-flowered Rush	*Juncus biflorus*	S1				NHIC; iNaturalist
Short-fruited Rush	*Juncus brachycarpus*	S1				NHIC; iNaturalist
Greene's Rush	*Juncus greenei*	S3				NHIC; iNaturalist
Grass-leaved Rush	*Juncus marginatus*	S3				iNaturalist
Two-flowered Dwarf-dandelion	*Krigia biflora*	S2				NHIC
Hairy Pinweed	*Lechea mucronata*	S3				NHIC; iNaturalist
Leggett's Pinweed	*Lechea pulchella*	S1				NHIC
Dense Blazing-star	*Liatris spicata*	S2	THR	THR	THR	NHIC; MTO 2016; MNRF 2016; iNaturalist
Purple Twayblade	*Liparis liliifolia*	S2S3	THR	THR	THR	NHIC; MECP 2019a
Hoary Puccoon	*Lithospermum canescens*	S3				NHIC
Bushy Seedbox	*Ludwigia alternifolia*	S1				NHIC; iNaturalist
Many-fruit Seedbox	*Ludwigia polycarpa*	S2				NHIC
Sundial Lupine	*Lupinus perennis*	S2S3				NHIC
Winged Loosestrife	*Lythrum alatum*	S3				NHIC; iNaturalist
American Lotus	*Nelumbo lutea*	S2S3				NHIC
Black Gum	*Nyssa sylvatica*	S3				NHIC
Biennial Gaura	*Oenothera gaura*	S2				NHIC; iNaturalist
Meadow Evening-primrose	*Oenothera pilosella*	S2				NHIC; iNaturalist

Chappus Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Stiff Cowbane	*Oxypolis rigidior*	S2				NHIC
Streambank Groundsel	*Packera pseudaurea*	S2				NHIC
Slender Paspalum	*Paspalum setaceum*	S2				NHIC
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	S1	END	END	END	NHIC
Cross-leaved Milkwort	*Polygala cruciata*	SX				NHIC
Pink Milkwort	*Polygala incarnata*	S1	END	END	END	NHIC
Blood Milkwort	*Polygala sanguinea*	S3				NHIC; iNaturalist
Whorled Milkwort	*Polygala verticillata*	S3?				NHIC; iNaturalist
Slender Knotweed	*Polygonum tenue*	S2				NHIC
Slender Mountain-mint	*Pycnanthemum tenuifolium*	S3				NHIC; iNaturalist
Hairy Mountain-mint	*Pycnanthemum verticillatum var. pilosum*	S1				NHIC
Grey-headed Prairie Coneflower	*Ratibida pinnata*	S3				NHIC
Climbing Prairie Rose	*Rosa setigera*	S2S3	SC	SC	SC	NHIC; iNaturalist
Clinton's Clubrush	*Trichophorum clintonii*	S2S3				NHIC
Whip Nutrush	*Scleria triglomerata*	S1				NHIC; iNaturalist
Cup Plant	*Silphium perfoliatum*	S2				NHIC
Prairie Rosinweed	*Silphium terebinthinaceum*	S1				NHIC; iNaturalist
White Blue-eyed-grass	*Sisyrinchium albidum*	S1				NHIC
Upright Carrionflower	*Smilax ecirrata*	S3?				NHIC
Illinois Carrionflower	*Smilax illinoensis*	S2?				NHIC
Riddell's Goldenrod	*Solidago riddellii*	S3	SC	SC	SC	NHIC; iNaturalist
Stiff Goldenrod	*Solidago rigida*	S3				NHIC; iNaturalist
Saltmarsh Sand-spurrey	*Spergularia marina*	S1				NHIC
Great Plains Ladies'-tresses	*Spiranthes magnicamporum*	S3?				NHIC
Bushy Aster	*Symphyotrichum dumosum*	S2				NHIC
Willow-leaved Aster	*Symphyotrichum praealtum*	S2	THR	THR	THR	NHIC; Jones 2013; MTO 2016

Chappus Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Skunk Meadow-rue	*Thalictrum amphibolum*	S3				NHIC
Ohio Spiderwort	*Tradescantia ohiensis*	S2				NHIC; iNaturalist
Giant Ironweed	*Vernonia gigantea*	S1?				NHIC
Missouri Ironweed	*Vernonia missurica*	S3?				NHIC; iNaturalist
Culver's Root	*Veronicastrum virginicum*	S2				NHIC; iNaturalist
Northern Fox Grape	*Vitis labrusca*	S1				NHIC; iNaturalist
Total[5]		83	11	9	9	
Birds						
Wood Duck	*Aix sponsa*	S5B,S3N				OBBA; ebird
Grasshopper Sparrow	*Ammodramus savannarum*	S4B	SC		SC	ebird
Sandhill Crane	*Antigone canadensis*	S5B,S3N				ebird
Eastern Whip-poor-will	*Antrostomus vociferus*	S4B	THR	THR	THR	NHIC
Great Egret	*Ardea alba*	S2B,S3M				ebird
Short-eared Owl	*Asio flammeus*	S4?B, S2S3N	SC	SC	SC	ebird
Tufted Titmouse	*Baeolophus bicolor*	S3				NHIC; OBBA
Rough-legged Hawk	*Buteo lagopus*	S1B,S4N				ebird
Red-shouldered Hawk	*Buteo lineatus*	S4B,S2N				ebird
Lapland Longspur	*Calcarius lapponicus*	S3B,S4N				ebird
Pectoral Sandpiper	*Calidris melanotos*	S1B,S4M				ebird
Semipalmated Sandpiper	*Calidris pusilla*	S2B,S4M				ebird
Canada Warbler	*Cardellina canadensis*	S5B	SC	THR	SC	ebird
Turkey Vulture	*Cathartes aura*	S5B,S3N				OBBA; ebird
Chimney Swift	*Chaetura pelagica*	S3B	THR	THR	THR	OBBA; ebird
Common Nighthawk	*Chordeiles minor*	S4B	SC	THR	SC	OBBA; ebird

Chappus Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Marsh Wren	*Cistothorus palustris*	S4B,S3N				ebird
Evening Grosbeak	*Coccothraustes vespertinus*	S4	SC	SC		ebird
Northern Bobwhite	*Colinus virginianus*	S1?	END	END	END	ebird
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SC	THR	SC	ebird
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	SC	NHIC; OBBA; ebird
Ruby-crowned Kinglet	*Corthylio calendula*	S5B,S3N				ebird
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	THR	OBBA; ebird
Gray Catbird	*Dumetella carolinensis*	S5B,S3N				OBBA; ebird
Acadian Flycatcher	*Empidonax virescens*	S1B	END	END	END	ebird
Rusty Blackbird	*Euphagus carolinus*	S4B,S3N	SC	SC		ebird
Peregrine Falcon	*Falco peregrinus*	S4			SC	OBBA; ebird
Kentucky Warbler	*Geothlypis formosa*	S1M				ebird
Common Yellowthroat	*Geothlypis trichas*	S5B,S3N				OBBA; ebird
Bald Eagle	*Haliaeetus leucocephalus*	S4			SC	ebird
Barn Swallow	*Hirundo rustica*	S4B	SC	THR	SC	NHIC; OBBA; ebird
Caspian Tern	*Hydroprogne caspia*	S3B,S5M				ebird
Wood Thrush	*Hylocichla mustelina*	S4B	THR	THR	SC	NHIC; OBBA; ebird
Yellow-breasted Chat	*Icteria virens*	S1B	END		END	NHIC; OBBA
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S3	END	END	END	OBBA; ebird
Black-crowned Night-Heron	*Nycticorax nycticorax*	S3B,S2N, S4M				ebird
Louisiana Waterthrush	*Parkesia motacilla*	S2B	THR	THR	THR	ebird
Savannah Sparrow	*Passerculus sandwichensis*	S5B,S3N				OBBA; ebird
Fox Sparrow	*Passerella iliaca*	S5B,S3N				ebird

Chappus Natural Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Eastern Towhee	*Pipilo erythrophthalmus*	S4B,S3N				OBBA; ebird
Summer Tanager	*Piranga rubra*	S1M				ebird
Pied-billed Grebe	*Podilymbus podiceps*	S4B,S2N				ebird
Purple Martin	*Progne subis*	S3B				ebird
Prothonotary Warbler	*Protonotaria citrea*	S1B	END	END	END	ebird
Bank Swallow	*Riparia riparia*	S4B	THR	THR	THR	OBBA; ebird
Cerulean Warbler	*Setophaga cerulea*	S2B	END	END	THR	ebird
Yellow-throated Warbler	*Setophaga dominica*	S1M				ebird
Pine Warbler	*Setophaga pinus*	S5B,S3N				ebird
Yellow-bellied Sapsucker	*Sphyrapicus varius*	S5B,S3N				ebird
Dickcissel	*Spiza americana*	S2M				ebird
Chipping Sparrow	*Spizella passerina*	S5B,S3N				OBBA; ebird
Field Sparrow	*Spizella pusilla*	S4B,S3N				OBBA; ebird
Forster's Tern	*Sterna forsteri*	S3B				ebird
Eastern Meadowlark	*Sturnella magna*	S4B,S3N	THR	THR	THR	NHIC; OBBA
Lesser Yellowlegs	*Tringa flavipes*	S3S4B, S5M				ebird
Golden-winged Warbler	*Vermivora chrysoptera*	S3B	THR	THR	SC	ebird
White-eyed Vireo	*Vireo griseus*	S1B				ebird
White-crowned Sparrow	*Zonotrichia leucophrys*	S5B,S3N				ebird
Total[5]		45	23	21	23	
Reptiles and Amphibians						
Snapping Turtle	*Chelydra serpentina*	S4	SC	SC	SC	NHIC; ORAA
Midland Painted Turtle	*Chrysemys picta marginata*	S4	SC	SC		NHIC; iNaturalist

Chappus Natural Area
Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Northern Map Turtle	*Graptemys geographica*	S3	SC	SC	SC	NHIC
Eastern Foxsnake (Carolinian population)	*Pantherophis vulpinus pop. 2*	S3	END	END	END	ORAA; MTO 2016; ECCC 2017
Massasauga (Carolinian population	*Sistrurus catenatus pop. 2*	S1	END	END	END	NHIC
Butler's Gartersnake	*Thamnophis butleri*	S2	END	END	END	NHIC; ORAA; MTO 2016; MECP 2019b; iNaturalist
Total[5]		4	6	6	5	
Mammals						
Silver-haired Bat	*Lasionycteris noctivagans*	S4	END			Dobbyn 1994
Eastern Red Bat	*Lasiurus borealis*	S4	END			Dobbyn 1994
Hoary Bat	*Lasiurus cinereus*	S4	END			Dobbyn 1994
Little Brown Myotis	*Myotis lucifugus*	S3	END	END	END	Dobbyn 1994
Gray Fox	*Urocyon cinereoargenteus*	S1	THR	THR	THR	Dobbyn 1994
Total[5]		2	5	2	2	
Terrestrial Invertebrates						
Hoary Edge	*Achalarus lyciades*	S1				Butterfly Atlas
Spiny Oakworm Moth	*Anisota stigma*	S2				NHIC
Gray Marvel Moth	*Anterastria teratophora*	S3S4				iNaturalist
Spotted Apatelodes Moth	*Apatelodes torrefacta*	S2				iNaturalist
Obtuse Yellow	*Azenia obtusa*	S3				iNaturalist
Hackberry Emperor	*Asterocampa celtis*	S3				Butterfly Atlas
Tawny Emperor	*Asterocampa clyton*	S3				Butterfly Atlas
Pecan Spittle Bug	*Clastoptera achatina*	S1?				NHIC
Monarch	*Danaus plexippus*	S2N,S4B	END	SC	SC	Butterfly Atlas; iNaturalist
A Chrysomelid Beetle	*Diabrotica cristata*	S1S2				NHIC

Chappus Natural Area Rare Species and Species at Risk Occurrences						
Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Short-winged Green Grasshopper	*Dichromorpha viridis*	S2				NHIC
Double-striped Bluet	*Enallagma basidens*	S3				NHIC
Swamp Darner	*Epiaeschna heros*	S3S4				NHIC
Sleepy Duskywing	*Erynnis brizo*	S1				NHIC; Butterfly Atlas
Mottled Duskywing	*Erynnis martialis*	S2	END		END	Butterfly Atlas
Black Dash	*Euphyes conspicua*	S3				Butterfly Atlas
Duke's Skipper	*Euphyes dukesi dukesi*	S2				NHIC; Butterfly Atlas
Pronghorn Clubtail	*Gomphus graslinellus*	S3				NHIC
Reversed Haploa Moth	*Haploa reversa*	S1	END			NHIC; Naturalist
Paintedhand Mudbug	*Lacunicambarus polychromatus*	S1S2				NHIC
Painted Skimmer	*Libellula semifasciata*	S3				NHIC; iNaturalist
Great Blue Skimmer	*Libellula vibrans*	S1				NHIC
Differential Grasshopper	*Melanoplus differentialis*	S3				NHIC
Scudder's Short-winged Grasshopper	*Melanoplus scudderi*	S1				NHIC; iNaturalist
Texas Mocis Moth	*Mocis texana*	S1S2				iNaturalist
Hentz's Orbweaver	*Neoscona crucifera*	S3S4				iNaturalist
Faint-spotted Palthis Moth	*Palthis asopialis*	S3S4				iNaturalist
A Potter Wasp	*Parancistrocerus perennis*	S2				NHIC
Proud Globelet	*Patera pennsylvanica*	S1	END	END	END	NHIC
Skiff Moth	*Prolimacodes badia*	S3S4				iNaturalist
Common Sanddragon	*Progomphus obscurus*	S2				NHIC
False-foxglove Sun Moth	*Pyrrhia aurantiago*	S1	END			NHIC
Northern Bush Katydid	*Scudderia septentrionalis*	S3?				iNaturalist

Chappus Natural Area

Rare Species and Species at Risk Occurrences

Common Name	Scientific Name	S-Rank[1]	COSEWIC Status[2]	SARA (Sch. 1) Status[3]	ESA Status[4]	References
Cicada Killer	*Sphecius speciosus*	S1S2				NHIC
Black Purseweb Tarantula	*Sphodros niger*	S3				NHIC
Pink-legged Tiger Moth	*Spilosoma latipennis*	S3S4				iNaturalist
A Red Milkweed Beetle	*Tetraopes quinquemaculatus*	S1				NHIC
Southern Cloudywing	*Thorybes bathyllus*	S3				Butterfly Atlas; iNaturalist
Globose Dome Snail	*Ventridens ligera*	S2				NHIC
Striped Whitelip	*Webbhelix multilineata*	S2S3	END			NHIC; iNaturalist
Total[5]		40	6	2	3	

[1] S-Rank (Provincial): S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); SH (Historical); SX (Extirpated); S#B (breeding); S#N (non-breeding); S#M (migrant); SNA (species not suitable target for conservation activities)

[2] Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[3] Species at Risk Act (SARA) Status in Canada: END (Endangered); THR (Threatened); SC (Special Concern)

[4] Endangered Species Act (ESA) Status in Ontario: END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

[5] Totals include only the sum of rare S1 to S3 ranks, or a combination that includes S1, S2 and/or S3; and all END, THR, and SC designated species