



Teichner Preserve

Floristic Quality Assessment Results

A Floristic Quality Assessment of Teichner Preserve was conducted by Liana May during the summer of 2014.

Floristic quality assessments (FQAs) are a useful tool to measure a plant community's conservation value. To perform an FQA, all vascular plant species in a community are quantified and an index representing the rarity of these species is summed to give a ranking that can be compared across different ecosystem types. This information can then be used to identify high-quality species and groupings of species in order to prioritize conservation and management efforts. At Teichner Preserve the total number of species and native species are:

Native Species	Total Species
176	208

The coefficient of conservation (C) is a value between 0 and 10 assigned to each species, representing the species likelihood to occur in an unaltered, pre-European settlement landscape in the state of Michigan (Herman et al 2001). A C-value of 0 is assigned to species with low fidelity to their natural habitat and the ability to persist in numerous habitat conditions. A C-value of 10 is assigned to invasive species, also called adventives. At Teichner Preserve the mean C-values are:

Native Mean C	Mean C w/ Adventives
4.7	3.8

The coefficient of wetness (W) is assigned to each species depending on their probability to occur in wetlands, where species with a W-value of -5 are obligatory wetland species, and those with a W-value of +5 are upland species. At Teichner Preserve the mean coefficients of wetness are:

Native Mean W	Mean W w/ Adventives
-0.9	-0.1

FQIs less than 20 have minimal significance, while FQIs greater than 35 represent areas of conservation importance and are floristically significant on a statewide level. Areas with FQIs greater than 50 are extremely rare and represent areas of significant native biodiversity (Herman et al 2001). At Teichner Preserve the FQI's are:

Native FQI	FQI w/ Adventives
74.3	42.2

May, L. 2015. Floristic Quality Assessment and Habitat Mapping of Teichner Preserve.

Herman, K. D., L. A. Masters, M. R. Penskar, A. A. Reznicek, G. S. Wilhelm, W. W. Brodovich, and K. P. Gardiner. 2001. Floristic Quality Assessment with Wetland Categories and Examples of Computer Applications for the State of Michigan – Revised, 2nd Edition. Michigan Department of Natural Resources, Wildlife, Natural Heritage Program. Lansing, MI. 19 pp. + Appendices.



Teichner Preserve

High Quality Plant Species

This list represents the most ecologically significant and high quality plants found at the Teichner Preserve during a 2012 *partial* Floristic Quality Assessment conducted by Liana May. These plants are the highest quality species found on the property and therefore may be rare, difficult to find, or not be blooming depending on the season.

Please remember to practice Leave No Trace techniques; picking flowers may not seem like a big deal, but it means others won't have a chance to enjoy them. With thousands of people visiting Conservancy properties, the less impact we each make, the longer we will enjoy what we have. If you are interested in conducting a scientific study on the property please contact the Conservancy for written permission.

C	Scientific Name	Common Name
6	<i>Adiantum pedatum</i>	MAIDENHAIR FERN
6	<i>Fraxinus nigra</i>	BLACK ASH
7	<i>Betula alleghaniensis</i>	YELLOW BIRCH
7	<i>Decodon verticillatus</i>	WHORLED or SWAMP LOOSESTRIFE
7	<i>Lathyrus palustris</i>	MARSH PEA
7	<i>Lobelia cardinalis</i>	CARDINAL FLOWER
7	<i>Polygala paucifolia</i>	GAY WINGS
8	<i>Aralia racemose</i>	SPIKENARD
8	<i>Cornus florida</i>	FLOWERING DOGWOOD
8	<i>Juncus brevicaudatus</i>	RUSH
8	<i>Oenothera oakesiana</i>	EVENING PRIMROSE
8	<i>Parnassia glauca</i>	GRASS OF PARNASSUS
9	<i>Cypripedium reginae</i>	SHOWY or QUEEN'S LADY SLIPPER
10	<i>Cladium mariscoides</i>	TWIG RUSH
10	<i>Eleocharis quinqueflora</i>	SPIKE RUSH
10	<i>Lobelia kalmia</i>	BOG LOBELIA

To see pictures or learn more about the plants listed above please visit the Michigan Natural Features Inventory website at <http://mnfi.anr.msu.edu/data/specialplants.cfm> or consult Newcomb's Wildflower Guide by Lawrence Newcomb.

Teichner Preserve (all)
 Addendum 2/8/2015
 Teichner Preserve
 Maple City
 Leelanau
 Michigan
 USA
 FQA DB Region:
 FQA DB Publication Year:
 FQA DB Description:

Michigan
 2014
 Reznicek, A.A., M.R. Penskar, B.S. Walters, and B.S. Slaughter. 2014. Michigan Floristic Quality Assessment Database. Herbarium, University of Michigan, Ann Arbor, MI and Michigan Natural Features Inventory, Michigan State University, Lansing, MI. Liana May

Practitioner:
 Latitude:
 Longitude:
 Weather Notes:
 Duration Notes:
 Community Type Notes:

Growing Season 2013
 Forested wetlands, some upland edges and inclusions, small northern fen, Lime Lake shoreline.

Other Notes:
 Private/Public:

Platanthera aquilonis is habenaria hyperborea undifferentiated from other H. hypoborea subsp.; Calamagrostis stricta is subsp. inexpansa.; AÇ Sporobolus heterolepis & Rattlesnake Master planted, Åsee if reproducing in wild;
 Public

Conservatism-Based Metrics:

Total Mean C: 3.8
 Native Mean C: 4.7
 Total FQI: 66.9
 Native FQI: 74.3
 Adjusted FQI: 42.2
 % C value 0: 22.3
 % C value 1-3: 21.9
 % C value 4-6: 39.7
 % C value 7-10: 16.1
 Native Tree Mean C: 4.3
 Native Shrub Mean C: 4.4
 Native Herbaceous Mean C: 4.8

Species Richness:

Total Species: 310
 Native Species: 250 80.60%
 Non-native Species: 60 19.40%

Species Wetness:

Mean Wetness: -0.1
 Native Mean Wetness: -0.9

Physiognomy Metrics:

Tree: 38 12.30%
 Shrub: 32 10.30%
 Vine: 8 2.60%
 Forb: 145 46.80%
 Grass: 31 10%
 Sedge: 37 11.90%
 Rush: 0 0%
 Fern: 19 6.10%
 Bryophyte: 0 0%

Duration Metrics:

Annual: 12 3.90%
 Perennial: 289 93.20%
 Biennial: 9 2.90%
 Native Annual: 8 2.60%
 Native Perennial: 240 77.40%
 Native Biennial: 2 0.60%

Species:

Scientific Name	Family	Acronym	Native?	C	W	Physiognomy	Duration	Common Name
Abies balsamea	Pinaceae	ABIBAL	native	3	0	tree	perennial	balsam fir
Acer pensylvanicum	Sapindaceae	ACEPEN	native	5	3	tree	perennial	striped maple
Acer rubrum	Sapindaceae	ACERUB	native	1	0	tree	perennial	red maple
Acer saccharinum	Sapindaceae	ACESAI	native	2	-3	tree	perennial	silver maple
Acer saccharum	Sapindaceae	ACESAU	native	5	3	tree	perennial	sugar maple
Acer spicatum	Sapindaceae	ACESPI	native	5	3	tree	perennial	mountain maple
Actaea pachypoda	Ranunculaceae	ACTPAC	native	7	5	forb	perennial	dolls-eyes
Adiantum pedatum	Pteridaceae	ADIPED	native	6	3	fern	perennial	maidenhair fern
Agrostis gigantea	Poaceae	AGRIGIG	non-native	0	-3	grass	perennial	redtop
Agrostis hyemalis	Poaceae	AGRHYE	native	4	0	grass	perennial	tickleglass
Allium tricoccum	Alliaceae	ALLTRI	native	5	3	forb	perennial	wild leek
Alnus incana; a. rugosa	Betulaceae	ALNINC	native	5	-3	shrub	perennial	speckled alder
Amelanchier arborea	Rosaceae	AMEARB	native	4	3	tree	perennial	juneberry
Anemone canadensis	Ranunculaceae	ANECAN	native	4	-3	forb	perennial	canada anemone
Antennaria howellii	Asteraceae	ANTHOW	native	2	5	forb	perennial	small pussytoes
Apocynum androsaemifolium	Apocynaceae	APOAND	native	3	5	forb	perennial	spreading dogbane
Apocynum cannabinum; a. sibiricum	Apocynaceae	APOCAN	native	3	0	forb	perennial	indian-hemp
Aquilegia canadensis	Ranunculaceae	AQUCAN	native	5	3	forb	perennial	wild columbine
Aralia nudicaulis	Araliaceae	ARANUD	native	5	3	forb	perennial	wild sarsaparilla
Aralia racemosa	Araliaceae	ARARAC	native	8	3	forb	perennial	spikenard
Arctium minus	Asteraceae	ARCMIN	non-native	0	3	forb	biennial	common burdock
Arisaema triphyllum	Araceae	ARITRI	native	5	0	forb	perennial	jack-in-the-pulpit
Asclepias incarnata	Apocynaceae	ASCINC	native	6	-5	forb	perennial	swamp milkweed
Asclepias syriaca	Apocynaceae	ASCSYR	native	1	5	forb	perennial	common milkweed
Asparagus officinalis	Asparagaceae	ASPOFF	non-native	0	3	forb	perennial	garden asparagus
Athyrium filix-femina	Athyriaceae	ATHFIL	native	4	0	fern	perennial	lady fern
Betula alleghaniensis	Betulaceae	BETALL	native	7	0	tree	perennial	yellow birch
Betula papyrifera	Betulaceae	BETPAP	native	2	3	tree	perennial	paper birch
Bidens connata	Asteraceae	BIDCON	native	5	-3	forb	annual	purple-stemmed tickseed
Bidens frondosa	Asteraceae	BIDFRON	native	1	-3	forb	annual	common beggar-ticks
Boehmeria cylindrica	Urticaceae	BOECYL	native	5	-5	forb	perennial	false nettle
Botrypus virginianus	Ophioglossaceae	BOTVIR	native	5	3	fern	perennial	rattlesnake fern

Bromus ciliatus	Poaceae	BROCIL	native	6	-3	grass	perennial	fringed brome
Bromus inermis	Poaceae	BROINE	non-native	0	5	grass	perennial	smooth brome
Calamagrostis canadensis	Poaceae	CALCAN	native	3	-5	grass	perennial	blue-joint
Calamagrostis stricta; c. inexpansa; c. lacustris	Poaceae	CALSTR	native	10	-3	grass	perennial	narrow-leaved reedgrass
Caltha palustris	Ranunculaceae	CALPAR	native	6	-5	forb	perennial	marsh-marigold
Calystegia sepium	Convolvulaceae	CALSEP	native	2	0	vine	perennial	hedge bindweed
Campanula aparinoides	Campanulaceae	CAMAPA	native	7	-5	forb	perennial	marsh bellflower
Cardamine diphylla; dentaria d.	Brassicaceae	CARDIP	native	5	3	forb	perennial	two-leaved toothwort
Carex arctata	Cyperaceae	CXARTT	native	3	5	sedge	perennial	sedge
Carex aurea	Cyperaceae	CXAURE	native	3	-3	sedge	perennial	sedge
Carex buxbaumii	Cyperaceae	CXBUXB	native	10	-5	sedge	perennial	sedge
Carex comosa	Cyperaceae	CXCOMO	native	5	-5	sedge	perennial	sedge
Carex crawei	Cyperaceae	CXCRAE	native	10	-3	sedge	perennial	sedge
Carex crinita	Cyperaceae	CXCRI	native	4	-5	sedge	perennial	sedge
Carex disperma	Cyperaceae	CXDISP	native	10	-5	sedge	perennial	sedge
Carex eburnea	Cyperaceae	CXEBUR	native	7	3	sedge	perennial	sedge
Carex flava	Cyperaceae	CXFLAV	native	4	-5	sedge	perennial	sedge
Carex hystericina	Cyperaceae	CXHYST	native	2	-5	sedge	perennial	sedge
Carex interior	Cyperaceae	CXINTE	native	3	-5	sedge	perennial	sedge
Carex intumescens	Cyperaceae	CXINTU	native	3	-3	sedge	perennial	sedge
Carex lasiocarpa	Cyperaceae	CXLASI	native	8	-5	sedge	perennial	sedge
Carex leptalea	Cyperaceae	CXLEPA	native	5	-5	sedge	perennial	sedge
Carex leptonevria	Cyperaceae	CXLEPO	native	3	0	sedge	perennial	sedge
Carex lupulina	Cyperaceae	CXLUPA	native	4	-5	sedge	perennial	sedge
Carex pensylvanica	Cyperaceae	CXPENS	native	4	5	sedge	perennial	sedge
Carex plantaginea	Cyperaceae	CXPLAN	native	8	5	sedge	perennial	sedge
Carex praegracilis	Cyperaceae	CXPRAE	non-native	0	-3	sedge	perennial	sedge
Carex prairea	Cyperaceae	CXPRAI	native	10	-3	sedge	perennial	sedge
Carex prasina	Cyperaceae	CXPRAS	native	10	-5	sedge	perennial	sedge
Carex scabrata	Cyperaceae	CXSCAB	native	4	-5	sedge	perennial	sedge
Carex schweinitzii	Cyperaceae	CXSCHW	native	10	-5	sedge	perennial	sedge
Carex stipata	Cyperaceae	CXSTIP	native	1	-5	sedge	perennial	sedge
Carex stricta	Cyperaceae	CXSTRI	native	4	-5	sedge	perennial	sedge
Carex tribuloides	Cyperaceae	CXTRIB	native	3	-3	sedge	perennial	sedge
Carex viridula	Cyperaceae	CXVIRU	native	4	-5	sedge	perennial	sedge
Carex vulpinoidea	Cyperaceae	CXVULP	native	1	-5	sedge	perennial	sedge
Castanea dentata	Fagaceae	CASDEN	native	9	5	tree	perennial	american chestnut
Centaurea stoebe; c. maculosa	Asteraceae	CENSTO	non-native	0	5	forb	biennial	spotted knapweed
Cephalanthus occidentalis	Rubiaceae	CEPOCC	native	7	-5	shrub	perennial	buttonbush
Cerastium fontanum	Caryophyllaceae	CERFON	non-native	0	3	forb	perennial	mouse-ear chickweed
Chrysosplenium americanum	Saxifragaceae	CHRAME	native	6	-5	forb	perennial	golden saxifrage
Cichorium intybus	Asteraceae	CICINT	non-native	0	3	forb	perennial	chicory
Cinna arundinacea	Poaceae	CINARU	native	7	-3	grass	perennial	wood reedgrass
Circaea alpina	Onagraceae	CIRALP	native	4	-3	forb	perennial	small enchanters-nightshade
Circaea canadensis; c. lutetiana	Onagraceae	CIRCAN	native	2	3	forb	perennial	enchanters-nightshade
Cirsium vulgare	Asteraceae	CIRVUL	non-native	0	3	forb	biennial	bull thistle
Cladium mariscoides	Cyperaceae	CLAMAR	native	10	-5	sedge	perennial	twig-rush
Clematis virginiana	Ranunculaceae	CLEVIR	native	4	0	vine	perennial	virgins bower
Clintonia borealis	Convallariaceae	CLIBOR	native	5	0	forb	perennial	bluebead-lily; corn-lily
Conyza canadensis	Asteraceae	CONCAN	native	0	3	forb	annual	horseweed
Coptis trifolia	Ranunculaceae	COPTRI	native	5	-3	forb	perennial	goldthread
Corallorhiza odorothiza	Orchidaceae	CORODO	native	8	5	forb	perennial	fall coral-root
Cornus alternifolia	Cornaceae	CORALT	native	5	3	tree	perennial	alternate-leaved dogwood
Cornus amomum	Cornaceae	CORAMO	native	2	-3	shrub	perennial	silky dogwood
Cornus florida	Cornaceae	CORFLO	native	8	3	tree	perennial	flowering dogwood
Cornus sericea; c. stolonifera	Cornaceae	CORSER	native	2	-3	shrub	perennial	red-osier
Cypripedium reginae	Orchidaceae	CYPRER	native	9	-3	forb	perennial	showy or queens lady-slipper
Cystopteris bulbifera	Cystopteridaceae	CYSBUL	native	5	-3	fern	perennial	bulblet fern
Dactylis glomerata	Poaceae	DACGLO	non-native	0	3	grass	perennial	orchard grass
Daucus carota	Apiaceae	DAUCAR	non-native	0	5	forb	biennial	queen-annes-lace
Decodon verticillatus	Lythraceae	DECVER	native	7	-5	shrub	perennial	whorled or swamp loosestrife
Dianthus armeria	Caryophyllaceae	DIARAR	non-native	0	5	forb	annual	depthford pink
Dianthus barbatus	Caryophyllaceae	DIABAR	non-native	0	5	forb	perennial	sweet william
Dichanthelium depauperatum; panicum d.	Poaceae	DICDEP	native	4	5	grass	perennial	panic grass
Dichanthelium implicatum; panicum l.	Poaceae	DICIMP	native	3	0	grass	perennial	panic grass
Diervilla lonicera	Diervillaceae	DIELON	native	4	5	shrub	perennial	bush-honeysuckle
Drosera rotundifolia	Droseraceae	DROROT	native	6	-5	forb	perennial	round-leaved sundew
Dryopteris carthusiana	Dryopteridaceae	DRYCAR	native	5	-3	fern	perennial	spinulose woodfern
Dryopteris cristata	Dryopteridaceae	DRYCRI	native	6	-5	fern	perennial	crested shield fern
Dryopteris intermedia	Dryopteridaceae	DRYINT	native	5	0	fern	perennial	evergreen woodfern
Dryopteris marginalis	Dryopteridaceae	DRYMAR	native	5	3	fern	perennial	marginal woodfern
Elaeagnus umbellata	Elaeagnaceae	ELAUMB	non-native	0	3	shrub	perennial	autumn-olive
Eleocharis elliptica	Cyperaceae	ELEELL	native	6	-5	sedge	perennial	golden-seeded spike rush
Eleocharis erythropoda	Cyperaceae	ELEERY	native	4	-5	sedge	perennial	spike-rush
Eleocharis rostellata	Cyperaceae	ELEROS	native	10	-5	sedge	perennial	spike-rush
Elymus canadensis	Poaceae	ELYCAN	native	5	3	grass	perennial	canada wild rye
Elymus hystrix; hystrix patula	Poaceae	ELYHYS	native	5	3	grass	perennial	bottlebrush grass
Elymus repens; agropyron r.	Poaceae	ELYREP	non-native	0	3	grass	perennial	quack grass
Epilobium parviflorum	Onagraceae	EPIPAR	non-native	0	-5	forb	perennial	willow-herb
Epipactis helleborine	Orchidaceae	EPIHEL	non-native	0	0	forb	perennial	helleborine
Equisetum arvense	Equisetaceae	EQUARV	native	0	0	fern	perennial	common horsetail
Equisetum hyemale	Equisetaceae	EQUHYE	native	2	0	fern	perennial	scouring rush
Equisetum scirpoides	Equisetaceae	EQUSCI	native	7	0	fern	perennial	dwarf scouring rush
Equisetum variegatum	Equisetaceae	EQUVAR	native	6	-3	fern	perennial	variegated scouring rush
Eryngium yuccifolium	Apiaceae	ERYYUC	native	10	0	forb	perennial	rattlesnake-master
Eupatorium perfoliatum	Asteraceae	EUPPER	native	4	-3	forb	perennial	boneset
Euthamia graminifolia	Asteraceae	EUTGRA	native	3	0	forb	perennial	grass-leaved goldenrod
Eutrochium maculatum; eupatorium m.	Asteraceae	EUTMAC	native	4	-5	forb	perennial	joe-pye-weed
Fagus grandifolia	Fagaceae	FAGGRA	native	6	3	tree	perennial	american beech
Fragaria virginiana	Rosaceae	FRAVIR	native	2	3	forb	perennial	wild strawberry
Fraxinus americana	Oleaceae	FRAAME	native	5	3	tree	perennial	white ash
Fraxinus nigra	Oleaceae	FRANIG	native	6	-3	tree	perennial	black ash
Galium aparine	Rubiaceae	GALAPA	native	0	3	forb	annual	annual bedstraw
Galium odoratum	Rubiaceae	GALODO	non-native	0	5	forb	perennial	sweet woodruff
Galium trifidum	Rubiaceae	GALTRD	native	6	-3	forb	perennial	small bedstraw
Galium triflorum	Rubiaceae	GALTRR	native	4	3	forb	perennial	fragrant bedstraw
Gaultheria procumbens	Ericaceae	GAUPRO	native	5	3	shrub	perennial	wintergreen
Geranium robertianum	Geraniaceae	GERROB	native	3	3	forb	annual	herb robert

Geum rivale	Rosaceae	GEURIV	native	7	-5	forb	perennial	purple avens
Gleditsia triacanthos	Fabaceae	GLETRI	native	8	0	tree	perennial	honey locust
Glyceria striata	Poaceae	GLYSTR	native	4	-5	grass	perennial	fowl manna grass
Gymnocarpium dryopteris	Cystopteridaceae	GYMDRY	native	5	3	fern	perennial	oak fern
Hemerocallis fulva	Hemerocallidaceae	HEMFUL	non-native	0	5	forb	perennial	orange day-lily
Hepatica acutiloba	Ranunculaceae	HEPACU	native	8	5	forb	perennial	sharp-lobed hepatica
Hieracium aurantiacum	Asteraceae	HIEAUR	non-native	0	5	forb	perennial	orange hawkweed
Hieracium piloselloides	Asteraceae	HIEPIS	non-native	0	5	forb	perennial	king devil
Hypericum perforatum	Hypericaceae	HYPPER	non-native	0	5	forb	perennial	common st. johns-wort
Ilex verticillata	Aquifoliaceae	ILEVER	native	5	-3	shrub	perennial	michigan holly
Impatiens capensis	Balsaminaceae	IMPCAP	native	2	-3	forb	annual	spotted touch-me-not
Iris pseudacorus	Iridaceae	IRIPSE	non-native	0	-5	forb	perennial	yellow flag
Iris pumila	Iridaceae	IRIPUM	non-native	0	5	forb	perennial	iris
Iris versicolor	Iridaceae	IRIVER	native	5	-5	forb	perennial	wild blue flag
Juncus brevicaudatus	Juncaceae	JUNBRE	native	8	-5	forb	perennial	rush
Juncus dudleyi	Juncaceae	JUNDUD	native	1	-3	forb	perennial	dudleys rush
Juncus effusus	Juncaceae	JUNEFF	native	3	-5	forb	perennial	soft-stemmed rush
Juncus nodosus	Juncaceae	JUNNOD	native	5	-5	forb	perennial	joint rush
Juncus torreyi	Juncaceae	JUNTOR	native	4	-3	forb	perennial	torreys rush
Juniperus communis	Cupressaceae	JUNCOI	native	4	3	shrub	perennial	common or ground juniper
Juniperus horizontalis	Cupressaceae	JUNHOR	native	10	3	shrub	perennial	creeping juniper
Lactuca canadensis	Asteraceae	LACCAN	native	2	3	forb	biennial	tall lettuce
Larix laricina	Pinaceae	LARLAR	native	5	-3	tree	perennial	tamarack
Lathyrus palustris	Fabaceae	LATPAL	native	7	-3	vine	perennial	marsh pea
Lathyrus sylvestris	Fabaceae	LATSYL	non-native	0	5	vine	perennial	everlasting pea
Leersia oryzoides	Poaceae	LEEORY	native	3	-5	grass	perennial	cut grass
Lemma turionifera; l. minor	Araceae	LEMTUR	native	5	-5	forb	perennial	red duckweed
Leucanthemum vulgare; chrysanthemum leucanthemum	Asteraceae	LEUVUL	non-native	0	5	forb	perennial	ox-eye daisy
Liatris cylindracea	Asteraceae	LIACYL	native	5	5	forb	perennial	cylindrical blazing-star
Lilium lancifolium	Liliaceae	LILLAN	non-native	0	5	forb	perennial	tiger lily
Liparis loeselii	Orchidaceae	LIPLOE	native	5	-3	forb	perennial	loesels twayblade
Lobelia cardinalis	Campanulaceae	LOBCAR	native	7	-5	forb	perennial	cardinal-flower
Lobelia kalmii	Campanulaceae	LOBKAL	native	10	-5	forb	perennial	bog lobelia
Lonicera morrowii	Caprifoliaceae	LONMOR	non-native	0	3	shrub	perennial	morrow honeysuckle
Lycopus americanus	Lamiaceae	LYCAME	native	2	-5	forb	perennial	common water horehound
Lycopus uniflorus	Lamiaceae	LYCUNI	native	2	-5	forb	perennial	northern bugle weed
Lysimachia ciliata	Myrsinaceae	LYSCIL	native	4	-3	forb	perennial	fringed loosestrife
Lysimachia thyriflora	Myrsinaceae	LYSTHY	native	6	-5	forb	perennial	tufted loosestrife
Maianthemum canadense	Convallariaceae	MAICAN	native	4	3	forb	perennial	canada mayflower
Maianthemum racemosum; smilacina r.	Convallariaceae	MAIRAC	native	5	3	forb	perennial	false spikenard
Maianthemum stellatum; smilacina s.	Convallariaceae	MAISTE	native	5	0	forb	perennial	starry false solomon-seal
Malus pumila	Rosaceae	MALPUM	non-native	0	5	tree	perennial	apple
Matteuccia struthiopteris	Onocleaceae	MATSTR	native	3	0	fern	perennial	ostrich fern
Medeola virginiana	Convallariaceae	MEDVIR	native	10	3	forb	perennial	indian cucumber-root
Melica smithii	Poaceae	MELSMI	native	7	5	grass	perennial	melic grass
Melilotus albus	Fabaceae	MELALB	non-native	0	3	forb	biennial	white sweet-clover
Melilotus officinalis	Fabaceae	MELLOF	non-native	0	3	forb	biennial	yellow sweet-clover
Mentha canadensis; m. arvensis	Lamiaceae	MENCAS	native	3	-3	forb	perennial	wild mint
Mentha yópipерita	Lamiaceae	MENPIP	non-native	0	-5	forb	perennial	peppermint
Milium effusum	Poaceae	MILEFF	native	8	3	grass	perennial	wood millet
Mitchella repens	Rubiaceae	MITREP	native	5	3	forb	perennial	partridge-berry
Mitella diphylla	Saxifragaceae	MITDIP	native	8	3	forb	perennial	bishops-cap
Mitella nuda	Saxifragaceae	MITNUD	native	8	-3	forb	perennial	naked miterwort
Monarda fistulosa	Lamiaceae	MONFIS	native	2	3	forb	perennial	wild-bergamot
Monarda punctata	Lamiaceae	MONPUN	native	4	5	forb	perennial	horse mint
Monotropa uniflora	Ericaceae	MONOUN	native	5	3	forb	perennial	indian-pipe
Muhlenbergia glomerata	Poaceae	MUHGLO	native	10	-5	grass	perennial	marsh wild-timothy
Muhlenbergia mexicana	Poaceae	MUHMEX	native	3	-3	grass	perennial	leafy satin grass
Nasturtium officinale	Brassicaceae	NASOFF	native	4	-5	forb	perennial	watercress
Oenothera oakesiana	Onagraceae	OENOAK	native	7	5	forb	biennial	evening-primrose
Onoclea sensibilis	Onocleaceae	ONOSEN	native	2	-3	fern	perennial	sensitive fern
Osmunda cinnamomea	Osmundaceae	OSMCIN	native	5	-3	fern	perennial	cinnamon fern
Osmunda regalis	Osmundaceae	OSMREG	native	5	-5	fern	perennial	royal fern
Ostrya virginiana	Betulaceae	OSTVIR	native	5	3	tree	perennial	ironwood; hop-hornbeam
Oxalis stricta; o. fontana	Oxalidaceae	OXASTR	native	0	3	forb	perennial	yellow wood-sorrel
Panicum virgatum	Poaceae	PANVIR	native	4	0	grass	perennial	switch grass
Parnassia glauca	Parnassiaceae	PARGLA	native	8	-5	forb	perennial	grass-of-parnassus
Parthenocissus quinquefolia	Vitaceae	PARQUI	native	5	3	vine	perennial	virginia creeper
Phalaris arundinacea	Poaceae	PHAARU	native	0	-3	grass	perennial	reed canary grass
Phleum pratense	Poaceae	PHLPRA	non-native	0	3	grass	perennial	timothy
Phragmites australis var. americanus	Poaceae	PHRAUM	native	5	-3	grass	perennial	reed
Physocarpus opulifolius	Rosaceae	PHYOPU	native	4	-3	shrub	perennial	ninebark
Picea abies	Pinaceae	PICABI	non-native	0	5	tree	perennial	norway spruce
Picea glauca	Pinaceae	PICGLA	native	3	3	tree	perennial	white spruce
Pilea fontana	Urticaceae	PILFON	native	5	-3	forb	annual	bog clearweed
Pinus resinosa	Pinaceae	PINRES	native	6	3	tree	perennial	red pine
Pinus strobus	Pinaceae	PINSTR	native	3	3	tree	perennial	white pine
Plantago lanceolata	Plantaginaceae	PLALAN	non-native	0	3	forb	perennial	english plantain
Plantago major	Plantaginaceae	PLAMAJ	non-native	0	3	forb	perennial	common plantain
Plantago rugelii	Plantaginaceae	PLARUG	native	0	0	forb	perennial	red-stalked plantain
Platanthera aquilonis; habenaria hyperborea	Orchidaceae	PLAAQU	native	5	-3	forb	perennial	northern green orchid
Platanthera clavellata; habenaria c.	Orchidaceae	PLACLA	native	6	-3	forb	perennial	small green wood orchid
Platanthera psychodes; habenaria p.	Orchidaceae	PLAPSY	native	7	-3	forb	perennial	purple fringed orchid
Poa compressa	Poaceae	POACOM	non-native	0	3	grass	perennial	canada bluegrass
Poa nemoralis	Poaceae	POANEM	non-native	0	3	grass	perennial	bluegrass
Poa palustris	Poaceae	POAPAS	native	3	-3	grass	perennial	fowl meadow grass
Poa pratensis	Poaceae	POAPRA	non-native	0	3	grass	perennial	kentucky bluegrass
Polygala paucifolia	Polygalaceae	POLPAU	native	7	3	forb	perennial	gay-wings
Polygonatum pubescens	Convallariaceae	POLPUB	native	5	5	forb	perennial	downy solomon seal
Populus balsamifera	Salicaceae	POPBAL	native	2	-3	tree	perennial	balsam poplar
Populus grandidentata	Salicaceae	POPGRA	native	4	3	tree	perennial	big-tooth aspen
Populus tremuloides	Salicaceae	POPTRE	native	1	0	tree	perennial	quaking aspen
Potentilla anserina	Rosaceae	POTANS	native	5	-3	forb	perennial	silverweed
Potentilla norvegica	Rosaceae	POTNOR	native	0	0	forb	annual	rough cinquefoil
Prunella vulgaris	Lamiaceae	PRUVUL	native	0	0	forb	perennial	self-heal
Prunus pensylvanica	Rosaceae	PRUPEN	native	3	3	tree	perennial	pin cherry
Prunus serotina	Rosaceae	PRUSER	native	2	3	tree	perennial	wild black cherry
Pteridium aquilinum	Dennstaedtiaceae	PTEAQU	native	0	3	fern	perennial	bracken fern

Pyrola asarifolia	Ericaceae	PYRASA	native	8	-3	forb	perennial	pink pyrola
Quercus alba	Fagaceae	QUEALB	native	5	3	tree	perennial	white oak
Quercus rubra	Fagaceae	QUERUB	native	5	3	tree	perennial	red oak
Ranunculus acris	Ranunculaceae	RANACR	non-native	0	0	forb	perennial	tall or common buttercup
Ranunculus recurvatus	Ranunculaceae	RANREC	native	5	-3	forb	perennial	hooked crowfoot
Rhamnus alnifolia	Rhamnaceae	RHAALN	native	8	-5	shrub	perennial	alder-leaved buckthorn
Rhus typhina	Anacardiaceae	RHUTYP	native	2	3	shrub	perennial	staghorn sumac
Rhynchospora alba	Cyperaceae	RHYALB	native	6	-5	sedge	perennial	beak-rush
Ribes americanum	Grossulariaceae	RIBAME	native	6	-3	shrub	perennial	wild black currant
Ribes cynosbati	Grossulariaceae	RIBCYN	native	4	3	shrub	perennial	prickly or wild gooseberry
Rosa blanda	Rosaceae	ROSBLA	native	3	3	shrub	perennial	wild rose
Rosa multiflora	Rosaceae	ROSMUL	non-native	0	3	shrub	perennial	multiflora rose
Rosa palustris	Rosaceae	ROSPAL	native	5	-5	shrub	perennial	swamp rose
Rubus occidentalis	Rosaceae	RUBOCC	native	1	5	shrub	perennial	black raspberry
Rubus pubescens	Rosaceae	RUBPUB	native	4	-3	shrub	perennial	dwarf raspberry
Rubus strigosus	Rosaceae	RUBSTR	native	2	0	shrub	perennial	wild red raspberry
Rudbeckia hirta	Asteraceae	RUDHIR	native	1	3	forb	perennial	black-eyed susan
Rumex obtusifolius	Polygonaceae	RUMOBT	non-native	0	0	forb	perennial	bitter dock
Salix bebbiana	Salicaceae	SALBEB	native	1	-3	shrub	perennial	bebbs willow
Salix candida	Salicaceae	SALCAN	native	9	-5	shrub	perennial	hoary willow
Salix discolor	Salicaceae	SALDIS	native	1	-3	shrub	perennial	pussy willow
Salix fragilis	Salicaceae	SALFRA	non-native	0	0	tree	perennial	crack willow
Salix nigra	Salicaceae	SALNIG	native	5	-5	tree	perennial	black willow
Sambucus canadensis	Adoxaceae	SAMCAN	native	3	-3	shrub	perennial	elderberry
Schedonorus arundinaceus; festuca a.	Poaceae	SCHARU	non-native	0	3	grass	perennial	tall fescue
Schedonorus pratensis; festuca p.	Poaceae	SCHPRA	non-native	0	3	grass	perennial	meadow fescue
Schoenoplectus acutus; scirpus a.	Cyperaceae	SCHACU	native	5	-5	sedge	perennial	hardstem bulrush
Schoenoplectus tabernaemontani; scirpus validus	Cyperaceae	SCHTAB	native	4	-5	sedge	perennial	softstem bulrush
Scirpus atrovirens	Cyperaceae	SCIATV	native	3	-5	sedge	perennial	bulrush
Scirpus cyperinus	Cyperaceae	SCICYP	native	5	-5	sedge	perennial	wool-grass
Scutellaria galericulata	Lamiaceae	SCUGAL	native	5	-5	forb	perennial	marsh skullcap
Silene latifolia; s. pratensis	Caryophyllaceae	SILLAT	non-native	0	5	forb	annual	white campion
Silene vulgaris	Caryophyllaceae	SILVUL	non-native	0	5	forb	perennial	bladder campion
Sium suave	Apiaceae	SIUSUA	native	5	-5	forb	perennial	water-parsnip
Solanum dulcamara	Solanaceae	SOLDUL	non-native	0	0	vine	perennial	bittersweet nightshade
Solidago altissima	Asteraceae	SOLALT	native	1	3	forb	perennial	tall goldenrod
Solidago caesia	Asteraceae	SOLCAE	native	6	3	forb	perennial	bluestem goldenrod
Solidago nemoralis	Asteraceae	SOLNEM	native	2	5	forb	perennial	old-field goldenrod
Solidago patula	Asteraceae	SOLPAT	native	6	-5	forb	perennial	swamp goldenrod
Solidago rugosa	Asteraceae	SOLRUG	native	3	0	forb	perennial	rough-leaved goldenrod
Solidago uliginosa	Asteraceae	SOLULI	native	4	-5	forb	perennial	bog goldenrod
Sonchus arvensis; s. uliginosus	Asteraceae	SONARV	non-native	0	3	forb	perennial	perennial sow-thistle
Sorbus decora	Rosaceae	SORDEC	native	4	3	tree	perennial	mountain-ash
Sparganium americanum	Typhaceae	SPAAME	native	6	-5	forb	perennial	american bur-reed
Sphenopholis intermedia	Poaceae	SPHINT	native	4	0	grass	perennial	slender wedgrass
Sporobolus heterolepis	Poaceae	SPOHET	native	10	3	grass	perennial	prairie dropseed
Stellaria graminea	Caryophyllaceae	STEGRE	non-native	0	5	forb	perennial	starwort
Symphyotrichum laeve; aster l.	Asteraceae	SYMLAE	native	5	3	forb	perennial	smooth aster
Symphyotrichum lanceolatum; aster l.	Asteraceae	SYMLAN	native	2	-3	forb	perennial	panicked aster
Symphyotrichum lateriflorum; aster l.	Asteraceae	SYMLAT	native	2	0	forb	perennial	calico aster
Symphyotrichum puniceum; aster p.	Asteraceae	SYMPUN	native	5	-5	forb	perennial	swamp aster
Taraxacum officinale	Asteraceae	TAROFF	non-native	0	3	forb	perennial	common dandelion
Taxus canadensis	Taxaceae	TAXCAN	native	5	3	shrub	perennial	yew
Thelypteris palustris	Thelypteridaceae	THEPAL	native	2	-3	fern	perennial	marsh fern
Thuja occidentalis	Cupressaceae	THUOCC	native	4	-3	tree	perennial	arbor vitae
Tiarella cordifolia	Saxifragaceae	TIACOR	native	9	3	forb	perennial	foamflower
Tilia americana	Malvaceae	TILAME	native	5	3	tree	perennial	basswood
Toxicodendron rydbergii; t. radicans	Anacardiaceae	TOXRYP	native	3	0	shrub	perennial	poison-ivy
Trientalis borealis	Myrsinaceae	TRIBOR	native	5	0	forb	perennial	star-flower
Trifolium campestre	Fabaceae	TRICAM	non-native	0	5	forb	annual	low hop clover
Trifolium pratense	Fabaceae	TRIPRA	non-native	0	3	forb	perennial	red clover
Trifolium repens	Fabaceae	TRIREP	non-native	0	3	forb	perennial	white clover
Trillium grandiflorum	Trilliaceae	TRIGRA	native	5	3	forb	perennial	common trillium
Tsuga canadensis	Pinaceae	TSUCAN	native	5	3	tree	perennial	hemlock
Typha angustifolia	Typhaceae	TYPANG	non-native	0	-5	forb	perennial	narrow-leaved cat-tail
Typha latifolia	Typhaceae	TYPLAT	native	1	-5	forb	perennial	broad-leaved cat-tail
Ulmus americana	Ulmaceae	ULMAME	native	1	-3	tree	perennial	american elm
Ulmus rubra	Ulmaceae	ULMRUB	native	2	0	tree	perennial	slippery elm
Urtica dioica	Urticaceae	URTDIO	native	1	0	forb	perennial	stinging nettle
Utricularia minor	Lentibulariaceae	UTRMIN	native	10	-5	forb	perennial	small bladderwort
Vaccinium myrtilloides	Ericaceae	VACMYR	native	4	-3	shrub	perennial	canada blueberry
Verbascum thapsus	Scrophulariaceae	VERTHA	non-native	0	5	forb	biennial	common mullein
Veronica beccabunga var. americana	Plantaginaceae	VERBEA	native	10	-5	forb	perennial	american brooklime
Veronica longifolia	Plantaginaceae	VERLON	non-native	0	5	forb	perennial	long-leaved speedwell
Veronica officinalis	Plantaginaceae	VEROFF	non-native	0	3	forb	perennial	common speedwell
Viburnum acerifolium	Adoxaceae	VIBACE	native	6	5	shrub	perennial	maple-leaved viburnum
Vicia villosa	Fabaceae	VICVIL	non-native	0	5	vine	annual	hairy vetch
Vinca minor	Apocynaceae	VINMIN	non-native	0	5	shrub	perennial	periwinkle
Viola cucullata	Violaceae	VIOCUC	native	5	-5	forb	perennial	marsh violet
Viola pubescens	Violaceae	VIOPUB	native	4	3	forb	perennial	yellow violet
Viola rostrata	Violaceae	VIOROS	native	6	3	forb	perennial	long-spurred violet
Vitis riparia	Vitaceae	VITRIP	native	3	0	vine	perennial	river-bank grape