



Kehl Lake Natural Area

Floristic Quality Assessment Results

A Floristic Quality Assessment of Kehl Lake Natural Area was conducted by Greg LaCross during the summer of 2009; an addendum was created by Liana May in the winter of 2015 (reflected below).

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 Kehl Lake Natural Area the total number of species and native species are:

Native Species	Total Species
211	232

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 Kehl Lake Natural Area the mean C-values are:

Native Mean C	Mean C w/ Adventives
4.6	4.1

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 Kehl Lake Natural Area the mean coefficients of wetness are:

Native Mean W	Mean W w/ Adventives
-1.5	-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 Kehl Lake Natural Area the FQI's are:

Native FQI	FQI w/ Adventives
66.8	62.4

May, L. 2015. Floristic Quality Assessment and Habitat Mapping of Kehl Lake Natural Area.

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.



Kehl Lake Natural Area

High Quality Plant Species

This list represents the most ecologically significant and high quality plants found at the Kehl Lake Natural Area during a 2009 Floristic Quality Assessment conducted by Greg LaCross. 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
7-10	Carex: arcta, laevivaginata, trisperma, plantaginea, aquatilis, rostrate	SEDGES (6 varieties)
7	Betula alleghaniensis	YELLOW BIRCH
7	Campanula aparlnoides	MARSH BELLFLOWER
7	Chelone glabra	TURTLEHEAD
7	Equisetum fluviatile	WATER HORSETAIL
7	Equisetum scirpoides	DWARF SCOURING RUSH
7	Geum rivale	PURPLE AVENS
7	Lobelia cardinalis	CARDINAL FLOWER
7	Nuphar variegata	YELLOW POND LILY
7	Platanthera psychodes	SMALL PURPLE FRINGED ORCHID
7	Polygala paucifolia	GAY WINGS
7	Puccinellia pallida	PUCCINELLIA
7	Shepherdia canadensis	SOAPBERRY
8	Aralia racemosa	SPIKENARD
8	Calamagrostis inexpansa	BOG REEDGRASS
8	Coreopsis lanceolata	SAND COREOPSIS
8	Elymus riparius	RIVERBANK WILD RYE
8	Schoenoplectus smithii	BULRUSH
9	Cypripedium reginae	SHOWY or QUEEN'S LADY SLIPPER
9	Poa alsodes	BLUEGRASS
10	Carex scirpoidea	BULRUSH SEDGE
10	Dryopteris filix-mas	MALE FERN
10	Equisetum palustre	MARSH HORSETAIL
10	Equisetum pretense	MEADOW HORSETAIL
10	Lobelia kalmii	BOG LOBELIA
10	Trisetum melicoides	TRISETUM
10	Utricularia cornuta	HORNED BLADDERWORT

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.

Kehl Lake Natural Area
 Addendum 2/8/2015
 Kehl Lake Natural Area
 Northport
 Leelanau
 Michigan
 USA

FQA DB Region: Michigan
 FQA DB Publication Year: 2014
 FQA DB Description: 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

Practitioner: Liana May
 Latitude:
 Longitude:
 Weather Notes:
 Duration Notes: Growing season 2009, 2010, visits 2014
 Community Type Notes: Mixed swamp around shallow lake with shoreline, marshes, aquatic vegetation. Large interannual record; *Torreyochloa pallida* new county record; *Packera aurea* new county record; *Graphephorum melicoides* new county record; *Dryopteris felix-mas* new county record; *Schoenoplectus americanus* is likely *S. pungens*;

Other Notes: *Utricularia resupinata* new county record (appears low water years)
 Private/Public: Public

Conservatism-Based Metrics:

Total Mean C: 4.1
 Native Mean C: 4.6
 Total FQI: 62.4
 Native FQI: 66.8
 Adjusted FQI: 43.9
 % C value 0: 12.5
 % C value 1-3: 25.9
 % C value 4-6: 46.1
 % C value 7-10: 15.5
 Native Tree Mean C: 3.9
 Native Shrub Mean C: 3.6
 Native Herbaceous Mean C: 4.7

Species Richness:

Total Species: 232
 Native Species: 211 90.90%
 Non-native Species: 21 9.10%

Species Wetness:

Mean Wetness: -1
 Native Mean Wetness: -1.5

Physiognomy Metrics:

Tree: 26 11.20%
 Shrub: 17 7.30%
 Vine: 2 0.90%
 Forb: 114 49.10%
 Grass: 15 6.50%
 Sedge: 33 14.20%
 Rush: 0 0%
 Fern: 25 10.80%
 Bryophyte: 0 0%

Duration Metrics:

Annual: 13 5.60%
 Perennial: 213 91.80%
 Biennial: 6 2.60%
 Native Annual: 11 4.70%
 Native Perennial: 199 85.80%
 Native Biennial: 1 0.40%

Species:

Scientific Name	Family	Acronym	Native?	C	W	Physiognomy	Duration	Common Name
<i>Abies balsamea</i>	Pinaceae	ABIBAL	native	3	0	tree	perennial	balsam fir
<i>Acer negundo</i>	Sapindaceae	ACENEG	native	0	0	tree	perennial	box-elder
<i>Acer pensylvanicum</i>	Sapindaceae	ACEPEN	native	5	3	tree	perennial	striped maple
<i>Acer rubrum</i>	Sapindaceae	ACERUB	native	1	0	tree	perennial	red maple
<i>Acer saccharum</i>	Sapindaceae	ACESAU	native	5	3	tree	perennial	sugar maple
<i>Acer spicatum</i>	Sapindaceae	ACESPI	native	5	3	tree	perennial	mountain maple
<i>Adiantum pedatum</i>	Pteridaceae	ADIPED	native	6	3	fern	perennial	maidenhair fern
<i>Alisma triviale</i> ; <i>a. plantago-aquatica</i>	Alismataceae	ALITRI	native	1	-5	forb	perennial	northern water-plantain
<i>Alnus incana</i> ; <i>a. rugosa</i>	Betulaceae	ALNINC	native	5	-3	shrub	perennial	speckled alder
<i>Ambrosia artemisiifolia</i>	Asteraceae	AMBART	native	0	3	forb	annual	common ragweed
<i>Anaphalis margaritacea</i>	Asteraceae	ANAMAR	native	3	5	forb	perennial	pearly everlasting
<i>Anemone canadensis</i>	Ranunculaceae	ANECAN	native	4	-3	forb	perennial	canada anemone
<i>Anemone quinquefolia</i>	Ranunculaceae	ANEQUI	native	5	3	forb	perennial	wood anemone
<i>Anemone virginiana</i>	Ranunculaceae	ANEVIR	native	3	3	forb	perennial	thimbleweed
<i>Apocynum androsaemifolium</i>	Apocynaceae	APOAND	native	3	5	forb	perennial	spreading dogbane
<i>Aralia nudicaulis</i>	Araliaceae	ARANUD	native	5	3	forb	perennial	wild sarsaparilla

Aralia racemosa	Araliaceae	ARARAC	native	8	3	forb	perennial	spikenard
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
Berteroa incana	Brassicaceae	BERINC	non-native	0	5	forb	annual	hoary alyssum
Betula alleghaniensis	Betulaceae	BETALL	native	7	0	tree	perennial	yellow birch
Betula papyrifera	Betulaceae	BETPAP	native	2	3	tree	perennial	paper birch
Bidens cernua	Asteraceae	BIDCER	native	3	-5	forb	annual	nodding beggar-ticks
Bidens connata	Asteraceae	BIDCON	native	5	-3	forb	annual	purple-stemmed tickseed
Bidens frondosa	Asteraceae	BIDFRO	native	1	-3	forb	annual	common beggar-ticks
Botrypus virginianus	Ophioglossaceae	BOTVIR	native	5	3	fern	perennial	rattlesnake fern
Bromus ciliatus	Poaceae	BROCIL	native	6	-3	grass	perennial	fringed brome
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
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 aquatilis	Cyperaceae	CXAQUA	native	7	-5	sedge	perennial	sedge
Carex arcta	Cyperaceae	CXARTA	native	8	-5	sedge	perennial	sedge
Carex bromoides	Cyperaceae	CXBROM	native	6	-3	sedge	perennial	sedge
Carex comosa	Cyperaceae	CXCOMO	native	5	-5	sedge	perennial	sedge
Carex crinita	Cyperaceae	CXCRIN	native	4	-5	sedge	perennial	sedge
Carex foenea; c. aenea	Cyperaceae	CXFOEN	native	3	5	sedge	perennial	sedge
Carex gracillima	Cyperaceae	CXGRAA	native	4	3	sedge	perennial	sedge
Carex granularis	Cyperaceae	CXGRAN	native	2	-3	sedge	perennial	sedge
Carex hystericina	Cyperaceae	CXHYS	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 laevivaginata	Cyperaceae	CXLAEV	native	8	-5	sedge	perennial	sedge
Carex leptalea	Cyperaceae	CXLEPA	native	5	-5	sedge	perennial	sedge
Carex lupulina	Cyperaceae	CXLUPA	native	4	-5	sedge	perennial	sedge
Carex pedunculata	Cyperaceae	CXPEDU	native	5	3	sedge	perennial	sedge
Carex plantaginea	Cyperaceae	CXPLAN	native	8	5	sedge	perennial	sedge
Carex pseudo-cyperus	Cyperaceae	CXPSEU	native	5	-5	sedge	perennial	sedge
Carex retrorsa	Cyperaceae	CXRETS	native	3	-5	sedge	perennial	sedge
Carex rostrata	Cyperaceae	CXROST	native	10	-5	sedge	perennial	sedge
Carex scabrata	Cyperaceae	CXSCAB	native	4	-5	sedge	perennial	sedge
Carex scirpoidea	Cyperaceae	CXSCIR	native	10	3	sedge	perennial	bulrush sedge
Carex stipata	Cyperaceae	CXSTIP	native	1	-5	sedge	perennial	sedge
Carex stricta	Cyperaceae	CXSTRI	native	4	-5	sedge	perennial	sedge
Carex trisperma	Cyperaceae	CXTRIS	native	9	-5	sedge	perennial	sedge
Carex vulpinoidea	Cyperaceae	CXVULP	native	1	-5	sedge	perennial	sedge
Centaurea stoebe; c. maculosa	Asteraceae	CENSTO	non-native	0	5	forb	biennial	spotted knapweed
Cerastium fontanum	Caryophyllaceae	CERFON	non-native	0	3	forb	perennial	mouse-ear chickweed
Chamerion angustifolium; epilobium a.	Onagraceae	CHAANG	native	3	0	forb	perennial	fireweed
Chelone glabra	Plantaginaceae	CHEGLB	native	7	-5	forb	perennial	turtlehead
Circaea alpina	Onagraceae	CIRALP	native	4	-3	forb	perennial	small enchanters-nightshade
Cirsium vulgare	Asteraceae	CIRVUL	non-native	0	3	forb	biennial	bull thistle
Clematis virginiana	Ranunculaceae	CLEVIR	native	4	0	vine	perennial	virgins bower
Clintonia borealis	Convallariaceae	CLIBOR	native	5	0	forb	perennial	bluebead-lily; corn-lily
Coptis trifolia	Ranunculaceae	COPTRI	native	5	-3	forb	perennial	goldthread
Coreopsis lanceolata	Asteraceae	CORLAN	native	8	3	forb	perennial	sand coreopsis
Cornus amomum	Cornaceae	CORAMO	native	2	-3	shrub	perennial	silky dogwood
Cornus canadensis	Cornaceae	CORCAA	native	6	0	shrub	perennial	bunchberry
Cornus rugosa	Cornaceae	CORRUG	native	6	5	shrub	perennial	round-leaved dogwood
Cornus sericea; c. stolonifera	Cornaceae	CORSER	native	2	-3	shrub	perennial	red-osier
Cypripedium acaule	Orchidaceae	CYPACA	native	5	-3	forb	perennial	pink lady-slipper; moccasin flower
Cypripedium reginae	Orchidaceae	CYPREG	native	9	-3	forb	perennial	showy or queens lady-slipper
Cystopteris bulbifera	Cystopteridaceae	CYSBUL	native	5	-3	fern	perennial	bulblet fern
Cystopteris fragilis	Cystopteridaceae	CYSFRA	native	4	3	fern	perennial	fragile fern
Daucus carota	Apiaceae	DAUCAR	non-native	0	5	forb	biennial	queen-annes-lace
Dichanthelium implicatum; panicum i.	Poaceae	DICIMP	native	3	0	grass	perennial	panic grass
Dichanthelium latifolium; panicum l.	Poaceae	DICLAT	native	5	3	grass	perennial	broad-leaved panic grass
Doellingeria umbellata; aster u.	Asteraceae	DOEUMB	native	5	-3	forb	perennial	flat-topped white aster
Dryopteris carthusiana	Dryopteridaceae	DRYCAR	native	5	-3	fern	perennial	spinulose woodfern
Dryopteris cristata	Dryopteridaceae	DRYCRI	native	6	-5	fern	perennial	crested shield fern
Dryopteris filix-mas	Dryopteridaceae	DRYFIL	native	10	5	fern	perennial	male fern
Dryopteris intermedia	Dryopteridaceae	DRYINT	native	5	0	fern	perennial	evergreen woodfern
Eleocharis obtusa	Cyperaceae	ELEOBT	native	3	-5	sedge	annual	spike-rush
Eleocharis palustris; e. smallii	Cyperaceae	ELEPAL	native	5	-5	sedge	perennial	spike-rush
Elymus riparius	Poaceae	ELYRIP	native	8	-3	grass	perennial	riverbank wild-rye
Epilobium coloratum	Onagraceae	EPICOL	native	3	-5	forb	perennial	cinnamon willow-herb
Epilobium leptophyllum	Onagraceae	EPILEP	native	6	-5	forb	perennial	fen willow-herb
Equisetum arvense	Equisetaceae	EQUARV	native	0	0	fern	perennial	common horsetail
Equisetum fluviatile	Equisetaceae	EQUFLU	native	7	-5	fern	perennial	water horsetail
Equisetum hyemale	Equisetaceae	EQUHYE	native	2	0	fern	perennial	scouring rush
Equisetum palustre	Equisetaceae	EQUPAL	native	8	-3	fern	perennial	marsh horsetail
Equisetum pratense	Equisetaceae	EQUPTA	native	10	-3	fern	perennial	meadow horsetail
Equisetum scirpoides	Equisetaceae	EQUSCI	native	7	0	fern	perennial	dwarf scouring rush
Erigeron annuus	Asteraceae	ERIANN	native	0	3	forb	biennial	daisy fleabane
Eupatorium perfoliatum	Asteraceae	EUPPER	native	4	-3	forb	perennial	boneset
Eutrochium maculatum; eupatorium m.	Asteraceae	EUTMAC	native	4	-5	forb	perennial	joe-pye-weed
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 asprellum	Rubiaceae	GALASP	native	5	-5	vine	perennial	rough bedstraw
Galium brevipes	Rubiaceae	GALBRE	native	6	-5	forb	perennial	short-stalked bedstraw
Galium triflorum	Rubiaceae	GALTRR	native	4	3	forb	perennial	fragrant bedstraw
Galium verum	Rubiaceae	GALVEM	non-native	0	5	forb	perennial	yellow bedstraw
Gaultheria procumbens	Ericaceae	GAUPRO	native	5	3	shrub	perennial	wintergreen
Geranium robertianum	Geraniaceae	GERRROB	native	3	3	forb	annual	herb robert
Geum canadense	Rosaceae	GEUCAN	native	1	0	forb	perennial	white avens
Geum rivale	Rosaceae	GEURIV	native	7	-5	forb	perennial	purple avens
Glyceria borealis	Poaceae	GLYBOR	native	6	-5	grass	perennial	northern manna grass
Glyceria grandis	Poaceae	GLYGRA	native	6	-5	grass	perennial	reed manna grass
Glyceria striata	Poaceae	GLYSTR	native	4	-5	grass	perennial	fowl manna grass
Goodyera oblongifolia	Orchidaceae	GOOBL	native	8	3	forb	perennial	menzies rattlesnake plantain
Grappheporum melicoides; trisetum m.	Poaceae	GRAMEL	native	10	-3	grass	perennial	trisetum
Gymnocarpium dryopteris	Cystopteridaceae	GYMDRY	native	5	3	fern	perennial	oak fern
Hylodesmum glutinosum; desmodium g.	Fabaceae	HYGLGU	native	5	5	forb	perennial	clustered-leaved tick-trefoil
Hypericum perforatum	Hypericaceae	HYPPER	non-native	0	5	forb	perennial	common st. johns-wort
Hypopitys monotropa; monotropa hypopithys	Ericaceae	HYPMON	native	6	5	forb	perennial	pinessap
Impatiens capensis	Balsaminaceae	IMPCAP	native	2	-3	forb	annual	spotted touch-me-not
Iris versicolor	Iridaceae	IRIVER	native	5	-5	forb	perennial	wild blue flag
Juncus articulatus	Juncaceae	JUNART	native	3	-5	forb	perennial	jointed rush
Juncus balticus	Juncaceae	JUNBAL	native	4	-5	forb	perennial	rush
Juncus canadensis	Juncaceae	JUNCAN	native	6	-5	forb	perennial	canadian rush
Juncus effusus	Juncaceae	JUNEFF	native	3	-5	forb	perennial	soft-stemmed rush
Juniperus communis	Cupressaceae	JUNCOI	native	4	3	shrub	perennial	common or ground juniper
Larix laricina	Pinaceae	LARLAR	native	5	-3	tree	perennial	tamarack
Leersia oryzoides	Poaceae	LEORY	native	3	-5	grass	perennial	cut grass
Lemna minor	Araceae	LEMMIN	native	5	-5	forb	perennial	common duckweed
Leucanthemum vulgare; chrysanthemum leucanthem	Asteraceae	LEUVUL	non-native	0	5	forb	perennial	ox-eye daisy
Linnaea borealis	Linnaeaceae	LINBOR	native	6	0	forb	perennial	twinflower
Lobelia cardinalis	Campanulaceae	LOBCAR	native	7	-5	forb	perennial	cardinal-flower
Lobelia kalmii	Campanulaceae	LOBKAL	native	10	-5	forb	perennial	bog lobelia
Lobelia siphilitica	Campanulaceae	LOBSIP	native	4	-3	forb	perennial	great blue lobelia
Lonicera Vóbella	Caprifoliaceae	LONBEL	non-native	0	3	shrub	perennial	hybrid honeysuckle
Lycopodium clavatum	Lycopodiaceae	LYCCLA	native	4	0	fern	perennial	running ground-pine
Lycopus uniflorus	Lamiaceae	LYCUNI	native	2	-5	forb	perennial	northern bugle weed
Lysimachia ciliata	Myrsinaceae	LYSCIL	native	4	-3	forb	perennial	fringed loosestrife
Lysimachia terrestris	Myrsinaceae	LYSTER	native	6	-5	forb	perennial	swamp-candles
Lysimachia thyriflora	Myrsinaceae	LYSTHY	native	6	-5	forb	perennial	tufted loosestrife
Maianthemum canadense	Convallariaceae	MAICAN	native	4	3	forb	perennial	canada mayflower
Matteuccia struthiopteris	Onocleaceae	MATSTR	native	3	0	fern	perennial	ostrich fern
Mentha canadensis; m. arvensis	Lamiaceae	MENCAS	native	3	-3	forb	perennial	wild mint
Mitchella repens	Rubiaceae	MITREP	native	5	3	forb	perennial	partridge-berry
Monotropa uniflora	Ericaceae	MONOUN	native	5	3	forb	perennial	indian-pipe
Nasturtium officinale	Brassicaceae	NASOFF	native	4	-5	forb	perennial	watercress
Nuphar variegata	Nymphaeaceae	NUPVAR	native	7	-5	forb	perennial	yellow pond-lily
Onoclea sensibilis	Onocleaceae	ONosen	native	2	-3	fern	perennial	sensitive fern
Osmunda cinnamomea	Osmundaceae	OSMCIN	native	5	-3	fern	perennial	cinnamon fern
Osmunda claytoniana	Osmundaceae	OSMCLN	native	6	0	fern	perennial	interrupted fern
Osmunda regalis	Osmundaceae	OSMREG	native	5	-5	fern	perennial	royal fern
Ostrya virginiana	Betulaceae	OSTVIR	native	5	3	tree	perennial	ironwood; hop-hornbeam
Packera aurea; senecio a.	Asteraceae	PACAU	native	5	-3	forb	perennial	golden ragwort
Persicaria punctata; polygonum p.	Polygonaceae	PERPUN	native	5	-5	forb	annual	smartweed
Phalaris arundinacea	Poaceae	PHAAU	native	0	-3	grass	perennial	reed canary grass
Picea glauca	Pinaceae	PICGLA	native	3	3	tree	perennial	white spruce
Picea mariana	Pinaceae	PICMAR	native	6	-3	tree	perennial	black spruce
Pinus resinosa	Pinaceae	PINRES	native	6	3	tree	perennial	red pine
Pinus strobus	Pinaceae	PINSTR	native	3	3	tree	perennial	white pine
Platanthera huronensis; habenaria hyperborea	Orchidaceae	PLAHUR	native	5	-3	forb	perennial	lake huron green orchid
Platanthera psychodes; habenaria p.	Orchidaceae	PLAPSY	native	7	-3	forb	perennial	purple fringed orchid
Poa alsodes	Poaceae	POAALS	native	9	0	grass	perennial	bluegrass
Polygala paucifolia	Polygalaceae	POLPAU	native	7	3	forb	perennial	gay-wings
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 recta	Rosaceae	POTREC	non-native	0	5	forb	perennial	rough-fruited cinquefoil
Prunella vulgaris	Lamiaceae	PRUVUL	native	0	0	forb	perennial	self-heal
Prunus pensylvanica	Rosaceae	PRUPEN	native	3	3	tree	perennial	pin cherry
Prunus virginiana	Rosaceae	PRUVIR	native	2	3	shrub	perennial	choke cherry
Pteridium aquilinum	Dennstaedtiaceae	PTEAQU	native	0	3	fern	perennial	bracken fern
Pyrola elliptica	Ericaceae	PYRELL	native	6	3	forb	perennial	large-leaved shinleaf
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
Rhus typhina	Anacardiaceae	RHUTYP	native	2	3	shrub	perennial	staghorn sumac
Rubus pubescens	Rosaceae	RUBPUB	native	4	-3	shrub	perennial	dwarf raspberry
Rudbeckia hirta	Asteraceae	RUDHIR	native	1	3	forb	perennial	black-eyed susan
Rumex acetosella	Polygonaceae	RUMACL	non-native	0	3	forb	perennial	sheep sorrel
Rumex crispus	Polygonaceae	RUMCRI	non-native	0	0	forb	perennial	curly dock
Salix discolor	Salicaceae	SALDIS	native	1	-3	shrub	perennial	pussy willow
Salix exigua	Salicaceae	SALEXI	native	1	-3	shrub	perennial	sandbar willow
Salix nigra	Salicaceae	SALNIG	native	5	-5	tree	perennial	black willow
Saponaria officinalis	Caryophyllaceae	SAPOFF	non-native	0	3	forb	perennial	bouncing bet

Schoenoplectiella smithii; scirpus s.	Cyperaceae	SCHSMI	native	8	-5	sedge	annual	bulrush
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 expansus	Cyperaceae	SCIEXP	native	5	-5	sedge	perennial	bulrush
Scirpus pendulus	Cyperaceae	SCIPEN	native	3	-5	sedge	perennial	bulrush
Scutellaria galericulata	Lamiaceae	SCUGAL	native	5	-5	forb	perennial	marsh skullcap
Scutellaria lateriflora	Lamiaceae	SCULAT	native	5	-5	forb	perennial	mad-dog skullcap
Shepherdia canadensis	Elaeagnaceae	SHECAN	native	7	5	shrub	perennial	soapberry
Silene vulgaris	Caryophyllaceae	SILVUL	non-native	0	5	forb	perennial	bladder campion
Sinapis arvensis; brassica kaber	Brassicaceae	SINARV	non-native	0	5	forb	annual	wild mustard
Sium suave	Apiaceae	SIUSUA	native	5	-5	forb	perennial	water-parsnip
Solidago altissima	Asteraceae	SOLALT	native	1	3	forb	perennial	tall goldenrod
Solidago gigantea	Asteraceae	SOLGIG	native	3	-3	forb	perennial	late goldenrod
Solidago juncea	Asteraceae	SOLJUN	native	3	5	forb	perennial	early goldenrod
Solidago patula	Asteraceae	SOLPAT	native	6	-5	forb	perennial	swamp goldenrod
Solidago rugosa	Asteraceae	SOLRUG	native	3	0	forb	perennial	rough-leaved goldenrod
Sphenopholis intermedia	Poaceae	SPHINT	native	4	0	grass	perennial	slender wedgrass
Spinulum annotinum; lycopodium a.	Lycopodiaceae	SPIANN	native	5	0	fern	perennial	stiff clubmoss
Spiraea alba	Rosaceae	SPIALB	native	4	-3	shrub	perennial	meadowsweet
Stachys palustris	Lamiaceae	STAPAL	non-native	0	-5	forb	perennial	windwort
Symphotrichum lanceolatum; aster l.	Asteraceae	SYMLAN	native	2	-3	forb	perennial	panicled aster
Symphotrichum lateriflorum; aster l.	Asteraceae	SYMLAT	native	2	0	forb	perennial	calico aster
Symphotrichum novae-angliae; aster n.	Asteraceae	SYMNOV	native	3	-3	forb	perennial	new england aster
Symphotrichum puniceum; aster p.	Asteraceae	SYMPUN	native	5	-5	forb	perennial	swamp aster
Thelypteris palustris	Thelypteridaceae	THEPAL	native	2	-3	fern	perennial	marsh fern
Thuja occidentalis	Cupressaceae	THUOCC	native	4	-3	tree	perennial	arbor vitae
Tilia americana	Malvaceae	TILAME	native	5	3	tree	perennial	basswood
Torreyochloa pallida; puccinellia p.	Poaceae	TORPAL	native	7	-5	grass	perennial	pale false mannagrass
Toxicodendron rydbergii; t. radicans	Anacardiaceae	TOXRYD	native	3	0	shrub	perennial	poison-ivy
Tragopogon pratensis	Asteraceae	TRAPRA	non-native	0	5	forb	biennial	common goats beard
Trientalis borealis	Myrsinaceae	TRIBOR	native	5	0	forb	perennial	star-flower
Trillium cernuum	Trilliaceae	TRICER	native	5	0	forb	perennial	nodding trillium
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
Urtica dioica	Urticaceae	URTDIO	native	1	0	forb	perennial	stinging nettle
Utricularia cornuta	Lentibulariaceae	UTRCOR	native	10	-5	forb	perennial	horned bladderwort
Utricularia resupinata	Lentibulariaceae	UTRRRES	native	10	-5	forb	perennial	small purple bladderwort
Verbascum thapsus	Scrophulariaceae	VERTHA	non-native	0	5	forb	biennial	common mullein
Verbena hastata	Verbenaceae	VERHAS	native	4	-3	forb	perennial	blue vervain
Veronica beccabunga var. americana	Plantaginaceae	VERBEA	native	10	-5	forb	perennial	american brooklime
Viburnum lentago	Adoxaceae	VIBLEN	native	4	0	shrub	perennial	nannyberry
Viola cucullata	Violaceae	VIOCUC	native	5	-5	forb	perennial	marsh violet
Viola labradorica; v. conspersa	Violaceae	VIOLAB	native	3	0	forb	perennial	dog violet
Zizania palustris; z. aquatica	Poaceae	ZIZPAL	native	8	-5	grass	annual	northern wild-rice