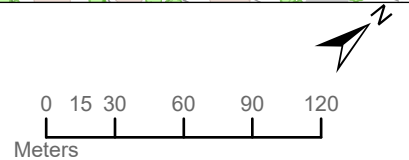


2021 NATURAL AREAS UPDATE

SITE CE7

- NATURAL AREAS
- VEGETATION COMMUNITIES
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- LINKAGES



Produced by Geospatial Solutions

City of Mississauga Natural Areas Survey (2018)

Natural Areas Fact Sheet

NATURAL AREA NAME	PLANNING DISTRICT	AREA (HA)	UTM GRID REFERENCE
CE7 (Sugar Maple Woods)	Central Erin Mills	9.52	6027 48238

1. LOCATION

South of Thomas Street between Winston Churchill Boulevard and Glen Erin Drive. The natural area CM12 is located approximately 500 m to the west.

2. CLASSIFICATION

Significant Natural Area

3. DESCRIPTION

A. Physical Features

This site is located in the Sawmill Creek subwatershed. Topography of this site is hilly and soil moisture is mesic to wet in swales. Seepage is apparent in many areas and a number of intermittent streams bisect the woodlot. Many of these have culverts where they pass under gravel trails. Bedrock geology of the site consists of red shales of the Queenston Formation. These are buried by up to 7.5 m of soils and glacial deposits consisting of poorly drained Jeddo clay loam, imperfectly drained Chinguacousy clay loam, and well drained Oneida clay loam. The soils have developed in the Halton till deposits, of a partially bevelled tillplain.

B. Biota

There are 182 floral species and 27 faunal species documented for this site. Four vegetation communities comprise this site (see accompanying figure): dry-fresh sugar maple - beech deciduous forest type (FOD5-2), green ash mineral deciduous swamp type/forb mineral meadow marsh (SWD2-2/MAM2-10), silver maple mineral deciduous swamp type (SWD3-2), and dry-fresh old field meadow type (CUM1-1).

Dry-Fresh Sugar Maple – Beech Deciduous Forest Type (FOD5-2)

Sugar Maple (*Acer saccharum* ssp. *saccharum*) and American Beech (*Fagus grandifolia*) dominate the canopy of this mature forest. Shagbark Hickory (*Carya ovata*), White Pine (*Pinus strobus*), and Black Cherry (*Prunus serotina*) are the associates. The closed canopy (greater than 60% cover) has a height greater than 25 m. The canopy trees are approximately 80 years old and typically 40 cm in diameter, however, trees 70 cm in diameter are not unusual. The sub-canopy contains American Beech, Hop Hornbeam (*Ostrya virginiana*), and Sugar Maple. Sub-canopy trees are 2-25 m in height and cover greater than 60% of the community. The understory is dominated by Sugar Maple, White Ash (*Fraxinus americana*), European Buckthorn (*Rhamnus cathartica*) and Chokecherry (*Prunus virginiana*) that are 1-2 m in height and covers greater than 60% of the community. The ground layer is diverse and contains species such as Running Strawberry (*Euonymus obovata*), Enchanter's Nightshade (*Circaea canadensis*), False Solomon's Seal (*Maianthemum racemosum*), Herb Robert (*Geranium robertianum*), and Garlic Mustard (*Alliaria petiolata*). Ground layer vegetation is less than 1 m in height and covers 25-60% of the community.

Green Ash Mineral Deciduous Swamp Type/Forb Mineral Meadow Marsh (SWD2-2/MAM2-10)

This lowland swamp/meadow marsh complex is located in a depression within the surrounding forest. The canopy is dominated by Red Maple (*Acer rubrum*), Black Maple (*Acer saccharum* ssp. *nigrum*), and Green Ash (*Fraxinus pennsylvanica*) with White Pine (*Pinus strobus*) as the associate. The canopy trees are between 10 to greater than 25 m in height and canopy cover is patchy, ranging from 25-60%. The sub-canopy also covers 25-60% of the community with species including Sugar Maple and White Elm (*Ulmus*

B. Biota (continued)

Americana) that are 2-10 m in height. The understory is mainly composed of Green Ash and Red-osier Dogwood (*Cornus stolonifera*) that is 1-2 m in height and also covers 25-60% of the community. The ground layer is densely vegetated with wetland flora including Spotted Jewelweed (*Impatiens capensis*), Fowl Manna Grass (*Glyceria striata*), and Bittersweet Nightshade (*Solanum dulcamara*). Ground vegetation is less than 1 m in height and covers greater than 60% of the community.

Silver Maple Mineral Deciduous Swamp Type (SWD3-2)

This swamp is also located in a depression within the surrounding forest. Bur Oak (*Quercus macrocarpa*) and Freeman's Maple (*Acer x freemanii*) are the dominant species in the canopy. Canopy trees are 10 to greater than 25 m in height and cover greater than 60% of the community. The sub-canopy is comprised of Green Ash, White Elm, and Shagbark Hickory that is 2-10 m in height and covers 25 to 60% of the community. The understory is also sparse (25-60% cover) with Red-osier Dogwood (*Cornus stolonifera*) dominating the vegetation and growing between 1-2 m in height. The ground layer is more densely vegetated (> 60% cover) with species including Spotted Jewelweed, Fowl Manna Grass, and Sensitive Fern (*Onoclea sensibilis*) that are less than 1 m in height.

Dry-Fresh Old Field Meadow Type (CUM1-1)

The cultural meadow has a sparse (10-25% cover) canopy of Eastern Cottonwood (*Populus deltoides*) and Trembling Aspen (*Populus tremuloides*) that are 10 to greater than 25 m in height. The sub-canopy is similarly sparse (10-25% cover) with White Ash, Bur Oak, Red Oak, and White Elm. Sub-canopy trees are 1-10 m in height. The understory is densely vegetated with Goldenrod (*Solidago* sp.), Trembling Aspen saplings, and Garlic Mustard. Understory vegetation is 0.5-1 m in height and covers greater than 60% of the community. The ground layer is also densely vegetated (greater than 60% cover) with species such as Wild Strawberry (*Fragaria virginiana*), Virginia Creeper (*Parthenocissus quinquefolia*), and Kentucky Bluegrass (*Poa pratensis*). Ground layer vegetation is less than 0.5 m in height.

There are 16 bird, 3 mammal, 6 amphibian, and 1 reptile species documented at this site. This is a very low diversity considering that though small, the forest habitat is diverse, and the northern part of the site has a configuration with a low edge to interior ratio. One species of bird, the Eastern Wood-pewee is considered provincially significant. The majority of bird species observed were habitat generalists such as Northern Cardinal, Black-capped Chickadee and American Robin. Generally, minimal bird songs were heard in this natural area. One species moderately dependent on mature forest habitat was present: Red-eyed Vireo. However, this species can nest in a variety of forest habitats, including late successional forests and small patches.

4. CONDITION

This site is in good condition. Disturbances present at this site include garbage, road noise, cutting, invasive species, as well as formal and ad-hoc trails. Gravel trails have been installed through this site, with culverts to maintain surface water connections. Invasive plant species including Garlic Mustard and European Buckthorn have spread into the woodlot. Fifty-two introduced plant species are present at this site (representing 28.57% of the total number of species present). The native FQI is 45.07, a high value, and the native mean coefficient is 3.95, a medium value. Surrounding land use is residential.

5. SIGNIFICANCE

- 1 fauna species considered at risk within the province and/or nationally.
- 12 Credit Valley Conservation fauna Species of Conservation Concern (Tier 1-3), including 5 birds, 1 mammal, and 6 amphibians.
- 41 Credit Valley Conservation flora Species of Conservation Concern (Tier 1-3).
- Close proximity to natural area CM12.

6. MANAGEMENT NEEDS

- As a tableland woodlot enclosed by residential development, this site should be a priority for a Conservation Plan.

7. PRINCIPLE REFERENCES

- City of Mississauga. 1976. Environmental Planning Program. Woodlot Analysis. Planning Department.
- duToit Associates Limited and Ecoplans Limited. 1977. Environmental Report for the Central Erin Mills District and Central Business Park.
- Ecoplans Limited. 1981. Central Erin Mills District, Woodlot Assessment.
- Proctor and Redfern Limited. 1992. Sawmill Creek Subwatershed Plan.