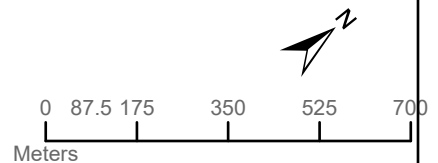


2024 NATURAL AREAS UPDATE

SITE LS1

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



LS1

CLASSIFICATION Significant Natural Area	Park Name Osprey Marsh/Osprey Woods Park		PLANNING DISTRICT Lisgar	AREA (Ha) 32.68
CONSERVATION AUTHORITY CVC	SUBWATERSHED Mullet Creek	OWNERSHIP Private/City	SURROUNDING LAND USE Residential	

GENERAL SUMMARY

Between Ninth Line and Tenth Line, from Parkgate Drive north along a tributary of Sixteen Mile Creek to Derry Road West. The natural areas LS2 and LS3 are located within 500 m to the east.

PHYSICAL DESCRIPTION

A channelized tributary of Sixteen Mile Creek is present within this site with a water quantity and quality control facility. The topography of this site is level. Soil moisture is wet-mesic and a perched water table subject to seasonal fluctuations is present in the southwest. Bedrock geology consists of the red shales of the Queenston Formation. These are overlain by up to 7.5 m of soils and glacial deposits consisting of poorly drained Jeddo clay loam over much of the site, and imperfectly drained Chinguacousy clay loam in the north woodlot, both formed within deposits of the Halton till plain.

CONDITION

This site is in fair-good condition as there are many disturbances and non-natives but floristics are relatively good. Disturbances present at this site include numerous *ad hoc* trails, garbage, dumping, encroachment into the natural area, man-made structures, vandalism, and the tributary of Sixteen Mile Creek has been channelized with concrete throughout this site. Highly invasive plant species (as regarded by Ontario Invasive Plant Council) found on site include Garlic Mustard, Winged Euonymus (*Euonymus alatus*), Wild Parsnip (*Pastinaca sativa*), Purple Loosestrife, Common Reed, Tatarian Honeysuckle, Periwinkle (*Vinca minor*), Goutweed (*Aegopodium podagraria*), and European Buckthorn. Invasive plant species are prevalent and widespread through much of the site, particularly along trails and in disturbed

areas. 98 introduced plant species are present at this site (representing 37.55% of the total number of species present), a high ratio of non-native plant species. The surrounding land use is residential.

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

6 vegetation communities are present at this site (see accompanying figure); dry-moist old field meadow type (CUM1-1), mineral cultural woodland (CUW1), dry-fresh oak-hickory deciduous forest type (FOD2-2), swamp maple mineral deciduous swamp type (SWD3-3), cattail mineral shallow marsh (MAS2-1), and open aquatic (OAO).

Significant Plant Communities

There are no Significant Plant Communities in LS1.

SPECIES RICHNESS

Flora

The native FQI is 48.63 and the native mean coefficient is 3.81, which are high and medium values, respectively. The native FQI and the native mean coefficient have both increased from previous values of 35.24 and 3.46, respectively.

There are 261 floral species documented for this site.

2 provincially significant flora species have been noted; 1 Endangered species and 1 uncommon in Ontario.

22 locally significant flora species have been noted on site; 11 are rare species (known from 1 to 3 locations) and 11 are uncommon species

(known from 4 to 10 locations) within the City.

61 Credit Valley Conservation flora Species of Conservation Concern (Tier 1-3).

Fauna

The cultural meadow is extremely narrow and long but does connect forest patches. The length and the connectivity of the different habitats has fostered a higher diversity of fauna (though mostly habitat-generalist species) than is expected within this type of urban habitat. There are 47 bird, 2 mammal, 2 amphibians, 1 reptile, and 1 butterfly species documented for this site. The OAO and associated areas supports fewer common species in City, such as Great Blue Heron, Spotted Sandpiper, Cliff Swallow, Common Yellowthroat, and House Wren.

There are 52 faunal species documented for this site.

3 provincially significant fauna species have been noted: 2 Threatened, 1 Special Concern.

23 Credit Valley Conservation fauna Species of Conservation Concern (Tier 1-3).

MANAGEMENT RECOMMENDATIONS

1. The linkage along the utility corridor to LS2 is identified as a Special Management Area.
2. The City Parks, Lisgar Meadow Brook and unnamed public land, are included within this natural area.
3. A Conservation and Invasive Species Management Plan should be prepared for this site, especially in view of the development that has infringed on the site and potentially altered the hydrology. Special attention should be paid to the European Buckthorn population in Osprey Woods Park.

REFERENCES

Milus Bollenberghe Topps Limited. 1983. Environmental Assessment Report for the Lisgar Residential District.

ECOLOGICAL LAND CLASSIFICATION

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

Species composition varies in this old field meadow as it is located along a riparian zone. The portion of meadow that is north of the cultural woodland and Osprey Boulevard has an open canopy (1-10% cover) dominated by Hybrid Willow (*Salix x fragilis*) and Silver Maple that are 10-25 m in height. The sub-canopy is sparse dense, covering 10-25% of the community, and is dominated by Eastern White Cedar (*Thuja occidentalis*), Freeman's Maple, Red-osier Dogwood (*Cornus sericea*), European Buckthorn (*Rhamnus cathartica*), and Staghorn Sumac (*Rhus typhina*). The sub-canopy is 2-10 m tall. The understory has a coverage of >60%, is 1-2 m tall and is composed of Canada Goldenrod (*Solidago canadensis*), Reed Canarygrass (*Phalaris arundinacea*), Common Teasel (*Dipsacum fullonum*) and Purple Loosestrife (*Lythrum salicaria*). The ground layer was also dense, covering >60% and was < 1 m tall. It was composed of Kentucky Bluegrass (*Poa pratensis*), Wild Carrot (*Daucus carota*) and Common Burdock, Poison Ivy (*Toxicodendron radicans*) and Green Ash (*Fraxinus pennsylvanica*) are associates.

The cultural meadow surrounding the ponds in Osprey Marsh have similar species compositions across all layers but there is much less canopy and understory cover, 1-10%.

Mineral Cultural Woodland (CUW1)

This woodland is just north of Osprey Boulevard and extends north until it turns into a cultural meadow. The dominant canopy species are Willow (*Salix sp.*), Silver Maple (*Acer saccharinum*) and Norway Maple (*Acer platanoides*). The canopy is 10 m to > 25 m and has 25-60% coverage. The sub-canopy is made up of Eastern White Cedar, Narrowleaf Cattail (*Typha angustifolia*), Red-osier Dogwood and Silver Maple. The sub-canopy also has a cover of 25-60% and is 2-10 m tall. The understory is a mixture of herbaceous meadow species. Canada Goldenrod, Reed Canarygrass, Common Teasel

were abundant, Prairie Cordgrass (*Sporobolus michauxianus*) was an associate.

Dry-Fresh Oak – Hickory Deciduous Forest Type (FOD2-2)

The oak-hickory forest is dominated by several mature Bur Oaks (*Quercus macrocarpa*), Shagbark Hickory (*Carya ovata*), and Northern Red Oak (*Quercus rubra*). The canopy is between 10m and greater than 25 m in height and covers greater than 60% of the community. The sub-canopy was composed of Hop Hornbeam (*Ostrya virginiana*), Northern Red Maple and American Basswood (*Tilia americana*), White Ash (*Fraxinus americana*) and Shagbark Hickory (*Carya ovata*) are associates. The subcanopy was also dense, >60% cover, and was between 10 and 25 m tall. The understory was almost completely dominated by European Buckthorn, but there are a few Hop Hornbeams, Chokecherries and Shagbark Hickories. This is a very dense layer, >60% cover, and was between 2 and 10 m tall. The ground layer is less dense with 10-25% cover and was made up of mostly European Buckthorn and Garlic Mustard with Chokecherry and White Ash being less common. The ground layer is 0.2 to 1 m tall.

Swamp Maple Mineral Deciduous Swamp Type (SWD3-3)

This swamp is dominated by Freeman's Maples (*Acer x freemanii*) and Silver Maple (*Acer saccharinum*). The canopy is greater than 25 m in height and covers greater than 60% of the community. The sub-canopy is composed Freeman's Maple and White Elm (*Ulmus americana*). The sub-canopy is 10 to 25 m in height and covers 10-25% of the layer. The previously open understory is now dense and dominated by European Buckthorn (*Rhamnus cathartica*), White Elm and Freeman's Maple. The understory is 2 to 10 m in height and covers >60%. The ground layer is composed of Virginia Creeper, Riverbank Grape, Green Ash seedlings and Buckthorn seedlings, Riverbank Wildrye (*Elymus riparia*) and Red Raspberry were also present. The ground layer is 0.5 to 2 m in height

and covers >60% of the ground. Depressions typically remain saturated into the summer.

Cattail Mineral Shallow Marsh (MAS2-1)

On either side of Osprey Boulevard a strip of Shallow Marsh is present. This marsh has a sparse canopy of Willow and Freeman's Maple. The canopy has a cover of 1-10% and a height of 10-25 m. The understory is composed almost entirely of Narrowleaf Cattail, with >60% and between 2 and 10 m tall. The ground layer was also dense with Narrowleaf Cattail but also had Purple Loosestrife. It was dense, with >60% cover and was 1-2 m tall.

Open Aquatic (OAO)

Osprey Marsh is a constructed lake with no floating aquatic vegetation.