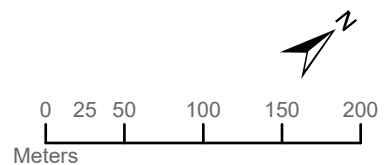


2024 NATURAL AREAS UPDATE

SITE CE10

- ▬ NATURAL AREAS
- ▬ VEGETATION COMMUNITIES
- ▬ SPECIAL MANAGEMENT AREAS
- ▬ LINKAGES



CE10

CLASSIFICATION Significant Natural Area	Park Name Erin Woods Park	PLANNING DISTRICT Central Erin Mills	AREA (Ha) 18.70
CONSERVATION AUTHORITY Credit Valley Conservation	SUBWATERSHED Mullet Creek	OWNERSHIP Public	SURROUNDING LAND USE Residential, Recreational, and Industrial

GENERAL SUMMARY

East of Erin Mills Parkway, south of McFarren Boulevard and north of Erin Centre Boulevard. CE9 and CE5 are located within 500 m to the west and south, respectively. Includes Erin Wood, a City park. This site is within the Mullet Creek subwatershed, which is classified as a type 2 fishery.

PHYSICAL DESCRIPTION

The site features rolling topography with a steep ravine in the centre of the site oriented in an east/west direction. Evidence of erosion exists on some of the ravine slopes. Soil moisture is mesic throughout. 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 imperfectly drained Chinguacousy clay loam (in the east) and well drained Oneida clay loam (in the west). These soils developed in the Halton till deposits on a partially bevelled tillplain.

CONDITION

This site is currently in good to fair condition. Disturbances prevalent at this site include a formal and unplanned trail network, litter, fort and dam construction in the ravine, vehicle and airplane noise, vandalism (spray paint on trees), soil compaction and erosion on the ravine slopes, and mountain biking. Evidence of Emerald Ash Borer infestation in ash trees, particularly at the south end of the natural area where many of the canopy ash trees are dead. Erosion continues to occur along the banks of the watercourse, which has been mainly dry since 1995, and is devoid of ground flora.

Highly invasive plant species (as regarded by Ontario Invasive Plant Council) found on site

include Garlic Mustard (*Alliaria petiolata*), European Buckthorn (*Rhamnus cathartica*), and Dog-strangling Vine (*Vincetoxicum rossicum*) are common.

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

Three vegetation communities comprise this site (see accompanying figure): Dry-Fresh Sugar Maple – Oak Deciduous Forest (FOD5-3); Hawthorn Cultural Savannah (CUS1-1); and Dry-Moist Old Field Meadow (CUM1-1). The old field is located in the northeast edge of the woodlot, and is adjacent to the hawthorn thicket. The red oak-sugar maple forest occupies the remainder of the site.

Significant Plant Communities

There are no Significant Plant Communities in CE10.

SPECIES RICHNESS

Flora

There are a total of 192 floral species documented for this site. The native FQI is 46.13 and the native mean coefficient is 4.00, which are high values. The native FQI and the native mean coefficient have decreased from previous values of 46.68 and 4.13, respectively. In total, 59 introduced plant species are present at this site (representing 30.70% of the total number of species present).

No provincially significant flora species have been noted for this site.

16 locally significant flora species have been noted on site.

48 Credit Valley Conservation flora species of Conservation Concern (Tier 1-3) have been noted for this site.

Fauna

There are 27 faunal species documented for this site: 21 birds, 4 mammal, 1 amphibian, and 1 reptile species.

Two provincially significant fauna species have been noted for this site.

Nine Credit Valley Conservation fauna species of Conservation Concern (Tier 1-3) have been noted for this site.

MANAGEMENT RECOMMENDATIONS

1. This site is a good candidate for more intensive management due to the presence of significant flora, large size, and a high native mean coefficient.
2. Invasive species removal, particularly of Garlic Mustard (*Alliaria petiolata*), European Buckthorn (*Rhamnus cathartica*), and Dog-Strangling Vine (*Vincetoxicum rossicum*), should occur throughout this site.
3. Mountain biking activities should be controlled, structures removed, and area restored.

REFERENCES

City of Mississauga (1978b)

duToit Associates Limited and Ecoplans Limited (1977)

Ecoplans Limited (1981a)

ECOLOGICAL LAND CLASSIFICATION

Dry-Fresh Sugar Maple – Oak Deciduous Forest Type (FOD5-3)

The mature forest canopy is dominated by Sugar Maple (*Acer saccharum ssp. saccharum*), Red Oak (*Quercus rubra*), Shagbark Hickory (*Carya ovata*) and White Oak (*Quercus alba*). This layer reaches > 25 m in height and covers > 60%. The sub-canopy is dominated by Red Oak, Sugar Maple, Shagbark Hickory, Hop Hornbeam (*Ostrya virginiana*) and White Ash (*Fraxinus americana*). This layer is between 2-10 m and covers 25-60%. The understory is dominated by Choke Cherry (*Prunus virginiana ssp. virginiana*), White Ash, Sugar Maple and Red Oak seedlings, and Tartarian Honeysuckle (*Lonicera tatarica*). This layer is between 1-2 m and covers 10-25%. The ground layer is diverse and includes Running Strawberry Bush (*Euonymus obovatus*), Garlic Mustard (*Alliaria petiolata*), Enchanter's Nightshade (*Circaea canadensis*), Large-Leaved Aster (*Eurybia macrophylla*), Blue-Stemmed Goldenrod (*Solidago caesia*) and sedges (*Carex spp.*). Sharp-leaved Hepatica (*Hepatica acutiloba*), Yellow Trout Lily (*Erythronium americanum ssp. americanum*), Canada Lily (*Maianthemum canadense*), and violets (*Viola spp.*) were also abundant in the spring. The ground layer ranges between 0.5-1 m in height and covers 25-60%. There is good regeneration of and Sugar Maple, with sporadic regeneration of White Ash Red Oak and Shagbark Hickory. A large amount of downed woody debris is also present within this community.

Hawthorn Cultural Savannah Type (CUS1-1)

The cultural savannah is heavily impacted by non-native species. The canopy layer consists of sparse Shagbark Hickory, White Pine (*Pinus strobus*) and White Spruce (*Picea glauca*). This layer is between 10-25 m in height and covers between 1-10%. The understory is dominated by European Buckthorn (*Rhamnus cathartica*), hawthorn (*Crataegus spp.*), White Ash, Manitoba Maple (*Acer negundo*) and Riverbank Grape (*Vitis riparia*). This layer ranges in height from 2-10 m

and covers 25-60%. The ground layer is dominated by Canada Goldenrod (*Solidago Canadensis*), Enchanter's Nightshade, Bittersweet Nightshade (*Solanum dulcamara*) and Yellow Avens (*Geum aleppicum*). This layer ranges in height from 1-2 m and covers 25-60%. Riverbank Grape grows throughout the community on the ground and into the canopy of trees and shrubs. European Buckthorn is very dominant in some parts of this community.

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

The old field is dominated by Canada Goldenrod (*Solidago canadensis*), Teasel (*Dipsacum fullonum ssp. sylvestris*), Red Raspberry (*Rubus idaeus ssp. melanolasius*), Riverbank Grape, and Burdock (*Arctium minus ssp. minus*) in the ground layer (0.5-1 m, > 60% cover). Surrounding the meadow is a shrub thicket dominated by hawthorn (*Crataegus spp.*). Red-osier Dogwood (*Cornus sericea*) and hawthorns are beginning to invade in the understory (1-2 m, 10-25% cover). Scattered throughout the thicket are immature White Pine (*Pinus strobus*), White Ash (*Fraxinus americana*), and Trembling Aspen (*Populus tremuloides*) in the canopy (2-10 m, 10-25% cover).