

A preliminary annotated list of the

Vascular Plants of Ostrander Point

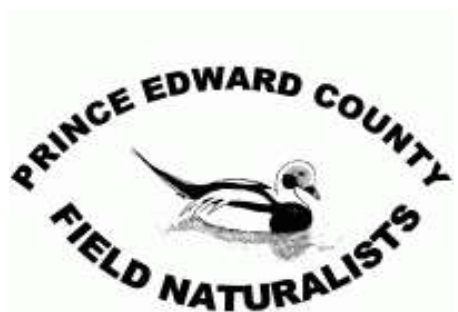
Crown Land Block



Paul M. Catling
Sheila McKay-Kuja
Brenda Kostiuk
Allen Kuja



Figure 1. Ostrander Point Crown Land Block showing boundary roads.



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Preliminary annotated list of the
Vascular plants
of Ostrander Point Crown Land Block

P.M. Catling, S.M. McKay-Kuja, B. Kostiuk, and A. Kuja

2014

Front cover: White Camas (*Zigadenus (Anticlea) elegans*) photographed by PMC on 17 July 2013 in the finger-shaped fens in the southwest where a thousand plants have been seen, probably representing the largest colony of this rare plant in Prince Edward County.

Back cover: Alvar shrubland (above) with an abundance of Longleaf Bluets (*Houstonia longifolia*). Flowers of Longleaf Bluets (below). Ostrander Point has the largest populations in Prince Edward County of this localized alvar plant which is rare in all regions of eastern Ontario. Photos taken on on 25 May 2012 by PMC.

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Preface

The following work is the result of an avocational interest of the authors in connection with the protection of Ostrander Point area and the South Shore of Prince Edward County. It also was done to fill in the gap of the very incomplete information available to the Ontario Ministry of Natural Resources for decisions on landuse planning in the area. Finally several groups including the Prince Edward County Field Naturalists, the Point to Point Foundation and the South Shore Coalition have encouraged the biological inventory of the south shore. This work is a step towards that goal.



Figure 2. Wild Blue Phlox (*Phlox divaricata*, left) and habitat with umbrellas of May Apple (*Podophyllum peltatum*, right). Middle Ostrander Point Rd., 12 May 2013, PMC.

Technical Summary

Ostrander Point Crown Land Block includes 415 native species of vascular plants (329 native and 86 introduced). The dominant plants throughout the site include Canada Bluegrass (*Poa compressa*), forbs such as Frost Aster (*Symphyotrichum pilosum* var. *pilosum*), Gray-stemmed Goldenrod (*Solidago nemoralis*), shrubs including Silky Dogwood (*Cornus ammomum* ssp. *obliqua*), Stiff Dogwood (*Cornus foemina* ssp. *racemosa*), Red Osier Dogwood (*Cornus stolonifera*), Meadowsweet (*Spiraea alba*), Prickly Ash (*Zanthoxylum americanum*), Common Buckthorn (*Rhamnus cathartica*) and the trees Green Ash (*Fraxinus pennsylvanica*), Eastern Red Cedar (*Juniperus*

virginiana), American Elm (*Ulmus americana*), and Bur Oak (*Quercus macrocarpa*). Six of the taxa present are rare in Ontario and tracked by the Ontario Natural Heritage Information Centre. In the latter category are: Ozark Dropseed (*Sporobolus vaginiflorus* var. *ozarkanus*), Eastern Few-fruited Sedge (*Carex oligocarpa*), Rigid Sedge (*Carex tetanica*), Secund Rush (*Juncus secundus*), Carolina Whitlow-grass (*Draba reptans*), and Limestone Hedge-Hyssop (*Gratiola quartermaniae*). There are 28 regionally rare species, some of which like Longleaf Bluets, are present by the thousands but otherwise rare in all regions of eastern Ontario. Introduced species (86) account for 20.7 % of the flora, but only Common Buckthorn is considered to be seriously increasing and displacing native species. Dog-strangling vine (*Vincetoxicum nigrum*) is likely to increase and have a negative impact. At present the impact of introduced species is not substantial. Alvar plant communities exist on the shallow substrate over limestone rock including Poverty Grass Dry Alvar Grassland, Tufted Hairgrass Wet Alvar Grassland, Juniper Alvar Shrubland, Red-Cedar Buttercup Alvar Woodland, and Annual Alvar grassland. These communities are considered globally imperiled or vulnerable. At least 16 of a potential provincial list of 54 alvar-associated plants that are restricted in Ontario occur in the area. Despite a period of extensive tree removal, grazing and use as a military testing site, the vegetation now present is likely very similar to that which existed in pre-settlement times. A preliminary annotated list is provided of the vascular plants recorded in three major surveys and details on collections supporting presence on the last survey are provided. With large populations of some rare and regionally rare species, globally imperilled alvar communities, vegetation of high integrity and regional representivity, Ostrander Point is a clear conservation priority.

1. Location

Ostrander Point Crown Land Block (Figure 1) is located at approx. 43.9036, -76.9971 in South Marysburgh Township on the south shore of Prince Edward County. The area is 16 km SE of Picton and 50 km SW of Kingston. It is bounded by Ostrander Point Rd., Babylon Rd., Helmer Rd. and Petticoat Rd. It covers the west half of lot 4; all of lots 5, 6, 7, 8, and part of lot 9 of the “Concession on Lake Ontario”; and part of lot 5 and 6 of the “Concession around Prince Edward Bay”. It is approximately 324 hectares in extent.

2. Botanical History

Pre-settlement

The basically flat terrain of Ostrander Point was probably a mixture of Red Cedar Woodland, Bur Oak –Prickly Ash Savannah, alvar shrubland, open alvar, Ash Swamp, ephemeral alvar wetland and shallow marsh in pre-settlement times. In many cases these communities may have intergraded and merged as some do today. It is likely that the periodically dry conditions promoted fires which continuously destroyed forest and re-established open alvar, savannah and shrublands, but woodland and Ash swamps were probably always present. Open alvar was possibly short-lived because the underlying limestone was friable and not hard enough to form pavement as on the limestone plateaus north of the Bay of Quinte. At times the only open areas may have been those subject to extreme wetness and dryness, the temporary marshes and associated pools dominated by the grass *Deschampsia cespitosa*.



Figure 4. Moses Hudgins log house built around 1865 on Ostrander Point Road provides a clue to the impact of early settlement on flora and fauna of Ostrander Point. Ostrander Point Rd., Aug. 2014, BK.

Military Use

During the 1950s the area was used for military testing and training. While this disturbed the shallow substrate, the impacts seem not to have been great. Scraped areas and some dents resulted in new vernal pools which were already abundant on the site. Some of these pools were colonized by rare and restricted native plants. Fires may have developed but this was already a natural process that promoted the unusual natural vegetation. Overall military use probably retarded tree growth but benefited species of more open habitats.

Recent and Future Changes

Over the past several decades the area has been used for recreation. Although local people have driven ATVs across the site to the beaches, this has had a very minor impact on the vegetation. Various nature activities including birdwatching and a bioblitz in 2014, organized by the Prince Edward County Field Naturalists' Club, has had no negative impact.

A much more serious development is the potential use of the area for a large wind turbine development (Catling et al. 2012). It was suggested during an Environmental Review Tribunal Hearing that this may destroy at least 50 ha of the area, at the same time closing the area to recreational use. The suggestion was based on the kinds and extent of damage anticipated and their known effects (Catling 2013a) and on biological information on the plants present including their susceptibility (Catling 2013 and see text box).

3. Major Plant Associations

Due to the very shallow (over much of the area less than 20 cm) substrate over limestone bedrock, the area may be regarded as an alvar landscape and it includes some well known alvar communities. The dominant plants throughout the site include Canada Bluegrass (*Poa compressa*),

forbs such as Frost Aster (*Symphyotrichum pilosum* var. *pilosum*), Gray-stemmed Goldenrod (*Solidago nemoralis*), shrubs including Silky Dogwood (*Cornus amomum* ssp. *obliqua*), Stiff Dogwood (*Cornus foemina* ssp. *racemosa*), Red Osier Dogwood (*Cornus stolonifera*), Meadowsweet (*Spiraea alba*), Prickly Ash (*Zanthoxylum americanum*), Common Buckthorn (*Rhamnus cathartica*) and the trees Green Ash (*Fraxinus pennsylvanica*), Eastern Red Cedar (*Juniperus virginiana*), American Elm (*Ulmus americana*), and Bur Oak (*Quercus macrocarpa*).

Evaluating the Natural Area

“Botanists have developed a means of identifying and evaluating natural areas based on biological features of the native flora. Co-efficients of Conservatism for species represent tolerance to disturbance caused by people. The Floristic Quality Index for an area takes into account all the species present and their coefficients. The natural quality of an area is reflected by its richness of conservative species – and susceptibility to disturbance is reflected in the same way. For Ostrander Point, the coefficients of conservatism and the floristic quality index support the very low tolerance of species and habitat to disturbances of the kind anticipated by the development of an industrial turbine field, ... and support an opinion that serious and irreversible damage will occur.” (Minutes of the Environmental Review Tribunal Hearing, 2013)



Figure 5. Acorns of Bur Oak (*Quercus macrocarpa*), a common tree. Ostrander Point Road. 31 Aug. 2014, PMC.

A detailed analysis of the vegetation and mapping of vegetation communities was beyond the scope of the present work, but it is possible to provide an indication of the major and conspicuous plant communities and their approximate extent. Slight changes in elevation over extensive areas result in large areas of mixing of these plant communities.

Open alvar Shrubland

This includes open areas with scattered Red Cedar, Silky and Stiff Dogwoods and low (less than 1 m) Prickly Ash. The open and often gravelly ground has Canada Bluegrass (*Poa compressa*) and Dropseed grasses (*Sporobolus vaginiflorus* var. *vaginiflorus* and var. *ozarkanus*), Longleaf Bluets (*Houstonia longifolia*), Hairy Beardtongue (*Penstemon hirsutus*), Small Skullcap (*Scutellaria parvula*), False Pennyroyal (*Trichostema brachyata*), Balsam Ragwort (*Senecio pauperculus*), Crawe's Sedge (*Carex crawei*), Hidden Sedge (*Carex umbellata*), Wiry Witch Grass (*Panicum flexile*), and other native species characteristic of alvar habitat (see below and see back cover). In some areas introduced White Sweet Clover (*Melilotus alba*) is abundant. This community accounts for over 100 ha in the area. In some areas it may slowly transform to alvar woodland but the trees may also die in fire or drought thus maintaining it. Small patches of community 3 may occur throughout this community. Open alvar Shrubland accounts for approximately 112 ha (Bland 1997).

Closed Alvar Shrubland – Succesional Alvar Woodland

This is a more rapidly moving stage of return to woodland. There are no or fewer open areas with grasses and forbs. The cover of Red Cedars and dogwoods is more or less continuous and Pricky Ash is more than one m tall. Red Cedar may be dominant in drier areas while Bur Oak and Green Ash may be more abundant in wetter sites. Impenetrable thickets surrounding wetland (marsh or swamp) are included here. Bland (1997) estimated this community to comprise 128 ha.

Temporary alvar marsh and pools

Tufted Hairgrass (*Deschampsia cespitosa*) and Flat-stemmed Spikerush (*Eleocharis compressa*) are dominant in areas of shallow substrate that retain water for extended periods in the spring and after rains in early summer. In deeper pools Jointed Rush (*Juncus articulatus*) and Slender Sedge (*Carex pellita*) may be co-dominant or dominant and other species include Bald Spikerush (*Eleocharis erythropoda*), Limestone Hedge-hyssop (*Gratiola quartermanniae*), Swamp Milkweed (*Asclepias incarnata*), Marsh Seedbox (*Ludwigia palustris*), Marsh Mermaid-weed (*Proserpinaca palustris*) and scattered trees of Green Ash. Pools often dry to white flakes by August. Where substrate is deeper Sartwell's Sedge (*Carex sartwellii*) is sometimes dominant. Some of these areas that retain water for longer periods are fen-like and feature large populations of White Camas (see cover) and species of *Agalinis* (*Agalinis* spp.). No estimate was provided by Bland (1997) for these distinctive alvar communities but it may be as much as 10 ha.

Swampy woodland

These areas are usually dominated by Green Ash, but Bur Oak and willow (*Salix* spp.) are often also present with tall and dense growths of dogwoods and Prickly Ash around the edges. Reed Canary Grass (*Phalaris arundinacea*) or Blue-joint (*Calamagrostis canadensis*) may dominate more open areas whereas shaded areas are dominated by Fowl Manna-grass (*Glyceria striata* var. *striata*) and/or Canada Manna-grass (*Glyceria canadensis*). Mild Water-pepper (*Polygonum hydropiperoides*) is also dominant in some areas. American Hog Peanut (*Amphicarpaea bracteata*) is often abundant around swamp edges. Other conspicuous species are Blueflag (*Iris versicolor*), Tall Buttercup (*Ranunculus acris*), Spotted Jewelweed (*Impatiens capensis*), Spotted Water-hemlock (*Cicuta maculata*), Small White-Aster (*Symphyotricum lateriflorum*), Fringed Loosestrife (*Lysimachia ciliata*), Mad-dog Skullcap (*Scutellaria lateriflora*), White Snakeroot (*Eupatorium rugosum*), species of Beggar's-ticks (*Bidens* spp.), and

species of Bugleweed (*Lycopus* spp.). Hop Sedge (*Carex lupulina*), although not dominant, is characteristic. Bland (1997) reported that this community was 12 ha in extent.



Figure 6. Limestone Hedge-hyssop (*Gratiola quartermanniae*) in drying pool. Although rare in Ontario, this species is frequent in the Ostrander Point area. SE area, 14 July 2013, PMC.

Dry open woodland and savannah

Scattered large trees of Bur Oak and/or Shagbark Hickory with shrubs and open areas of forbs and grasses are among the richest plant communities. Red Cedar and/or Green Ash may also be major tree components. On the property these communities are usually small and intergrading. They are likely to increase in area. They are rich in native species with impressive spring flora including violets (*Viola* spp.), Narrow-leaved Spring Beauty (*Claytonia virginica*), Dutchman's Breeches (*Dicentra cucullaria*), Wild Blue Phlox (*Phlox divaricata*) and May Apple (*Podophyllum peltatum*, Figure 2). Savannah glades have some less common shrubs such as Canada Plum (*Prunus nigra*) and Compact Saskatoon (*Amelanchier alnifolia* var. *compacta*) as well as large stands of Wild Bergamot (*Monarda fistulosa*). The latter is one of the most frequently visited wildflowers by pollinating insects. Sunflowers (*Helianthus divaricatus* and *H. giganteus*) and Coffee Tinker's-weed (*Triosteum*

aurantiacum) are among the less common but conspicuous plants in these semi-open habitats. Bland (1997) estimated these communities to account for 20 ha.

Cultural Meadow complexes

This is a difficult classification because meadows vary from those strongly dominated by a dense growth of introduced grasses such as Creeping Wild-rye (*Elumus repens*), Timothy (*Phleum pratense*), Black and Spreading Bentgrass (*Agrostis gigantea* and *Agrostis stolonifera*) to those with Kentucky Bluegrass (*Poa pratensis*) and many native species to those merging into open alvar shrubland or wet meadow. Most cultural meadows include many native shrubs and a few other native plants such as common Milkweed (*Asclepias syriaca*) are usually abundant. Bland (1997) suggested that these areas may account 26 ha but much of that may be merging communities.



Figure 7. Many hundreds of plants of native Common Milkweed occur in a small “cultural meadow” on the west side of Odtrander Point Road. Although the community has low floristic diversity, the milkweeds provide nectar for a great variety of insects and both food and nectar for many including the Monarch Butterfly. Thus cultural meadow can make a very large contribution to native animal biodiversity despite a relatively low native plant diversity. Ostrander Point Rd., 13 July 2013, PMC.

Graminoid Marsh

It is very unusual in not being dominated by Cattails (*Typha* spp.) which are very rare there. Most of the marsh has water 2-3 dm deep in late summer. Dominant plants are sedges including particularly Water Sedge (*Carex aquatilis*), Beaked Sedge (*Carex rostrata*), Blue-joint Grass (*Calamagrostis canadensis*) and Tussock Sedge (*Carex stricta*), but also Lake-bank Sedge (*Carex lacustris*), Slender Sedge (*Carex lasiocarpa*), Bristly Sedge (*Carex comosa*), and Northern Beaked Sedge (*Carex utriculata*). Hairy Swamp Loosestrife (*Decodon verticillatus*) and Water Smartweed (*Polygonum amphibium*) were also seen often in the marsh which was surrounded by willows (*Salix* spp.). Deeper water had Spikerushes (*Eleocharis* spp.), Yellow cowlily (*Nuphar lutea* ssp. *variegata*),

Floating Pondweed (*Potamogeton natans*), and Greater Bladderwort (*Utricularia vulgaris*). The marsh is 2.7 ha in extent, but much smaller areas of are scattered elsewhere and Bland (1997) suggested that graminoid marsh occupied 5 ha on the property.



Figure 8 Sedge Marsh in southeast corner. During a botanical survey, the marsh at the lakefront in the southeast corner of the property was estimated to produce 17,000 Gray Tree frogs (*Hyla versicolor*) based on 215 of the recently emerged green forms seen on sedge leaves on a walk through a small part of it on 4 Aug. 2013. The vascular flora of the shallow marsh is probably essential to this unusual productivity. Not surprisingly this deeper and relatively permanent marsh is home to a high diversity of animals. SE marsh, 4 Aug. 2013, BK.

Beach Ridge

The ridge comprised of cobble, flat limestone fragments and sand is approximately 2 m above the flat land to the north of it and breaking waves to the south. Behind the ridge are mostly wet thickets with Red Osier Dogwood, willows and Green Ash, sometimes with openings dominated by Blue-joint grass (*Calamagrostis canadensis*). The ridge itself has a dense covering of Common Buckthorn (*Rhamnus cathartica*) with Green Ash and willows. Along the open parts on the lake side is Herb Robert (*Geranium robertianum*) and a very pubescent variety (*syrticola*) of Riverbank Grape (*Vitis riparia*), as well as Climbing Nightshade (*Solanum dulcamara*), Wild Raspberry (*Rubus idaeus*), Black Bindweed (*Polygonum convolvulus*), Grove Sandwort (*Moehringia lateriflora*), Silverweed (*Potentilla anserina*), Canada Lettuce (*Lactuca canadensis*), Rough Cockle-bur (*Xanthium strumarium*) and Poison Ivy (*Rhus rydbergii*). Sea-rocket (*Cakile edentula*) occurred in a few very small areas of sand (Figure) along the shore. One of the more frequently encountered introductions here was Gold Moss (*Sedum acre*).

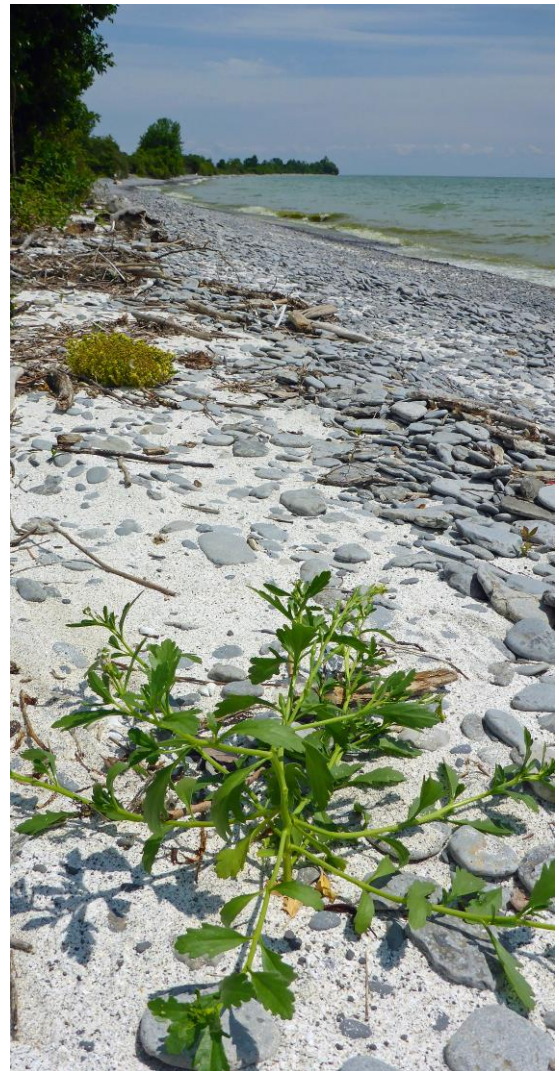


Figure 9. Sea-rocket (*Cakile edentula*) on the beach in the foreground and a patch of Gold-Moss (*Sedum acre*) on the upper left. SE beach, 19 July 2014, PMC.

4. History of Botanical Surveys and future work

The south shore of Prince Edward County has received relatively little attention from visiting botanists, who have spent most their time at Sandbanks and Outlet. The only botanical surveys available for any part of the south shore are Kristensen's list for Prince Edward Point National Wildlife Area (2013) which records 395 species, and that of Ecological Services (2012) for the 198.8 ha Miller Property which records 223 species. With respect to the Ostrander Point Crown Land Block, Bland's (1997) report was remarkably comprehensive considering the extensive nature of his survey. Snetsinger (2001) provided a very useful checklist for this area but it included Prince Edward Point so that the location of the significant plant species is unclear. Taylor et al. (2011) did a relatively incomplete survey and failed to record many widespread and frequent species, but it did establish the widespread occurrence of alvar vegetation.

The amount of time spent on the Ostrander Point site in hours during various botanical surveys is indicated in Table 1. The total of 125-170 hours is thought to be sufficient for a reasonable survey that captures more than 85% of the vascular flora. The size, variability and accessibility of the site has been taken into account in this estimate.

Table 1. Time in hours spent during various botanical surveys of Ostrander Point Crown Land Block. The total time spent is estimated to be 125-170 hours.

1997 - Bland (also breeding birds and soils) – less than 70.
2001 - Snetsinger et al (pers. comm.) – less than 10.
2006 - Crowder and Knack (thought protected) – less than 10.
2011 - Taylor et al. (Stantec –June) – less than 50 (reports 36.9 hours)
2012 – Catling, Kostiuk, Kuja, McKay-Kuja – 10.
2013 – Catling, Kostiuk, Kuja, McKay-Kuja – 30.
2014 – Catling, Kostiuk, Kuja, McKay-Kuja – 15.

Future study of the vascular flora of the area is desirable since some rare and significant species have probably not yet been found and some common species may have been overlooked. As soon as work is published, it encourages participation and this makes it at least slightly out of date. Hopefully this will be added to and updated and contribute to a growing base of knowledge of the South Shore flora.



Figure 10. Prickly Ash (left) and Common Buckthorn (right). Petticoat Rd., 31 Aug., PMC.



Figure 11. Bergamot (*Monarda fistulosa*, left) and Nodding Ladies'-tresses (*Spiranthes cernua*, right) in SE area. Both Ostrander Point Rd., 9 Aug. 2014, 24 Aug. 2014, PMC, BK respectively.

5. Conservation Significance of Ostrander Point

Rare species

Ostrander Point Crown Land Block includes 329 native species of vascular plants of which 6 are rare and tracked by the Ontario Natural Heritage Information Centre (Table 2). There are 27 regionally rare species. Some of these, such as Longleaf Bluets (*Houstonia longifolia*), are present by the thousands but otherwise rare in all regions of eastern Ontario. See Appendix Table 1 for a list of regionally rare species (marked RR) and defined as region 2, the Lake Ontario Lowlands in Cuddy (1991).

Table 2. Species present at Ostrander Point Crown Land Block that are rare in Ontario and tracked by the Ontario Natural Heritage Information Centre.

<i>Sporobolus vaginiflorus</i> (Torrey ex A. Gray) Torrey ex Alph. Wood var. <i>ozarkanus</i> (Fernald) Shinners, Ozark Dropseed
<i>Carex oligocarpa</i> Schk.ex Willd., Eastern Few-fruited Sedge
<i>Carex tetanica</i> Schk. ex Willd. , Rigid Sedge
<i>Juncus secundus</i> P. Beauv. ex Poiret, Secund Rush
<i>Draba reptans</i> (Lam.) Fern., Carolina Whitlow-grass
<i>Gratiola quartermaniae</i> D. Estes, Limestone Hedge-hyssop

Rare communities and representivity

The natural openness of some of the landscape, both today and likely in pre-settlement times, as well as shallow soils over flat limestone rock makes Ostrander Point conform to the definition of alvar which is a naturally more or less open landscape of shallow soil over essentially flat limestone or marble rock with a cover of herbs and shrubs with trees absent or not forming a continuous canopy. Most alvar landscapes do not include all of the potential associations that can occur. Ostrander Point is without limestone pavement because the underlying limestone is friable so dry mesic and wet pavements are absent and so are deep fissured pavements with grykes. Ostrander Point also lacks areas of dry deeper soils over limestone rocks perhaps explaining the absence of Prairie Smoke (*Geum triflorum*). On the other hand the rapidly drying alvar wetlands featuring species such as *Eleocharis compressa*, *Deschampsia caespitosa*, *Juncus articulatus*, *Carex crawei*, and *Sporobolus vaginiflorus* var. *vaginiflorus* and var. *ozarkanus* with unusula plants such as Death Camas (*Zygadenus elegans*) and Limestone Hedge-hyssop (*Gratiola quartermaniae*) or slightly longer lasting wetland dominated by Slender Sedge (*Carex pellita*) or Sartwell's Sedge (*Carex sartwellii*), are well represented. Some of the area is dotted with lower areas with native species of alvar wetland in a matrix of meadow with alvar plants as well as those characteristic of successional woodland. Ostrander Point contains some of the largest Tufted Hairgrass (*Deschampsia cespitosa*) meadows of any alvar area in eastern Ontario and such communities are considered by NatureServe to be imperilled. Alvar communities present on the site that are considered imperilled or vulnerable by Natureserve are listed in Table 3. Most of the communities found within alvar landscapes are considered rare in Ontario and throughout their ranges (Brownell & Riley 2000) and alvar landscapes are high protection priority (Catling et al. 2014).

Table 3. Alvar Communities recognized as imperilled (G2, at risk of endangerment) or vulnerable (G3, at moderate risk of endangerment) by Natureserve.

Community type	Rank
Poverty Grass Dry Alvar Grassland.....	G2?
Tufted Hairgrass Wet Alvar Grassland	G2
Juniper Alvar Shrubland	G3
Red Cedar - Buttercup Alvar Woodland	G3?

Another way of considering significance and representivity is to consider characteristic species present. Of 54 species largely restricted to alvars in Ontario (Catling 1995), 16 (30 %) are present in Ostrander Point Crown Land Block (Table 3).

Table 4. Characteristic alvar species present at Ostrander Point Crown Land Block (from Catling 1995).

Amelanchier alnifolia Nutt. var. ***compacta*** (Nielsen) S.M. McKay, Compact Saskatoon
Carex crawei Dewey, Crawe's Sedge
Deschampsia cespitosa (L.) P. Beauv. ssp. ***cespitosa***, Tufted Hairgrass
Eleocharis compressa Sullivant, Flat-stemmed Spikerush
Packera (*Senecio*) ***paupercula*** (Michaux) A. Love and D. Love, Balsam Ragwort/ Northern Meadow Groundsel
Panicum flexile (Gattinger) Scribner, Wiry Witch Grass
Panicum philadelphicum Bernh. ex Trin., Philadelphia Panic Grass
Polygala senega L., Seneca Snakeroot
Ranunculus fascicularis Muhlenb. ex Bigelow, Early Buttercup
Rhus aromatica Aiton, Fragrant Sumac
Saxifraga virginiensis Michaux, Virginia Saxifrage
Scutellaria parvula Michaux var. ***parvula***, Small Skullcap
Solidago ptarmicoides (Nees) B. Boivin *Aster ptarmicoides* (Nees) Torrey & Gray, Prairie Goldenrod
Symphotrichum pilosum Willd. var. ***pringlei*** (A.Gray) G.L. Nesom, Pringle's Aster
Trichostema brachiatum L. (*Isanthus brachiatus* (L.) Britton, Sterns & Pogg), False Pennyroyal
Verbena simplex Lehm., Narrow-leaved Vervain

Ecological Integrity

Introduced species (86) account for 20.7 % of the flora, but only Common Buckthorn (*Rhamnus cathartica*) is considered to be seriously increasing and displacing native species. Dog-strangling vine (*Vincetoxicum medium*) is likely to increase and have a negative impact. At present the impact of introduced species is not substantial. Many communities have a relatively low component of introductions and are diverse in native plant species which provide food and habitat for a diverse fauna. Therefore may be said to have relatively high ecological integrity, which is: "the abundance and diversity of organisms at all levels, and the **ecological** patterns, processes, and structural attributes responsible for that biological diversity and for **ecosystem** resilience." Despite a period of extensive tree removal, grazing and use as a military testing site, the vegetation now present not only has ecological integrity but is likely very similar to that which existed in pre-settlement times.

7. Acknowledgements

A. Crowder and D. Kristensen of Queens University provided update information on the plants of the Kingston region. Myrna Wood assisted with the gathering of information.

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Figure 12. A Silver-spotted Skipper (*Espargyreus clarus*) butterfly taking nectar from a flower of the introduced Tufted Vetch (*Vicia cracca*). Ostrander Point Rd., 13 July 2013, PMC.

Appendix Table 1. The Annotated List

The following list of vascular plants that have been found in Ostrander Point Crown Land Block (Appendix Table 1) mostly follows the order and names of the “Plants of the Kingston Region (Crowder et al. 1996). This list was followed because it is familiar to people in the region. Some names have changed, particularly at the generic level, and the synonyms and correct names can be found at Brouillet et al. (2010+). Recording of species in past surveys is indicated in columns 3, 4 and 5. Rare species that are considered critically imperiled (S1), imperiled (S2), or vulnerable (S3) according to Oldham and Brinker (2009) are indicated as such in column 6. Regional rarity (RR) is also indicated in column 6 based on Cuddy (1991) and refers to region 2, the Lake Ontario Lowlands. Status is indicated, where established, with the terms “very common” (continuously distributed over large areas), “Common”(more than 16 localities), “Frequent” (10-16 localities), “Occasional” (7-10 localities), “Scarce” (4-6 localities) and “Rare” (1-3 localities) indicating decreasing frequency in the area. Localities are defined as being 0.5 km apart. Size of populations is sometimes indicated. Data on voucher collections is indicated with location, habitat, latitude, longitude, date and in brackets the collection number and the herbarium accession number. All collections were made by one or more of the authors.

Latin Name	Common Name	Bland	Taylor	Catling et al.	Notes
PTERIDOPHYTA EQUISETACEAE					
<i>Equisetum arvense</i> L.	Field Horsetail	●	●	●	Occasional. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-44, DAO 894067).
<i>Equisetum fluviatile</i> L.	Water Horsetail	●		●	Rare. Marsh
DRYOPTERIDACEAE					
<i>Dryopteris carthusiana</i> (Villars) H.P. Fuchs	Spinulose Sheild Fern			●	Rare. Swamps SE and SW and W of middle Ostrander Point Rd. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-804, DAO 894046). Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-29, DAO 894024).
<i>Dryopteris cristata</i> (L.) A. Gray	Crested Shield-fern			●	Rare. Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-26, DAO 894052).
<i>Onoclea sensibilis</i> L.	Sensitive Fern	●		●	Rare. Moist woods.
THELYPTERIDACEAE					
<i>Thelypteris palustris</i> (Salisb.) Schott	Marsh Fern	●	●	●	Occasional. Local in marsh and swamp.
CUPRESSACEAE - The Cypress Family					
<i>Juniperus communis</i> L.	Ground Juniper	●	●	●	Common. Dry areas throughout.
<i>Juniperus virginiana</i> L.	Eastern Red Cedar	●	●	●	Very common throughout much of the area.
<i>Thuja occidentalis</i> L.	Eastern White Cedar		●	●	Very rare on cobble beach.
TYPHACEAE - The Cattail Family					
<i>Typha angustifolia</i> L.	Narrow-leaved Cattail	●	●	●	Occasional.

<i>Typha x glauca</i> Godron = <i>T. latifolia</i> x <i>T. angustifolia</i>	Blue Cattail			●	Occasional.
<i>Typha latifolia</i> L.	Broad-leaf Cattail	●	●	●	Occasional.
<i>Sparganium emersum</i> Rehman ssp. <i>emersum</i>	Greenfruit Bur-reed	●		●	Rare but locally common. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-673, DAO 886514). (<i>S. chlorocarpum</i>)
<i>Sparganium eurycarpum</i> Engelm. Ex A. Gray	Large Bur-reed	●	●	●	Rare but locally common. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-664, DAO 886236).
POTAMOGETONACEAE - The Pondweed Family					
<i>Potamogeton filiformis</i> Pers.	Threadleaf Pondweed	●			? Rare.
<i>Potamogeton gramineus</i> L.	Grassy Pondweed			●	Rare but locally common. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-680, DAO 886507).
<i>Potamogeton natans</i> L.	Floating Pondweed	●		●	Rare but locally common. Pools in southeast marsh. SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-827, DAO 894096).
ALISMATACEAE - The Water Plantain Family					
<i>Alisma plantago-aquatica</i> L.	American Water Plantain	●		●	Occasional.
<i>Sagittaria latifolia</i> Willd.	Broadleaf Arrowhead	●		●	Rare.
HYDROCHARITACEAE - The Frog's-bit Family					
<i>Hydrocharis morsus-ranae</i> L.	* European Frogbit	●		●	Rare. Swamp and marsh.
GRAMINEAE (Poaceae) - The Grass Family					
<i>Agrostis gigantea</i> Roth	* Black Bentgrass	●	●	●	Occasional.
<i>Agrostis perennans</i> (Walter) Tuckerman	Perennial Bentgrass	●			? Rare
<i>Agrostis scabra</i> Willd.	Rough Bentgrass	●	●	●	Common.
<i>Agrostis stolonifera</i> L.	* Spreading Bentgrass		●	●	Common.
<i>Bromus ciliatus</i> L.	Fringed Brome			●	Rare. Wet meadow. Ostrander Point Road W of the corner, moist woodland edges, 43.90302, -76.98292, 14 July 2013 (2013-648, DAO 885472). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-39, DAO 894070, and 2014-42, DAO 894069, representing plants of different sizes).
<i>Bromus inermis</i> ssp. <i>inermis</i> Leyss.	* Awnless Brome	●	●	●	Common.
<i>Bromus racemosus</i> L.	*			●	Rare. Petticoat Road, 43.895, - 77.0026, 10 June 2012 (2012-249, DAO 878321).
<i>Bromus tectorum</i> L.	* Cheat Grass	●	●	●	Occasional. Gravel roads.
<i>Calamagrostis canadensis</i> (Michaux) P. Beauv.	Canada Blue-joint	●		●	Occasional. Marsh.
<i>Cinna arundinacea</i> L.	Stout Wood Reedgrass	●			? Rare.
<i>Dactylis glomerata</i> L.	Orchard Grass	●	●	●	Frequent.
<i>Danthonia spicata</i> (L.) P. Beauv. ex Roemer & Schultes	Poverty Oatgrass	●	●	●	Common.
<i>Deschampsia cespitosa</i> (L.) P. Beauv. ssp. <i>cespitosa</i>	Tufted Hairgrass	●	●	●	Common. Ostrander Point, Petticoat Road, 43.895, - 77.0026, 10 June 2012, P.M. Catling, B. Kostiuk 2012-241 (DAO 878329).

<i>Dichanthelium implicatum</i> (Scribn.) Kerguelen (<i>D. acuminatum</i>)			●	●	Common. Alvar shrublands and meadows throughout. On earlier lists as <i>Panicum implicatum</i> . Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-246) DAO 878324). W of Ostrander Point Road, Bur Oak savannah, 43.90580, -76.98679, 14 May 2013 (2013-630, DAO 885473).
<i>Echinochloa crus-galli</i> (L.) P.Beauv.	Barnyard Grass	●	●	●	Occasional.
<i>Elymus canadensis</i> L.	Nodding Wild-rye	●		●	Rare.
<i>Elymus hystrix</i> L.	Bottlebrush Grass	●		●	Scarce. SE section, Shagbark Hickory woods, 43.905887, -76.986716, 15 August 2013 (2013-802, DAO 894049).
<i>Elymus repens</i> (L.) Gould (<i>Agropyron repens</i> (L.) B. Beauv.)	*Creeping Wild-rye	●	●	●	Frequent. W of Ostrander Point Road, dominant in cultural meadow, 43.90635, -76.98695, 14 May 2013 (2013-626, DAO 885488).
<i>Elymus riparius</i> Wieg.	+River Wild-rye			●	RR. Occasional. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-811, DAO 894062).
<i>Elymus trachycaulus</i> (Link) Gould in Shimm. ssp. trachycaulus (<i>Agropyron trachycaulum</i> (Link) Malte ex H. Lewis)	Slender Wheatgrass	●		●	Occasional.
<i>Elymus villosus</i> Muhlenb. ex Willd.				●	RR. Rare. SE section, Shagbark Hickory woods, 43.905887, -76.98671615, 15 August 2013 (2013-803, DAO 894048).
<i>Elymus virginicus</i> L. var. virginicus	Virginia Wild-rye	●		●	Rare. Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-13, DAO 894269).
<i>Eragrostis frankii</i> C. Meyer ex Steudel	Frank's Love-grass			●	RR. Rare. W side, limestone gravel beside the road, 43.898033, -77.013224, 28 September 2013 (2013-873, DAO 894085). Possibly but not definitely introduced.
<i>Glyceria canadensis</i> (Michaux) Trin.	Canada Manna-grass	●		●	Rare. Dominant in parts of the Ash swamp W of middle Ostrander Point Rd. and scattered throughout in periodically wet places.
<i>Glyceria striata</i> var. striata (Lam.) A. Hitchc.	Fowl Manna-grass	●	●	●	Rare. Ash Awamp, SE section, 43.905784, -76.988049, 5 August 2013 (2013-808, DAO 894042). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-50, DAO 894059).
<i>Hordeum jubatum</i> L. ssp. jubatum	* Foxtail Barley/Squirrel Tail	●		●	Rare.
<i>Leersia oryzoides</i> (L.) Sw.	Rice Cutgrass	●	●	●	Scarce.
<i>Muhlenbergia mexicana</i> (L.) Trin.	Mexican Muhly			●	Scarce. Swamp, SW area, 43.8935, -77.0035, 24 August 2014 (2014-17, DAO 894265).
<i>Panicum capillare</i> L.	* Old Witch Panic-grass	●		●	Common. Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-766, DAO 886373).
<i>Panicum flexile</i> (Gattinger) Scribner	Wiry Witch Grass		●	●	Common. W side, alvar parkland with <i>Juniperus virginiana</i> , 43.898033, -77.013224, 28 September 2013 (2013-872, DAO 894100).
<i>Panicum philadelphicum</i> Bernh. ex Trin.	Philadelphia Panic Grass	●		●	Occasional.
<i>Phalaris arundinacea</i> L.	* Reed Canary Grass	●		●	Common.
<i>Phleum pratense</i> L.	* Meadow Timothy	●	●	●	Common.
<i>Poa compressa</i> L.	Canada Bluegrass	●	●	●	Very common.
<i>Poa palustris</i> L.	Fowl Bluegrass	●		●	Occasional.
<i>Poa pratensis</i> L. ssp. pratensis	Kentucky Bluegrass	●	●	●	Frequent.

<i>Setaria pumila</i> (Poiret) Schultes	White Foxtail	●			?
<i>Sporobolus neglectus</i> Nash	Small Dropseed	●		●	Occasional.
<i>Sporobolus vaginiflorus</i> (Torrey ex A. Gray) Torrey ex Alph. Wood var. <i>vaginiflorus</i>	Sheathed Dropseed	●		●	Common.
<i>Sporobolus vaginiflorus</i> (Torrey ex A. Gray) Torrey ex Alph. Wood var. <i>ozarkanus</i> (Fernald) Shinnars	Ozark Dropseed			●	S2? Common. W side, alvar parkland with <i>Juniperus virginiana</i> , 43.898033, -77.013224, 28 September 2013 (2013-874, DAO 894084).
CYPERACEAE - The Sedge Family					
<i>Carex aquatilis</i> Wahlenb.	Water Sedge			●	Rare but locally common. SE area, dominant in the southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-660, DAO 885446).
<i>Carex aurea</i> Nutt.	Golden-fruited Sedge	●	●	●	Rare. Wet meadows.
<i>Carex bebbii</i> (L. Bailey) Olney ex Fern.	Bebb's Sedge	●	●	●	Rare. Marshes. Westernmost finger wetlands, edge of vernal pool, 43.91048; -76.99315, 17 August 2013 (2013-769, DAO 886376).
<i>Carex blanda</i> Dewey	Woodland Sedge			●	Common. Ostrander Point, Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-237, DAO 878333).
<i>Carex brevior</i> (Dewey) Mackenzie ex Lunnell	Fescue Sedge			●	RR. Rare. W of Ostrander Point Road, ash swamp, 43.91059, -76.99328, 14 May 2013 (2013-627, DAO 885476).
<i>Carex comosa</i> Boott	Bristly Sedge	●	●	●	Rare. Marshes and swamps. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-661, DAO 886244).
<i>Carex crawei</i> Dewey	Crawe's Sedge	●		●	RR. Common. Dry areas in alvar scrub throughout. 43.9061, -77.0063, 19 May 2012 (2012-134, DAO 871817). W of Ostrander Point Road, 43.90833, -76.99010, 12 May 2013 (2013-30, DAO 885270).
<i>Carex cristatella</i> Britton	Crested Sedge			●	Scarce. W of Ostrander Point Road, ash swamp, 43.91059, -76.99328, 14 May 2013 (2013-628, DAO 885467).
<i>Carex flava</i> L.	Yellow Sedge	●		●	Frequent. Wet meadows and temporary pools.
<i>Carex gracillima</i> Schwein.	Graceful Sedge		●	●	Frequent. Moist meadow.
<i>Carex granularis</i> Muhlenb.	Meadow Sedge	●	●	●	Common. 43.9061, -76.9866, 19 May 2012 (2012-158, DAO 871708).
<i>Carex hitchcockiana</i> Dewey	Hitchcock's Sedge			●	Scarce. W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-41, DAO 885279). SE section, Shagbark Hickory woods, 43.905887, -76.986716, 15 August 2013, (2013-800, DAO 894051).
<i>Carex interior</i> L. Bailey	Inland Sedge	●	●	●	Scarce. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-228, DAO 878466). Far west Fingers Wetlands, willow swamp, 43.89516, -77.00262, 4 August 2013 (2013-714, DAO 886554).
<i>Carex intumescens</i> Rudge	Bladder Sedge	●		●	Rare.
<i>Carex lacustris</i> Willd.	Lake-bank Sedge	●	●	●	Rare. Inconspicuous, but locally common in marsh in southwest.
<i>Carex lasiocarpa</i> Ehrh.	Slender Sedge			●	Rare. Large patches in parts of the southeast marsh and in marsh W of the corner of Ostrander Point rd. Identifiable by its conspicuous narrow leaves with curled leaf tips, despite a lack of flowering in some years. SE area; 43.89951; -76.99259, 4 August 2013 (2013-671, DAO 886516).
<i>Carex lupulina</i> Muhlenb. ex. Willd.	Hop Sedge	●	●	●	Rare. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (Catling

					2013-807, DAO 894043).
Carex molesta Mack.	Troublesome Sedge			●	Occasional. Scattered throughout in alvar shrubland and savannah. Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012, (2012-251, DAO 878318) and 2012-254, DAO 878307). wet meadow, 43.90673, -77.00393, 4 August 2013 (2013-695, DAO 885506). <i>Deschampsia</i> meadow, 43.90450, -77.00462, 4 August 2013 (2013-683, DAO 886504).
Carex oligocarpa Schk.ex Willd.	Eastern Few-fruited Sedge			●	S3. RR. Rare. Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012, (2012-265, DAO 878309).
Carex pellita Willd.	Slender Sedge	●		●	Common. 43.9061, - 77.0063, 19 May 2012, (2012-119, DAO 871802). Previously <i>C. lasiocarpa</i> var. <i>latifolia</i> .
Carex radiata (Wahlenb.) Small	Stellate Sedge			●	Scarce. Far west Fingers Wetlands, willow swamp, 43.89516, -77.00262, 4 August 2013 (2013-715, DAO 886555).
Carex retrorsa Schwein.	Retrorsed Sedge		●	●	Rare.
Carex rosea Schk. ex Willd.	Rosy Sedge	●		●	Occasional. Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012 (2012-259, DAO 878302).
Carex rostrata Stokes	Beaked Sedge	●		●	Rare. SE section, marsh, 43.899502, - 76.991239, 15 August 2013 (2013-799, DAO 894031).
Carex sartwellii Dewey	Sartwell's Sedge			●	Scarce. Deeper temporary pools. Several acres W of Ostrander Point Rd. corner. East Helmer Rd. 43.9061, - 76.9866, 19 May 2012 (2012-163, DAO 871845). W of Ostrander Point Road, open and periodically wet limestone areas, 43.91059, -76.99328, 14 July 2013 (2013-637, DAO 885457).
Carex spicata Hudson	* An introduced Sedge		●	●	Rare. Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012 (2012-267, DAO 878310).
Carex stipata Muhlenb. ex Willd.	Stalk-grain Sedge	●		●	Occasional.
Carex stricta Lam.	Tussock Sedge	●		●	Rare. 43.9061, -77.0063, 19 May 2012 (2012-122, DAO 871805).
Carex tenera Dewey	Slender Sedge	●		●	Scarce.
Carex tetanica Schk. ex Willd.	Rigid Sedge		●	●	S3. RR. Rare. Petticoat Road, 43.895, - 77.0026, 10 June 2012 (2012-230, DAO 878464).
Carex umbellata Schk. ex Willd.	Hidden Sedge			●	Common. Throughout in dry, open ground, but inconspicuous in flower and fruit. 43.8929, -77.0154, 19 May 2012 (2012-149, DAO 871832).
Carex utriculata	Northern Beaked Sedge			●	Rare. Ostrander Point Marsh, shallow open water, 43.89946, -76.992273, 22 July 2014 (2014-8, DAO 893757).
Carex vulpinoidea Michaux	Fox Sedge	●	●	●	Frequent. Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012 (2012-253, DAO 878317).
Eleocharis acicularis (L.) Roemer & Schultes	Least Spikerush	●		●	Scarce.
Eleocharis compressa Sullivant	Flat-stemmed Spikerush	●	●	●	Common. Sometimes dominant in low, open areas throughout. 43.9061, - 77.0063, 19 May 2012 (2012-118, DAO 871801). Vernal pool from scrape, 43.90673, -77.00393, 4 August 2013 (2013-687, DAO 886525).
Eleocharis erythropoda Steudel	Bald Spikerush		●	●	Frequent. Vernal pool from scrape, 43.90673, -77.00393, 4 August 2013 (2013-688, DAO 886526). Far west Fingers Wetlands, vernal pool, 43.89516, - 77.00262, 4 August 2013 (2013-710, DAO 886523). NE central area, vernal pool, 43.90851, -76.99308, 3 August 2013 (2013-656, DAO 885441).

<i>Eleocharis smallii</i> Britton	Creeping Spikerush	●		●	Rare. SE area, , southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-662, DAO 885450). Now <i>E. palustris</i> .
<i>Scirpus acutus</i> Muhlenb. ex Bigelow	Pointed Bulrush/Hard/Stiff Stemmed Bulrush			●	Rare. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-676, DAO 886511).
<i>Scirpus atrovirens</i> Willd.	Dark-green Bulrush	●	●	●	Scarce. Ostrander Point Road W of the corner, moist woodland edges, 43.90302, -76.98292, 14 July 2013 (2013-634, DAO 885483).
<i>Scirpus cyperinus</i> (L.) Kunth	Cottongrass Bulrush	●			? Rare.
<i>Scirpus pendulus</i> Muhlenb. ex Willd.	Rufous Bulrush		●	●	Scarce. Met Tower, edge of vernal pool, 43.90363, -77.00202, 14 July 2013 (2013-639, DAO 885453).
<i>Scirpus validus</i> L.	Strong Bulrush/ Soft-stem Bulrush	●		●	Rare.
ARACEAE - The Arum Family					
<i>Acorus calamus</i> L.	Sweetflag	●		●	Rare.
<i>Arisaema triphyllum</i> (L.) Schott ssp. <i>triphyllum</i>	Jack-in-the-pulpit			●	Rare. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-35, DAO 894035).
LEMNACEAE - The Duckweed Family					
<i>Lemna minor</i> L.	Lesser Duckweed	●		●	Rare.
JUNCACEAE - The Rush Family					
<i>Juncus alpinoarticulatus</i> Chaix (<i>J. alpinus</i>)				●	Rare. Far west Fingers Wetlands, vernal wetland, 43.89516, -77.00262, 4 August 2013 (2013-706, DAO 885499).
<i>Juncus articulatus</i> L.	Jointed Rush			●	RR. Frequent. W of Ostrander Point Road, vernal pools, 43.91059, -76.99328, 14 May 2013 (2013-624, DAO 885478).
<i>Juncus articulatus</i> × <i>nodosus</i>	Hybrid Rush			●	Rare. Vernal pool donut, 43.90698, -77.00077, 4 August 2013 (2013-698, DAO 885505). Western finger wetlands, vernal pool, 43.91048, -76.9932, 7 August 2013 (2013-759, DAO 886377).
<i>Juncus bufonius</i> L.	Toad Rush			●	Scarce. S side of Helmer Road, moist ruts at E end of Helmer Road, 43.90611, -77.00625, 14 July 2013 (2013-649, DAO 885481).
<i>Juncus canadensis</i> J. Gaye ex Laharpe	Canada Rush	●		●	Rare.
<i>Juncus dudleyi</i> Wieg.	Dudley's Rush	●		●	Common.
[<i>Juncus filiformis</i> L.]	Thread Rush		●		Unlikely since usually associated with acid substrates or fluctuating water levels.
<i>Juncus nodosus</i> L.	Knotted Rush			●	Rare. SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-798, DAO 894090). Far west Fingers Wetlands, vernal pool, 43.89516, -77.00262, 4 August 2013 (2013-709, DAO 886524).
<i>Juncus secundus</i> P. Beauv. ex Poiret	Secund Rush			●	S3. RR. Rare. Open limestone gravel in the southwest where found in 2014. Known from one other location in the county from an alvar on Potter Rd.
LILIACEAE - (inc. Amaryllidaceae) The Lily Family					
<i>Hemerocallis fulva</i> (L.) L.	* Orange Daylily	●		●	Rare. Roadside.
<i>Leucojum aestivum</i> L.	* Giant Snowdrop	●		●	Rare. Five hundred plants spreading in swamp behind Lake Ontario shore. 43.8967, - 76.9985, 19 May 2012 (2012-142, DAO 871824).
<i>Maianthemum stellatum</i> (L.) Link (<i>Covallaria stellatum</i> , <i>Smilacina stellatum</i>)	Starflower False Solomon's-seal		●	●	Occasional.

<i>Zigadenus elegans</i> Pursh ssp. <i>glaucus</i> (Nutt.) Hultén	White Camas			●	Scarce. Locally dominant in fens. Fingers drying alvar fen, edges of vernal pools, 43.89919, -77.00358, 14 July 2013 (2013-645, DAO 885442), 43.89516; -77.00262, 4 August 2013 (2013-705, DAO 886227). Now <i>Anticlea elegans</i> .
SMILACACEAE - The Catbrier Family					
<i>Smilax hispida</i> Muhlenb.	Prickly Greenbrier		●	●	Rare.
IRIDACEAE - The Iris Family					
<i>Iris versicolor</i> L.	Blueflag	●	●	●	Frequent. 43.9059, -76.9869, 10 June 2012 (2012-255, DAO 878306).
<i>Sisyrinchium angustifolium</i> Miller	Blue-eyed Grass	●	●	●	? Occasional. 43.9061, -77.0063, 19 May 2012 (2012-126, DAO 871809).
<i>Sisyrinchium montanum</i> E. Greene	Strict Blue-eyed-grass			●	? Occasional.
ORCHIDACEAE - The Orchid Family					
<i>Cypripedium calceolus</i> L.	Yellow Lady's Slipper	●		●	Rare. Helmer & Babylon Roads, 43.9061, -77.0063, 19 May 2012 (2012-141, (DAO 871825).
<i>Epipactis helleborine</i> (L.) Crantz	* Eastern Helleborine			●	Rare. SE area, thickets on Cobble Beach, 43.89951, -76.99259, 4 August 2013 (2013-670, DAO 886517).
<i>Platanthera psycodes</i> (L.) Lindley <i>Habenaria psycodes</i> (L.) Sprengel	Small Purple-fringed Orchid	●		●	Rare. Marsh W of Ostrander Point Rd. corner. Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-40, DAO 894072).
<i>Spiranthes cernua</i> (L.) Rich.	Nodding Ladies'-tresses		●	●	Rare but locally common. 3,000 plants seen in alvar scrub and marsh W of Ostrander Point Rd. corner, this being the largest population in the county. Low places in alvar shrubland, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-32, DAO 894038).
SALICACEAE - The Willow Family					
<i>Populus balsamifera</i> L.	Balsam Poplar	●		●	Scarce.
<i>Populus deltoides</i> Bartram ex Marshall ssp. <i>deltoides</i>	Eastern Cottonwood	●		●	Scarce. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-41, DAO 894071).
<i>Populus nigra</i> L.	*Black Cottonwood			●	Rare. 43.8967, -76.9985, 19 May 2012 (2012-139, DAO 871822).
<i>Populus tremuloides</i> Michaux	Trembling Aspen	●	●	●	Occasional.
<i>Salix alba</i> L. var. <i>vitellina</i>	White Willow			●	Occasional. Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-28, DAO 894025).
<i>Salix amygdaloides</i> Andersson	Peach-leaved Willow	●	●	●	Frequent. Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-765, DAO 886572).
<i>Salix bebbiana</i> Sarg.	Bebb's Willow	●		●	Occasional. 43.9061, -77.0063, 19 May 2012 (2012-124 (DAO 871807). Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-242, DAO 878328). Helmer & Babylon Roads, 43.9061, -77.0063, 20 May 2012 (2012-151, DAO 871834).
<i>Salix discolor</i> Muhlenb.	Pussy Willow	●	●	●	Frequent. 43.9061, -77.0063, 19 May 2012 (2012-123, DAO 871806 and 2012-125, DAO 871808). 43.8967, -76.9985, 19 May 2012 (2012-147, DAO 871830).
<i>Salix exigua</i> Nutt.	Sandbar Willow		●	●	Scarce. Cobble Beach. Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-14, DAO 894268).
<i>Salix fragilis</i> L.	Crack Willow	●	●	●	Occasional. Cobble Beach. 43.8967, -76.9985, 19 May 2012 (2012-140, DAO 871823). Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-23, DAO 894056).

<i>Salix petiolaris</i> Smith	Meadow Willow	●	●	●	Frequent. Helmer & Babylon Roads, 43.9061, -7.0063, 20 May 2012 (2012-152, (DAO 871835). Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-768, DAO 886375).
JUGLANDACEAE - The Walnut Family					
<i>Carya cordiformis</i> (Wagenh.) K. Koch	Bitter-nut Hickory	●		●	Rare. Moist woods.
<i>Carya ovata</i> (Miller) K. Koch	Shag-bark Hickory	●	●	●	Occasional. Scattered throughout, mostly in SW. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-30, DAO 894040).
BETULACEAE - (incl. Corylaceae) The Birch Family					
<i>Betula papyrifera</i> Marshall	Paper Birch		●		? Rare.
FAGACEAE - The Beech Family					
<i>Quercus alba</i> L.	White Oak	●			? Rare.
<i>Quercus macrocarpa</i> Michaux	Mossy-cup Oak	●	●	●	Common.
<i>Quercus rubra</i> L.	Northern Red Oak	●	●	●	Occasional. On slightly elevated areas throughout including in swamps.
ULMACEAE - The Elm Family					
<i>Ulmus americana</i> L.	American Elm	●	●	●	Frequent. 43.9061, -77.0063, 19 May 2012 (2012-129, DAO 871812).
URTICACEAE - The Nettle Family					
<i>Boehmeria cylindrica</i> (L.) Sw.	False Nettle	●		●	Rare.
<i>Laportea canadensis</i> (L.) Wedd.	Wood Nettle		●		? Rare.
<i>Urtica dioica</i> L. ssp. <i>dioica</i>	* European Stinging Nettle	●		●	Scarce. SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-829, DAO 894094).
<i>Urtica dioica</i> L. ssp. <i>gracilis</i> (Aiton) Selandier	Stinging Nettle		●	●	Scarce.
SANTALACEAE - The Sandal-wood Family					
<i>Comandra umbellata</i> (L.) Nutt.	Umbellate Bastard Toad-flax	●	●	●	Scarce. Ostrander Point, Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-248, DAO 878322).
POLYGONACEAE - The Knotweed Family					
<i>Polygonum</i> (<i>Persicaria</i>) <i>hydropiperoides</i> Michaux	Mild Water-pepper			●	Occasional. Locally abundant in swamps on W side of Ostrander Point Rd. 43.911, -76.9939, 29 September 2012 (2012-560, DAO 878455). SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-806, DAO 894044).
<i>Polygonum amphibium</i> L.	Water Smartweed	●	●	●	Rare. Locally frequent in SE corner marsh and present in other wet areas behind the shore. Forma <i>stipulaceum</i> in SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-659, DAO 886237). Forma <i>emersum</i> also in SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-675, DAO 886512). Wet area behind cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-12, DAO 894260).
<i>Polygonum convolvulus</i> L.	Black Bindweed			●	Occasional. Cobble Beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-25, DAO 894054).
<i>Polygonum persicaria</i> L.	Lady's Thumb	●		●	Rare.
<i>Polygonum scandens</i> L.	Climbing False-buckwheat	●		●	Rare. SE section, cobble beach, 43.899502, -76.991239, 15 August 2013 (2013-824, DAO 894086). Now <i>Fallopia scandens</i> .

<i>Rumex acetosella</i> L. ssp. <i>acetosella</i>	* Sheep Sorrel		●	●	Rare. Upper cobble beach.
<i>Rumex crispus</i> L.	* Curly Dock	●	●	●	Occasional. <i>Deschampsia</i> meadow, 43.90450, -77.00462, 4 August 2013 (2013-686, DAO 886501).
CHENOPODIACEAE - The Goosefoot Family					
<i>Chenopodium album</i> L. var. <i>album</i>	* Lamb's quarters	●		●	Occasional.
PORTULACACEAE - The Purslane Family					
<i>Claytonia virginica</i> L.	Narrow-leaved Spring Beauty			●	Scarce. In some Oak-Hickory woods on the east side. W of Ostrander Point Road, 43.90530, -76.98804, 12 May 2013 (2013-43, DAO 885271).
CARYOPHYLLACEAE (incl. Illecebraceae) - The Pink Family					
<i>Arenaria serpyllifolia</i> L.	* Thyme-leaf Sandwort	●	●	●	? Occasional.
<i>Cerastium arvense</i> L. ssp. <i>arvense</i>	* Field Mouse-ear Chickweed	●	●	●	Occasional. Possibly also the native subsp. <i>strictum</i> .
<i>Cerastium fontanum</i> Baumg. ssp. <i>triviale</i> (Link) J alas (<i>C. vulgatum</i>)	* Common Mouse-ear Chickweed	●	●	●	Occasional.
<i>Cerastium velutinum</i> Raf.	Long-hairy Chickweed			●	Occasional. Ostrander Point Crown Land Block, 43.9061, - 77.0063, 19 May 2012, <i>P.M. Catling, S.M. McKay-Kuja, B. Kostiuk, A. Kuja 2012-131</i> (DAO 871814).
<i>Dianthus armeria</i> L.	* Deptford-pink		●	●	Occasional.
<i>Saponaria officinalis</i> L.	* Bouncing-bet	●	●	●	Rare. Old home sites.
<i>Silene antirrhina</i> L.	Sleepy Catchfly	●	●	●	Occasional.
<i>Silene latifolia</i> Poiret	A Catchfly		●		?
<i>Stellaria crassifolia</i> Ehrh.	A chickweed		●		?
<i>Minuartia michauxii</i> (Fenzl) Farw. <i>Arenaria stricta</i> Michaux	Michaux's Stitchwort		●	●	Occasional. Petticoat Road, 43.895, - 77.0026, 10 June 2012 (2012-236, DAO 878334).
<i>Moehringia lateriflora</i> (L.) Fenzl <i>Arenaria lateriflora</i> L.	Grove Sandwort	●	●	●	Scarce. 43.8967, -76.9985, 19 May 2012 (2012-173, DAO 871853).
NYPHAEACEAE - The Water Lily Family					
<i>Nuphar lutea</i> ssp. <i>variegata</i>	Yellow Cowlily	●		●	Rare. SE marsh.
<i>Nymphaea odorata</i> (Paine) Wiersma and Hellquist ssp. <i>tuberosa</i>	Tuberous White Water-lily		●		?
RANUNCULACEAE - The Buttercup Family					
<i>Anemone canadensis</i> L.	Canada Anemone	●	●	●	Occasional. Ostrander Point, Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012 (2012-250, DAO 878320).
<i>Anemone cylindrica</i> A. Gray	Long-fruited Anemone			●	Occasional. 43.911, - 76.9939, 19 May 2012 (2012-154, DAO 871837). Ostrander Point, Bur Oak Savannah, 43.9059, - 76.9869, 10 June 2012 (2012-264, DAO 878468).
<i>Anemone virginiana</i> L.	Virginia Anemone	●	●	●	?
<i>Aquilegia canadensis</i> L.	Wild Columbine	●	●	●	Occasional. Rocky Red Cedar scrub. 43.9061, -76.9866, 19 May 2012 (2012-156, DAO 871839).
<i>Ranunculus abortivus</i> L.	Kidney-leaved Buttercup			●	Scarce. Moist woods. W of Ostrander Point Road, 43.90404, -76.98731, 12 May 2013 (2013-39, DAO 885277).
<i>Ranunculus acris</i> L.	Tall Butter-cup	●		●	Occasional. Swamps and moist meadows.

<i>Ranunculus fascicularis</i> Muhlenb. ex Bigelow	Early Buttercup		●	●	Occasional. Widespread. 43.9061, -77.0063, 19 May 2012 (2012-136, DAO 871819).
<i>Ranunculus repens</i> L.	Creeping Butter-cup			●	Far west Fingers Wetlands, willow swamp, 43.89516, -77.00262, 4 August 2013 (2013-716, DAO 886556).
BERBERIDACEAE - The Barberry Family					
<i>Podophyllum peltatum</i> L.	May Apple	●		●	Scarce. Widespread in the area, mostly in drier sites with mature Red or Bur Oak. Ostander Point, Bur Oak Savannah, 43.9059, -76.9869, 10 June 2012 (2012-257, DAO 878304).
FUMARIACEAE - The Fumitory Family					
<i>Dicentra cucullaria</i> (L.) Bernh.	Dutchman's Breeches			●	Scarce. W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-33, DAO 885273).
CRUCIFERAE (Brassicaceae) - The Mustard Family					
<i>Barbarea vulgaris</i> R. Br.	* Yellow Rocket	●		●	Occasional.
<i>Berteroa incana</i> (L.) DC.	* Hoary False-alyssum		●	●	Occasional.
<i>Brassica rapa</i> L.	* Bird's Rape	●	●	●	Rare. (includes <i>B. campestris</i>)
<i>Cakile edentula</i> (Bigelow) Hook.	American Sea-rocket			●	Rare. Three plants found in small sandy areas in the cobble beach beside the marsh in the southeast on 19 July 2014. Photographed. Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-21, DAO 894058).
<i>Capsella bursa-pastoris</i> (L.) Medikus	* Common Shepherd's Purse	●		●	Occasional.
<i>Cardamine pratensis</i> L. var. <i>pratensis</i>	Meadow Bittercress/ Cuckoo Flower			●	RR. Rare. 43.9061, -77.0063, 19 May 2012 (2012-138, DAO 871821).
<i>Draba reptans</i> (Lam.) Fern.	Carolina Whitlow-grass			●	S3. Rare. Open limestone gravel in the southwest.
<i>Erucastrum gallicum</i> (Willd.) O. Schultz	* Common Dogmustard		●	●	Occasional. Limestone gravel along road, W side, 43.898033, -77.013224, 28 September 2013 (2013-871, DAO 894099). Gravel road, SW area, 43.8935, -77.0035, 24 August 2014 (2014-11, DAO 894258).
<i>Erysimum cheiranthoides</i> L. ssp. <i>cheiranthoides</i>	* Worm-seed Mustard	●		●	Occasional.
<i>Hesperis matronalis</i> L.	* Dame's Rocket	●	●	●	Rare.
<i>Lepidium campestre</i> (L.) R. Br.	* Field Pepper-grass	●		●	Occasional.
<i>Sisymbrium altissimum</i> L.	* Tall Hedgemustard	●		●	Rare.
CRASSULACEAE - The Stonecrop Family					
<i>Sedum acre</i> L.	* Gold-moss		●	●	Scarce. Cobble Beach.
SAXIFRAGACEAE - The Saxifrage Family					
<i>Saxifraga virginensis</i> Michaux	Virginia Saxifrage	●		●	Rare.
GROSSULARIACEAE - The Gooseberry Family					
<i>Ribes americanum</i> Miller	Wild Black Currant	●	●	●	Scarce. 43.9061, -77.0063, 19 May 2012 (2012-135, DAO 871818).
<i>Ribes cynosbati</i> L.	Prickly Gooseberry	●		●	Occasional. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-238, DAO 878332). 43.8967, -76.9985, 19 May 2012 (2012-144, DAO 871827).
<i>Ribes hirtellum</i> Michaux	Smooth Gooseberry	●		●	RR. Rare. 43.8967, -76.9985, 19 May 2012 (2012-143, DAO 871826).
<i>Ribes odoratum</i> Wendl. f.	*Golden Current			●	Rare. Bur Oak Savannah, 43.9059, -76.9869, 10 June 2012 (2012-256, DAO

					878305).
ROSACEAE - The Rose Family					
<i>Agrimonia gryposepala</i> Wallr.	Tall Hairy Groovebur	●		●	Occasional. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-38, DAO 894053).
<i>Amelanchier alnifolia</i> Nutt. var. <i>compacta</i> (Nielsen) S.M. McKay	Compact Saskatoon			●	Occasional. Open alvar shrubland and savannah. 43.9061, -76.9866, 19 May 2012 (2012-160, DAO 871842).
<i>Amelanchier sanguinea</i> (Pursh) DC. var. <i>sanguinea</i>	Juneberry/ Roundleaf Serviceberry	●	●	●	Scarce.
<i>Amelanchier spicata</i> (Lam) Koch	Spiked Serviceberry			●	RR. Scarce. W of Ostrander Point Road, 43.90386, -76.99305, 12 May 2013 (2013-38, DAO 885276).
<i>Crataegus crus-galli</i> L.	Cockspur Hawthorn	●	●	●	Scarce. 43.8929, -77.0154, 19 May 2012 (2012-150, DAO 871833).
<i>Fragaria vesca</i> L. ssp. <i>americana</i> (Porter) Staudt	Woodland Strawberry	●		●	Rare.
<i>Fragaria virginiana</i> Miller ssp.	Virginia Strawberry	●	●	●	Common.
<i>Geum aleppicum</i> Jacq.	Yellow Avens	●	●	●	? Scarce. Wet meadow, 43.90673, -77.00393, 4 August 2013 (2013-694, DAO 886229).
<i>Geum canadense</i> Jacq.	White Avens	●	●	●	? Scarce.
<i>Malus pumila</i> Miller (<i>Pyrus malus</i>)	* Common Apple	●	●	●	Rare.
<i>Physocarpus opulifolius</i> (L.) Maxim.	Ninebark	●	●	●	RR. Occasional. Stony beaches and edges of Ash swamps throughout. 43.8967, -76.9985, 19 May 2012 (2012-148, DAO 871831). SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-797, DAO 894091).
<i>Potentilla anserina</i> L. ssp.	Silverweed	●	●	●	Scarce. Only Cobble Beach. SW area, 43.8935, -77.0035, 24 August 2014 (2014-24, DAO 894055).
<i>Potentilla argentea</i> L.	* Silvery Cinquefoil	●	●	●	Occasional.
<i>Potentilla arguta</i> Pursh	Tall Cinquefoil		●	●	Scarce.
<i>Potentilla recta</i> L.	* Sulphur Cinquefoil	●	●	●	Occasional.
<i>Potentilla simplex</i> Michaux	Old-field Cinquefoil	●	●	●	Occasional.
<i>Prunus nigra</i> Aiton	Canada Plum			●	Rare. W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-31, DAO 885272).
<i>Prunus serotina</i> Ehrh.	Wild Black Cherry		●		?
<i>Prunus virginiana</i> L. ssp. <i>virginiana</i>	Choke Cherry	●	●	●	Frequent. Alvar shrubland and cobble beach.
<i>Pyrus communis</i> L.	* Common Pear	●		●	Occasional. Alvar shrubland.
<i>Rosa acicularis</i> Lindley ssp. <i>sayi</i> (Schwien) W. Lewis	Prickly Rose			●	Frequent. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-736, DAO 878308).
<i>Rosa blanda</i> Aiton	Smooth Rose	●	●	●	Frequent. Petticoat Road, 43.895, -77.0026, 10 June 2012, (2012-240, DAO 878330 and 2012-243, DAO 878327).
<i>Rosa carolina</i> L.	Carolina Rose	●	●		RR. ?
<i>Rosa rubiginosa</i> L. (<i>R. eglanteria</i>)	* Swamp Rose		●		?
<i>Rubus idaeus</i> L. ssp. <i>idaeus</i>	* Common Red Raspberry	●	●	●	Frequent. Possibly the glandless <i>R. strigosus</i> also present but overlooked due to its similarity with this species.
<i>Rubus occidentalis</i> L.	Black Raspberry	●		●	Rare. 43.9059, -76.9869, 10 June 2012 (2012-252, DAO 878319).

<i>Spiraea alba</i> Durio	Narrow-leaved Meadow-sweet	●	●	●	Very Common. Moist meadows throughout. <i>Deschampsia</i> meadow, 43.90450, -77.00462, 4 August 2013 (2013-681, DAO 886506).
[<i>Spiraea tomentosa</i> L.]	Hardhack Spiraea	●			Unlikely since more often associated with acid or sandy substrates.
FABACEAE (LEGUMINOSAE) - The Pea or Bean Family					
<i>Amphicarpaea bracteata</i> (L.) Fern.	American Hog Peanut			●	Frequent. Dominant in and around some swampy areas. W of the corner, moist woodland edges, 43.90302, -76.98292, 14 July 2013 (2013-643, DAO 885445). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-49, DAO 894060).
<i>Lathyrus ochroleucus</i> Hook.	Pale Vetchling Peavine		●	●	Rare. Alvar savannah.
<i>Lathyrus palustris</i> L.	Vetchling Peavine			●	Rare. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-663, DAO 886233). Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-233, DAO 878275). Swamp, SW area, 43.8935, -77.0035, 24 August 2014 (2014-19, DAO 894263).
<i>Lotus corniculatus</i> L.	*Birds-foot Trefoil	●	●	●	Common.
<i>Medicago lupulina</i> L.	*Black Medic	●	●	●	Common.
<i>Medicago sativa</i> L. ssp. <i>sativa</i>	*Alfalfa	●		●	Occasional.
<i>Melilotus albus</i> Medikus	* White Sweet Clover	●	●	●	Very common.
<i>Melilotus officinalis</i> (L.) Pallas	*Yellow Sweet Clover	●	●	●	Occasional. NE central area, open alvar, 43.90851, -76.99308, 3 August 2013 (2013-654, DAO 886230).
<i>Trifolium hybridum</i> L. ssp. <i>elegans</i> (Savi) Asch. & Graebner	*Alsike Clover	●		●	Common.
<i>Trifolium pratense</i> L.	*Red Clover	●	●	●	Common.
<i>Trifolium repens</i> L.	*White Clover	●		●	Frequent.
<i>Vicia americana</i> Muhlenb. ex Willd.	American Purple Vetch			●	Rare. Bur Oak Savannah, 43.9059, -76.9869, 10 June 2012 (2012-263, DAO 878298).
<i>Vicia cracca</i> L.	*Tufted Vetch	●	●	●	Common.
<i>Vicia tetrasperma</i> (L.) Schreber	*Lentil Vetch			●	Scarce. Bur Oak Savannah, 43.9059, -76.9869, 10 June 2012 (2012-261, DAO 878299).
GERANIACEAE - The Geranium Family					
<i>Geranium maculatum</i> L.	Wild Crane's-bill		●	●	Rare. 43.9061, -76.9866, 19 May 2012 (2012-157, DAO 871840).
<i>Geranium robertianum</i> L.	Herb-robert	●	●	●	Frequent. Only on cobble beach. Possibly confined to the rocky beach SE section, cobble beach, 43.899502, -76.991239, 15 August 2013 (2013-831, DAO 894032). SE section, cobble beach, 43.899502, -76.991239, 15 August 2013 (2013-831, DAO 894032).
RUTACEAE - The Rue Family					
<i>Zanthoxylum americanum</i> Miller	Northern Prickly Ash	●	●	●	Very common. Forming impenetrable thickets in many places including dry open areas and swamps..
POLYGALACEAE - The Milkwort Family					
<i>Polygala senega</i> L.	Seneca Snakeroot			●	Scarce. Locally abundant in some Bur Oak Savannas west of Ostrander Point Road (1000 plants). 43.911, - 76.9939, 19 May 2012 (2012-153, DAO 871836).
EUPHORBIACEAE - The Spurge Family					

<i>Chamaesyce maculata</i> (L.) Small <i>Euphorbia maculata</i> L.	*Spotted Spurge	●	●	●	Common. Road gravel.
ANACARDIACEAE - The Cashew Family					
<i>Rhus aromatica</i> Aiton	Fragrant Sumac	●	●	●	Common. Scattered throughout in open places. 43.9061, -76.9866, 19 May 2012 (2012-172, DAO 871855).
<i>Rhus rydbergii</i> Small ex Rydb.	Poison Ivy	●	●	●	Common. The vine-like Poison Ivy (now generally called <i>Rhus radicans</i>) does not occur in the area
<i>Rhus typhina</i> L.	Staghorn Sumac	●	●	●	Frequent.
CELASTRACEAE - The Staff-tree Family					
<i>Celastrus scandens</i> L.	Climbing Bittersweet	●	●	●	Occasional.
ACERACEAE - The Maple Family					
<i>Acer x freemanii</i> E. Murr.	Hybrid Maple		●		? Rare.
<i>Acer negundo</i>	*Box Elder	●	●	●	Occasional. Around an old habitation and a few on cobble beach.
<i>Acer rubrum</i> L.	Red Maple	●	●	●	?
<i>Acer saccharum</i> Marshall var. <i>saccharum</i>	Sugar Maple	●	●	●	Rare.
<i>Acer saccharum</i> Marshall ssp. <i>nigrum</i> (Michaux f.) Desmarais	Black Maple	●		●	Rare.
BALSAMINACEAE - The Touch-me-not Family					
<i>Impatiens capensis</i> Meerb.	Spotted Jewel-weed	●	●	●	Occasional. Swampy woods.
RHAMNACEAE - The Buckthorn Family					
<i>Rhamnus alnifolia</i> L'Hér.	Alderleaf Buckthorn			●	Occasional. Moist woods. Ostander Point, Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-232, DAO 878276).
<i>Rhamnus cathartica</i> L.	*Common Buckthorn	●	●	●	Very common. Dominant on the cobble beach and scattered throughout. 43.9061, -77.0063, 19 May 2012 (2012-127, DAO 871810).
VITACEAE - The Grape Family					
<i>Parthenocissus inserta</i> (A. Kerner) Fritsch	Virginia Creeper	●	●	●	Common. Open bank near old homestead, 43.90947, -76.99711, 4 August 2013 (2013-701, DAO 885503).
<i>Vitis riparia</i> Michaux	Riverbank Grape	●	●	●	Common. Far west Fingers Wetlands, edge of vernal pool, 43.89516, -77.00262, 4 August 2013 (2013-712, DAO 885440). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-31, DAO 894039). Var. <i>syrticola</i> on the Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-15, DAO 894267).
TILIACEAE - The Linden Family					
<i>Tilia americana</i> L.	American Basswood	●	●	●	Occasional.
MALVACEAE - The Mallow Family					
<i>Malva neglecta</i> Wallr.	*Dwarf Cheeseweed	●		●	Scarce.
GUTTIFERAE (incl. Clusiaceae & Hypericaceae) - The St. John's Wort Family					
<i>Hypericum perforatum</i> L.	*Common St. John's-wort	●		●	Common. <i>Deschampsia</i> meadow, 43.90450, -77.00462, 4 August 2013 (2013-685, DAO 886502).

<i>Triadenum fraseri</i> (Spach) Gleason	Marsh St. John's-wort			●	Rare. SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-826, DAO 894097).
VIOLACEAE - The Violet Family					
<i>Viola affinis</i> Le Conte	Le Conte's Violet			●	RR. Scarce. W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-32, DAO 885267, 2013-35, DAO 885268, and 2013-37, DAO 885269).
<i>Viola cucullata</i> Aiton	Marsh Blue Violet	●		●	Scarce.
<i>Viola labradorica</i> Schrank	Labrador Violet			●	RR. Scarce. W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-42, DAO 885280).
<i>Viola nephrophylla</i> Greene	Northern Bog Violet			●	RR. Frequent. Occasional. 43.9061, -77.0063, 19 May 2012 (2012-130, DAO 871813).
<i>Viola pubescens</i> Aiton var. <i>pubescens</i>				●	Rare. W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-34, DAO 885275).
<i>Viola rostrata</i> Pursh	Long-spur Violet			●	Rare.
<i>Viola sororia</i> Willd.	Woolly Blue Violet		●	●	Frequent.
ELAEAGNACEAE - The Oleaster Family					
<i>Shepherdia canadensis</i> (L.) Nutt.	Canada Buffalo-berry	●	●	●	Frequent. 43.9061, -76.9866, 19 May 2012 (2012-162, DAO 871844). W of Ostrander Point Road, 43.90386, -76.99305, 12 May 2013 (2013-36, DAO 885274). W of Ostrander Point Road, Bur Oak savannah, 43.90580, -76.98679, 14 July 2013 (2013-632, DAO 885459).
LYTHRACEAE - The Loosestrife Family					
<i>Decodon verticillatus</i> (L.) Elliott	Hairy Swamp Loosestrife	●		●	Rare. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-665, DAO 886234).
<i>Lythrum salicaria</i> L.	*Purple Loosestrife	●		●	Common. Scattered in wetlands throughout.
ONAGRACEAE - The Evening Primrose Family					
<i>Circaea lutetiana</i> L. ssp. <i>canadensis</i> (L.) Aschers. & Magnus	Canada Enchanter's Nightshade			●	Scarce. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-809, DAO 894041). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-48, DAO 894033).
<i>Epilobium coloratum</i> Biehler	Purple-leaf Willow-herb		●		Scarce. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-46, DAO 894065).
<i>Epilobium palustre</i> L.	Marsh Willow-herb			●	Scarce. <i>Deschampsia</i> meadow, 43.90450, -77.00462, 4 August 2013 (2013-684, DAO 886503).
<i>Epilobium strictum</i> Muhlenb. ex Sprengel	Downy Willow-herb			●	Rare. Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-27, DAO 894047).
<i>Ludwigia palustris</i> (L.) Elliott	Marsh Seedbox	●		●	Scarce. Temporary pools throughout.
<i>Oenothera biennis</i> L.	Common Evening-primrose	●	●	●	Occasional. Cobble Beach, roadsides.
<i>Oenothera villosa</i> Thunb.	Hairy Evening-primrose			●	Rare. Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-18, DAO 894264).
HALORAGACEAE - The Water Milfoil Family					
<i>Proserpinaca palustris</i> L.	Marsh Mermaid-weed	●		●	Rare. Deeper temporary pools. 43.9061, -77.0063, 19 May 2012 (2012-121, DAO 871804). S side of Helmer Road, in shallow water at E end of Helmer Road, 43.90611, -77.00625, 14 July 2013 (2013-638, DAO 885454). Vernal pool donut, 43.90698, -77.00077, 4 August 2013 (2013-696, DAO 885435).

UMBELLIFERAE (Apiaceae) - The Carrot Family					
<i>Cicuta bulbifera</i> L.	Bulb-bearing Water-hemlock	●	●	●	Occasional. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-667, DAO 886520).
<i>Cicuta maculata</i> L.	Spotted Water-hemlock	●	●	●	Occasional. Far west Fingers Wetlands, willow swamp, 43.895156; -77.0026, 4 August 2013 (2013-713, DAO 885493).
<i>Daucus carota</i> L.	*Wild Carrot	●	●	●	Common. Dry, open habitats.
<i>Pastinaca sativa</i> L.	*Wild Parsnip	●		●	Frequent.
<i>Sanicula marilandica</i> L.	Black Snake-root		●	●	? Scarce.
<i>Sanicula trifoliata</i> Bickn.	Large-fruited Sanicle			●	RR. Scarce. Bur Oak Savannah, 43.9059, -76.9869, 10 June 2012 (2012-258, DAO 878303).
<i>Sium suave</i> Walter	Hemlock Water-parasit	●	●	●	Occasional. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-666, DAO 886235).
<i>Zizia aurea</i> (L.) Koch	Common Alexanders		●	●	RR. Scarce. Five populations of 10-30 plants scattered over the area.
CORNACEAE - The Dogwood Family					
<i>Cornus amomum</i> Miller ssp. <i>obliqua</i> (Raf.) J.S. Wilson	Silky Dogwood	●	●	●	Very common. Vernal pool from scrape, 43.90673, -77.00393, 4 August 2013 (2013-691, DAO 886339). Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-763, DAO 886370). Common in alvar shrubland, SW area, 43.8935, -77.0035, 24 August 2014 (2014-10, DAO 894259).
<i>Cornus foemina</i> Miller ssp. <i>racemosa</i> (Lam.) J.S. Wilson	Stiff Dogwood	●	●	●	Very common. Common in alvar shrubland, SW area, 43.8935, -77.0035, 24 August 2014 (2014-9, DAO 894255).
<i>Cornus stolonifera</i> Michaux	Red Osier Dogwood	●	●	●	Common.
PRIMULACEAE - The Primrose Family					
<i>Lysimachia ciliata</i> L. (<i>Steironema ciliatum</i> (L.) Raf.)	Fringed Loosestrife	●	●	●	Occasional. W of Ostrander Point Road, Bur Oak savannah, 43.90580, -76.98679, 14 May 2013 (2013-629, DAO 885465). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-43, DAO 894068).
<i>Lysimachia nummularia</i> L.	*Creeping Jennie	●	●	●	Rare. Behind cobble beach.
<i>Lysimachia terrestris</i> (L.) Britton, Sterns & Pogg	Swamp Loosestrife		●		?
<i>Lysimachia thyrsoflora</i> L. (<i>Naumbergia thyrsoflora</i> (L.) Duby)	Water Loosestrife	●		●	Rare. SE marsh edges.
OLEACEAE - The Olive Family					
<i>Fraxinus americana</i> L.	White Ash	●	●	●	Rare. Recorded only as present.
<i>Fraxinus nigra</i> Marshall	Black Ash	●	●	●	Rare. Recorded only as present.
<i>Fraxinus pennsylvanica</i> Marshall	Green Ash (includes Red Ash)	●	●	●	Very common. Dominant in swamps throughout. 43.9061, -77.0063, 19 May 2012 (2012-128, DAO 871811). SE section, dominant in swamp, 43.899502, -76.99123915, August 2013 (2013-793, DAO 894075). NE central area, vernal pool, 43.90851, -76.99308, 3 August 2013 (2013-655, DAO 886231). Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-760, DAO 886367). Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-22, DAO 894057).
<i>Syringa vulgaris</i> L.	*Common Lilac	●	●	●	Rare. Old habitations, W Helmer Rd.
GENTIANACEAE - The Gentian Family					

<i>Gentiana andrewsii</i> Griesb.	Fringe-top Bottle Gentian			●	Occasional. Wet meadows throughout. SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-794, DAO 894074).
APOCYNACEAE - The Dogbane Family					
<i>Apocynum androsaemifolium</i> L. ssp. <i>androsaemifolium</i>	Spreading Dogbane	●	●	●	? Common. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-245, DAO 878325).
<i>Apocynum cannabinum</i> L.	Clasping-leaf Dogbane	●		●	? Common. Westernmost finger wetlands, vernal pool, 43.91048; -76.99315, 17 August 2013 (2013-762, DAO 886369).
ASCLEPIADACEAE - The Milkweed Family					
<i>Asclepias incarnata</i> L. ssp. <i>incarnata</i>	Swamp Milkweed	●	●	●	Common. Swamp, marsh, temporary pools.
<i>Asclepias syriaca</i> L.	Kansas Milkweed	●	●	●	Common. Moist to dry, open area.
<i>Asclepias tuberosa</i> L.	Butterfly Milkweed	●			RR. Rare. At least one other location on limestone rock in the county south of Skyline Bridge.
<i>Vincetoxicum</i> (<i>Cynanchum</i>) <i>nigrum</i> (L.) Moench	*Dog Strangling Vine/ Black Swallow-wort	●	●	●	Common. Large, dominant infestations on cobble beach. Widespread but elsewhere not dominating large areas at present (as it is a Prince Edward Point). Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-227, DAO 878467). Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-20, DAO 894262).
CONVOLVULACEAE - The Morning-glory Family					
<i>Calystegia sepium</i> (L.) R. Br. ssp. <i>americanum</i> (Sims) Brummit (<i>Convolvulus sepium</i> var. <i>americanum</i>)	Hedge Bindweed	●		●	Scarce.
<i>Convolvulus arvensis</i> L.	*Field Bindweed		●	●	Scarce.
POLEMONIACEAE - The Phlox Family					
<i>Phlox divaricata</i> L.	Wild Blue Phlox			●	Scarce. 43.9061, -76.9866, 19 May 2012 (2012-155, DAO 871838). W of Ostrander Point Road, 43.90532, -76.98804, 12 May 2013 (2013-40, DAO 885278).
BORAGINACEAE - The Borage Family					
<i>Cynoglossum officinale</i> L.	*Common Hound's-tongue	●		●	Scarce.
<i>Echium vulgare</i> L.	*Common Viper's-bugloss	●	●	●	Common. Dry, open areas.
VERBENACEAE - The Vervain Family					
<i>Verbena hastata</i> L.	Blue Vervain	●	●	●	Rare. Swamp.
<i>Verbena simplex</i> Lehm.	Narrow-leaved Vervain	●	●	●	Frequent. Gravelly areas periodically inundated. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-735, DAO 878311).
LABIATAE (Lamiaceae) - The Mint Family					
<i>Clinopodium vulgare</i> L. <i>Satureja vulgaris</i> (L.) Fritsch	Field Basil	●	●	●	Frequent. 43.911, -76.9939, 29 September 2012 (2012-563, DAO 878456). W of Ostrander Point Road, open limestone areas, 43.91059, -76.99328, 14 May 2013 (2013-622, DAO 885480).
<i>Hedeoma hispida</i> Pursh	Rough Pennyroyal		●	●	Occasional.
<i>Hedeoma pulegioides</i> (L.) Pers.	American Pennyroyal	●		●	Occasional. W of Ostrander Point Road, Bur Oak savannah, 43.90580, -76.98679, 14 July 2013 (2013-631, DAO 885464).
<i>Hyssopus officinalis</i> (L.) Pers.	* Hyssop			●	Rare. Gravel roadside, rare, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-36, DAO 897256)
<i>Leonurus cardiaca</i> L. ssp. <i>cardiaca</i>	*Common Mother-wort	●		●	Scarce.

<i>Lycopus americanus</i> Muhlenb. ex Bartram	American Bugleweed	●	●	●	Occasional. Vernal pool from scrape, 43.90673, -77.00393, 4 August 2013 (2013-692, DAO 886340). Western finger wetlands, vernal pool, 43.91048, -43.91048, 17 August 2013 (2013-765, DAO 886521).
<i>Lycopus uniflorus</i> Michaux	Northern Bugleweed			●	Occasional. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-805, DAO 894045).
<i>Mentha arvensis</i> L. ssp. <i>borealis</i> (Michaux) R.L. Taylor Macbryde	Corn Mint	●		●	Occasional. SE area, wet meadow near marsh, 43.89951, -76.99259, 4 August 2013 (2013-668, DAO 886519). Far west Fingers Wetlands, edge of vernal pool, 43.89516, -77.00262, 4 August 2013 (2013-708, DAO 885436).
<i>Monarda fistulosa</i> L.	Wild Bergamot	●	●	●	Occasional. Some locations have over 500 plants. West side of Ostrander Point Road, 43.911, -76.9939, 29 September 2012 (2012-562, DAO 878457). W of Ostrander Point Road, open limestone areas, 43.91059, -76.99328, 14 May 2013 (2013-623, DAO 885479).
<i>Nepeta cataria</i> L.	*Catnip	●		●	Scarce.
<i>Origanum vulgare</i> L.	Wild Marjoram		●	●	Rare.
<i>Prunella vulgaris</i> L. ssp. <i>lanceolata</i> (W.C. Barton) Hultén	Self-heal	●	●	●	Common. Ostrander Point, Petticoat Road, 43.895, -77.0026, 10 June 2012, <i>P.M. Catling</i> , <i>B. Kostiuk</i> 2012-244 (DAO 878326).
<i>Scutellaria galericulata</i> L.	Hooded Skullcap	●		●	Occasional. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-678, DAO 886509).
<i>Scutellaria lateriflora</i> L.	Mad Dog Skullcap			●	Occasional. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-810, DAO 894063). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-45, DAO 894066).
<i>Scutellaria parvula</i> Michaux var. <i>parvula</i>	Small Skullcap	●		●	Common. Widespread in limestone gravel. W of Ostrander Point Road, open limestone areas, 43.91059, -76.99328, 14 May 2013 (2013-621, DAO 885469).
<i>Stachys hispida</i> Pursh	Hispid Hedge-nettle	●		●	Scarce. Moist woods. Ostrander Point Road W of the corner, moist woodland edges, 43.90302, -76.98292, 14 July 2013 (2013-644, DAO 885444). Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-51, DAO 894261).
<i>Trichostema brachiatum</i> L. (<i>Isanthus brachiatus</i> (L.) Britton, Sterns & Pogg)	False Pennyroyal	●	●	●	Very common. Frequent and widespread in open alvar.
SOLANACEAE - The Nightshade Family					
<i>Solanum dulcamara</i> L.	*Climbing Nightshade	●	●	●	Occasional. Mostly on the upper cobble beach.
SCROPHULARIACEAE - The Figwort Family					
<i>Chaenorhinum minus</i> (L.) Lange (<i>Antirrhinum minus</i> L.)	*Common Dwarf Snapdragon	●		●	Scarce. Dry, open gravelly alvar in disturbed sites. SE section, cobble beach, 43.899502, -76.991239, 15 August 2013 (2013-823, DAO 894087).
<i>Gratiola quartermaniae</i> D. Estes	Limestone Hedge-hyssop	●		●	S3? RR. Frequent. Vernal pools throughout. 43.9061, -77.0063, 19 May 2012 (2012-133, DAO 871816). Met Tower, temporary pool, 43.903685, -77.001959, 22 July 2014 (2014-4, DAO 893758). W of Ostrander Point Road, vernal pools, 43.91059, -76.99328, vernal pools, 14 July 2013 (2013-633, DAO 885462). NE central area, vernal pool, 43.90851, -76.99308, 3 August 2013 (2013-658, DAO 885443). Far west Fingers Wetlands, 43.89516, -77.00262, 4 August 2013 (2013-702, DAO 885502).

					vernal pool from scrape, 43.90673, -77.00393, 4 August 2013 (2013-690, DAO 886528). Met Tower, vernal pool just gone dry, 43.90363, -77.00202, 14 July 2013 (2013-640, DAO 885451). Vernal pool donut, 43.90698, -77.00077, 4 August 2013 (2013-700, DAO 885501). Previously included in <i>G. neglecta</i> and status under taxonomic review.
<i>Linaria vulgaris</i> Miller	*Butter-and-eggs	●	●	●	Scarce.
<i>Mimulus ringens</i> L.	Square-stem Monkeyflower	●		●	Occasional. Vernal pools and wet meadow. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-679, DAO 886508).
<i>Penstemon digitalis</i> Nutt. ex Sims	Foxglove Beardtongue		●		RR. ?
<i>Penstemon hirsutus</i> (L.) Willd.	Hairy Beardtongue	●		●	Common. Dry, open and gravelly places.
<i>Verbascum thapsus</i> L.	*Great Mullein	●	●	●	Scarce. Cobble beach and cultural meadows.
<i>Veronica americana</i> (Raf.) Schwein. ex Benth	American Speedwell	●		●	Rare.
<i>Veronica anagallis-aquatica</i> L.	Brook-pimpernell	●		●	RR. Rare. Fingers drying alvar fen, vernal pool, 43.89919, -77.00358, 14 July 2013 (2013-647, DAO 885468).
<i>Veronica beccabunga</i> L.	*European Speedwell			●	Scarce. Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-767, DAO 886374). Vernal pool donut, 43.90698, -77.00077, 4 August 2013 (2013-699, DAO 885504).
<i>Veronica peregrina</i> L. ssp. <i>peregrina</i>	Purslane Speedwell			●	Occasional. 43.9061, -76.9866, 19 May 2012 (2012-161, DAO 871843).
<i>Veronica scutellata</i> L.	Marsh-speedwell			●	Occasional. S side of Helmer Road, in shallow water at E end of Helmer Road 43.90611, -77.00625, 14 July 2013 (2013-636, DAO 885458). Westernmost finger wetlands, vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-764, DAO 886371).
<i>Veronica serpyllifolia</i> L. ssp. <i>serpyllifolia</i>		●		●	? Scarce.
OROBANCHACEAE - The Broom-Rape Family					
<i>Agalinis purpurea</i> (L.) Pennell (<i>Gerardia purpurea</i>)	Large Purple Agalinis	●		●	Occasional. Moist meadow. Far west Fingers Wetlands, edge of vernal pool, 43.89516; -77.00262, 4 August 2013 (2013-703, DAO 885500).
<i>Agalinis tenuifolia</i> M. Vahl.	Slender Agalinis	●	●	●	RR. Occasional. Marshes and wet meadows in SE section. 43.899502, -76.991239, 15 August 2013 (2013-792, DAO 894076).
LENTIBULARIACEAE - The Bladderwort Family					
<i>Utricularia cornuta</i> Michaux	Horned Bladderwort	●			RR. Seems unlikely but possible on mudflats in marsh during a dry year.
<i>Utricularia vulgaris</i> L.	Greater Bladderwort			●	Rare. SE area, open water in southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-672, DAO 885615).
PLANTAGINACEAE - The Plantain Family					
<i>Plantago major</i> L.	*Nipple-seed Plantain	●	●	●	? Frequent.
<i>Plantago rugelii</i> Decne.	*Black-seed Plantain	●		●	? Frequent.
RUBIACEAE - The Madder Family					
<i>Cephalanthus occidentalis</i> L.	Common Buttonbush	●		●	Rare. Swamp.
<i>Galium aparine</i> L.	Catchweed Bedstraw	●		●	Scarce. 43.8967, -76.9985, 19 May 2012 (2012-146, DAO 871829). Bur Oak Savannah, 43.9059, -76.9869, 10 June 2012 (2012-262, DAO 878312).

<i>Galium asprellum</i> Michaux	Rough Bedstraw	●	●	●	?
<i>Galium boreale</i> L.	Northern Bedstraw	●		●	Occasional. Petticoat Road, 43.895, -77.0026, 10 June 2012, (2012-231, DAO 878277). S side of Helmer Road, open meadow, 43.90611, -77.00625, 14 July 2013 (2013-641, DAO 885449).
<i>Galium labradoricum</i> (Weig.) Wieg	Bog Bedstraw			●	RR. Occasional. Moist meadows. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-247, DAO 878323 and 2012-234, DAO 878336).
<i>Galium mollugo</i> L.	*Great Hedge Bedstraw		●	●	Scarce.
<i>Galium obtusum</i> Bigelow	Blunt-leaf Bedstraw			●	Scarce. Cobble beach, SW area, 43.8935, -77.0035, 24 August 2014 (2014-16, DAO 894266).
<i>Galium palustre</i> L.	Marsh Bedstraw	●	●	●	Scarce.
<i>Galium trifidum</i> L. ssp. <i>trifidum</i>	Small Bedstraw			●	Occasional. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-674, DAO 886513).
<i>Galium triflorum</i> Michaux	Sweet-scent Bedstraw		●	●	Occasional. SE section, Ash swamp, 43.905784, -76.988049, 15 August 2013 (2013-812, DAO 894061).
<i>Houstonia longifolia</i> Willd.	Longleaf Bluets	●	●	●	RR. Common. Localized in many areas in dry, open gravel, - often thousands of plants. 43.9061, -77.0063, 19 May 2012 (2012-132, DAO 871815). Open meadow, 43.90611, -77.00625, 14 July 2013 (2013-642, DAO 885447).
CAPRIFOLIACEAE - The Honeysuckle Family					
<i>Lonicera canadensis</i> Marsh.	American Fly-honeysuckle		●		?
<i>Lonicera dioica</i> L.	Mountain Honeysuckle	●		●	Occasional. 43.8967, -76.9985, 19 May 2012 (2012-145, DAO 871828).
<i>Lonicera hirsuta</i> Eaton	Hairy Honeysuckle	●	●	●	Rare.
<i>Lonicera tatarica</i> L.	*Tartarian Honeysuckle	●	●	●	Common. Open areas throughout. 43.9061, -76.9866, 19 May 2012 (2012-159, DAO 871841).
<i>Sambucus nigra</i> L. ssp. <i>canadensis</i> (Linnaeus) Bolli	Common Elderberry	●	●	●	Occasional. Woodland and marsh edges.
<i>Symphoricarpos albus</i> (L.) S.F. Blake var. <i>albus</i>	Snowberry	●	●	●	Scarce. Savannah and alvar shrubland.
<i>Triosteum aurantiacum</i> E. Bickn.	Coffee Tinker's-weed	●	●	●	Occasional. Open woods. 43.911, -76.9939, 19 May 2012 (2012-171, DAO 871852).
<i>Viburnum lentago</i> L.	Nannyberry	●	●	●	Common. Open shrubby areas. 43.9061, -77.0063, 19 May 2012 (2012-120, DAO 871803).
<i>Viburnum rafinesquianum</i> Schultes	Downy Arrowwood	●	●	●	Scarce. Woods and savannah. Moist woods, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-37, DAO 894034).
DIPSACACEAE - The Teasel Family					
<i>Dipsacus fullonum</i> L. ssp. <i>sylvestris</i> (Hudson) Clapham	*Fuller's Teasel	●		●	Rare.
CAMPANULACEAE (incl. Lobeliaceae) - The Harebell Family					
<i>Campanula aparinoides</i> Pursh	Marsh Bellflower	●		●	RR. Scarce. Wet meadow and marsh. SE area, southeast marsh, 43.89951, -76.99259, 4 August 2013 (2013-677, DAO 886510).
<i>Campanula rapunculoides</i> L.	*Creeping Bellflower	●		●	Rare. Roadside and old habitation.
<i>Campanula rotundifolia</i> L.	American Harebell	●	●	●	Occasional. Open areas of cobble beach and alvar.
<i>Lobelia spicata</i> Lam.	Pale-spiked Lobelia	●	●	●	RR. Occasional. Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-239, DAO

					878331). Fingers drying alvar fen, edge of vernal pool, 43.89919, -77.00358, 14 July 2013 (2013-646, DAO 885486).
COMPOSITAE (Asteraceae) - The Aster Family					
<i>Achillea millefolium</i> L. var. <i>millefolium</i>	Common Yarrow	●	●	●	? Common . Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-235, DAO 878335).
<i>Ambrosia artemisiifolia</i> L.	Annual Ragweed	●	●	●	Common .
<i>Antennaria neglecta</i> E. Greene	Field Pussytoes	●	●	●	Common .
<i>Aster umbellatus</i> Miller	Flat-topped White Aster	●		●	? Rare .
<i>Bidens cernua</i> L.	Nodding Beggar-ticks	●	●	●	Occasional .
<i>Bidens discoidea</i> (Torrey & A. Gray) Britton	Swamp Beggar-ticks	●		●	RR. Scarce . SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-825, DAO 894098).
<i>Bidens frondosa</i> L.	Devil's Beggar-ticks	●	●	●	Occasional .
<i>Carduus acanthoides</i> L.	*Spiny Plumeless-thistle	●		●	Occasional .
<i>Chrysanthemum leucanthemum</i> L.	*Ox-eye Daisy	●	●	●	Common .
<i>Cichorium intybus</i> L.	*Chicory	●	●	●	Common . Mostly roadsides.
<i>Cirsium vulgare</i> (Savi) Ten.	*Bull Thistle	●	●	●	Occasional .
<i>Erigeron annuus</i> (L.) Pers.	White-top Fleabane	●	●	●	Common . Westernmost finger wetlands, edge of vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-765, DAO 886522).
<i>Erigeron strigosus</i> Muhlenb. ex Willd.	Daisy Fleabane	●	●	●	Common . <i>Deschampsia</i> meadow, 43.90450, -77.00462, 4 August 2013 (2013-682, DAO 886505).
<i>Eupatorium maculatum</i> L. ssp. <i>maculatum</i>	Spotted Joe-pye Weed	●	●	●	Scarce . SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-795, DAO 894073). Now <i>Eutrochium maculatum</i> .
<i>Eupatorium perfoliatum</i> L.	Common Boneset	●	●	●	Common . Throughout in wetlands.
<i>Eupatorium rugosum</i> Houtt.				●	Scarce : Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-33, DAO 894037).
<i>Euthamia graminifolia</i> (L.) Nutt. <i>Solidago graminifolia</i> (L.) Salisb.	Flat-top Fragrant-golden-rod	●		●	Common . Moist open areas.
<i>Helianthus divaricatus</i> L.	Woodland Sunflower	●		●	Rare . Open woods on east side.
<i>Helianthus giganteus</i> L.	Tall Sunflower			●	RR. Rare . SE section, Shagbark Hickory woods, 43.905887, -76.986716, 15 August 2013 (2013-801, DAO 894050).
<i>Hieracium aurantiacum</i> L.	*Orange Hawkweed	●	●	●	? Occasional .
<i>Hieracium piloselloides</i> Villars	*Tall Hawkweed	●	●	●	Common . Petticoat Road, 43.895, -77.0026, 10 June 2012 (2012-737, DAO 878300).
<i>Lactuca canadensis</i> L.	Canada Lettuce	●	●	●	Occasional . Gravelly beaches and wet meadows. Plants from the latter habitat look very different. SE section, cobble beach, 43.899502, -76.991239, 15 August 2013 (2013-822, DAO 894088). Marsh, SW of Ostrander Point Rd. corner, 43.903, -76.9837, 24 August 2014 (2014-34, DAO 894036).
<i>Packera</i> (Senecio) <i>paupercula</i> (Michaux) A. Love and D. Love	Balsam Ragwort/ Northern Meadow Groundsel	●	●	●	Common . Helmer & Babylon Roads, 43.9061, -77.0063, 19 May 2012 (2012-170, DAO 871854).

<i>Solidao altissima</i> L.	Late Goldenrod		●		Occasional.
<i>Solidago canadensis</i> L. var. <i>canadensis</i>	Canada Goldenrod	●		●	? Scarce.
<i>Solidago gigantea</i> Aiton	Smooth Goldenrod	●		●	Common. This glabrous species appears to be the common tall goldenrod in the area. Some start flowering in early August. W side, willow swamp, 43.892885, -77.005736, 28 September 2013 (2013-876, DAO 894082). easternmost finger wetlands, edge of vernal pool, 43.91048, -76.99315, 17 August 2013 (2013-761, DAO 886368). Far west Fingers Wetlands, edge of vernal pool, 43.89516, -77.00262, 4 August 2013 (2013-711, DAO 885434). SE area, wet meadow near marsh, 43.89951, -76.99259, 4 August 2013 (2013-669, DAO 886518). Far west Fingers Wetlands, edge of vernal pool, 43.89516, -77.00262, 4 August 2013 (2013-704, DAO 886228).
<i>Solidago juncea</i> Aiton	Early Goldenrod	●		●	Occasional.
<i>Solidago nemoralis</i> Aiton var. <i>nemoralis</i>	Gray-stemmed Goldenrod	●	●	●	Very Common. Dry, open areas throughout. Ostrander Point, W side, alvar parkland with <i>Juniperus virginiana</i> , 43.898033, -77.013224, 28 September 2013 (2013-869, DAO 894105).
<i>Solidago ptarmicoides</i> (Nees) B. Boivin <i>Aster ptarmicoides</i> (Nees) Torrey & Gray	Prairie Goldenrod			●	Rare. Periodically wet alvar. One other location on the South Shore at Charwell Point.
[<i>Symphyotrichum ciliolatum</i> Lindley]	Lindley's Aster		●		Probably misidentified since this species generally occurs further to the north.
<i>Symphyotrichum cordifolium</i> L.	Heart-leaf Aster	●		●	Occasional. Open woods.
<i>Symphyotrichum ericoides</i> L. var. <i>ericoides</i>	White Heath Aster	●	●	●	Rare.
<i>Symphyotrichum lanceolatum</i> Willd. ssp. <i>lanceolatum</i>	Panicled Aster	●		●	Scarce. W side, willow swamp, 43.892885, -77.005736, 28 September 2013 (2013-875, DAO 894083). SE section, marsh, 43.899502, -76.99123915, August 2013 (2013-828, DAO 894095).
<i>Symphyotrichum lateriflorum</i> (L.) var. <i>lateriflorum</i>	Small White Aster	●	●	●	Rare.
<i>Symphyotrichum novae-angliae</i> L.	New England Aster	●	●	●	Frequent. SE section, marsh, 43.899502, -76.991239, 15 August 2013 (2013-796, DAO 894092). Ostrander Point, W side, alvar parkland with <i>Juniperus virginiana</i> , 43.898033, -77.013224, 28 September 2013 (2013-879, DAO 894079).
<i>Symphyotrichum pilosum</i> Willd. var. <i>pilosum</i>	Frost Aster	●		●	Very Common. Widespread. The common small, white flowered Asters of dry, open alvar habitats are this hairy variety and the next glabrous variety which is associated with Great Lakes shores. A form with bluish-pink flowers (2013 877, DAO 894081) occurs sporadically. 43.911, -76.9939, 29 September 2012 (2012-561, DAO 878454). Ostrander Point, alvar parkland with <i>Juniperus virginiana</i> , W side, 43.898033, -77.013224, 28 September 2013 (2013-878, DAO 894080 and 2013-877, DAO 894081).
<i>Symphyotrichum pilosum</i> Willd. var. <i>pringlei</i> (A.Gray) G.L. Nesom	Pringle's Aster			●	? Very Common. SE section, alvar, 43.905887, -76.986716, 15 August 2013 (2013-830, DAO 894093).
<i>Symphyotrichum urophyllum</i> Lindley	Arrow-leaved Aster			●	Occasional. Alvar shrubland. Ostrander Point, W side, alvar parkland with <i>Juniperus virginiana</i> , 43.898033, -77.013224, 28 September 2013 (2013-870, DAO 894106).

<i>Taraxacum officinale</i> G. Weber	*Brown-seed Dandelion	●		●	Common.
<i>Tragopogon pratensis</i> L. ssp. <i>pratensis</i>	*Meadow Goat's-beard	●	●	●	Occasional.
<i>Xanthium strumarium</i> L.	Rough Cockle-bur	●		●	Occasional. Confined in the area to disturbed roadside and cobble beach.

