



Greeno Preserve

Floristic Quality Assessment Results

A Floristic Quality Assessment of Greeno 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 Greeno Preserve the total number of species and native species are:

Native Species	Total Species
180	213

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 0 is assigned to invasive species, also called adventives. At Greeno Preserve the mean C-values are:

Native Mean C	Mean C w/ Adventives
4.5	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 Greeno Preserve the mean coefficients of wetness are:

Native Mean W	Mean W w/ Adventives
-0.9	-0.4

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 Greeno Preserve the FQI's are:

Native FQI	FQI w/ Adventives
60.4	55.5

May, L. 2012. Floristic Quality Assessment and Habitat Mapping of Belanger Creek 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.

Greeno Preserve All Communities

Greeno Preserve (all)

10/21/14

Greeno Preserve

Lake Leelanau

Leelanau

MI

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 Features Inventory, Michigan State University, Lansing, MI. <http://michiganflora.net>
Liana May

Practitioner:

Latitude:

Longitude:

Weather Notes:

Duration Notes:

Growing season 2014.

Community Type Notes:

All communities at Greeno Preserve.

Other Notes:

Private/Public:

Public

Conservatism-Based Metrics:

Total Mean C: 3.8
Native Mean C: 4.5
Total FQI: 55.5
Native FQI: 60.4
Adjusted FQI: 41.4
% C value 0: 17.4
% C value 1-3: 27.2
% C value 4-6: 42.7
% C value 7-10: 12.7
Native Tree Mean C: 3.7
Native Shrub Mean C: 4.5
Native Herbaceous Mean C: 4.6

Species Richness:

Total Species: 213
Native Species: 180 84.50%
Non-native Species: 33 15.50%

Species Wetness:

Mean Wetness: -0.4
Native Mean Wetness: -0.9

Physiognomy Metrics:

Tree: 27 12.70%
Shrub: 36 16.90%
Vine: 7 3.30%
Forb: 89 41.80%
Grass: 12 5.60%
Sedge: 23 10.80%
Rush: 0 0%
Fern: 19 8.90%
Bryophyte: 0 0%

Duration Metrics:

Annual: 5 2.30%
Perennial: 205 96.20%
Biennial: 3 1.40%
Native Annual: 5 2.30%
Native Perennial: 175 82.20%
Native Biennial: 0 0%

Species:

Scientific Name	Family	Acronym	Native?	C	W	Physiognomy	Duration	Common Name
Abies balsamea	Pinaceae	ABIBAL	native	3	0	tree	perennial	balsam fir
Acer rubrum	Sapindaceae	ACERUB	native	1	0	tree	perennial	red maple
Acer saccharum	Sapindaceae	ACESAU	native	5	3	tree	perennial	sugar maple
Acer spicatum	Sapindaceae	ACESPI	native	5	3	tree	perennial	mountain maple
Achillea millefolium	Asteraceae	ACHMIL	native	1	3	forb	perennial	yarrow
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	AGRGIG	non-native	0	-3	grass	perennial	redtop
Alnus incana; a. rugosa	Betulaceae	ALNINC	native	5	-3	shrub	perennial	speckled alder
Amelanchier arborea	Rosaceae	AMEARB	native	4	3	tree	perennial	juneberry
Amelanchier interior	Rosaceae	AMEINT	native	4	5	shrub	perennial	serviceberry
Anaphalis margaritacea	Asteraceae	ANAMAR	native	3	5	forb	perennial	pearly everlasting
Anemone canadensis	Ranunculaceae	ANECAN	native	4	-3	forb	perennial	canada anemone
Aralia nudicaulis	Araliaceae	ARANUD	native	5	3	forb	perennial	wild sarsaparilla

Appendix A

Greeno Preserve All Communities

Arisaema triphyllum	Araceae	ARITRI	native	5	0	forb	perennial	jack-in-the-pulpit
Asclepias incarnata	Apocynaceae	ASCINC	native	6	-5	forb	perennial	swamp milkweed
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
Caltha palustris	Ranunculaceae	CALPAR	native	6	-5	forb	perennial	marsh-marigold
Calystegia sepium	Convolvulaceae	CALSEP	native	2	0	vine	perennial	hedge bindweed
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 arctata	Cyperaceae	CXARTT	native	3	5	sedge	perennial	sedge
Carex comosa	Cyperaceae	CXCOMO	native	5	-5	sedge	perennial	sedge
Carex cristatella	Cyperaceae	CXCRIS	native	3	-3	sedge	perennial	sedge
Carex disperma	Cyperaceae	CXDISP	native	10	-5	sedge	perennial	sedge
Carex flava	Cyperaceae	CXFLAV	native	4	-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	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 leptoneuria	Cyperaceae	CXLEPO	native	3	0	sedge	perennial	sedge
Carex normalis	Cyperaceae	CXNORM	native	5	-3	sedge	perennial	sedge
Carex pedunculata	Cyperaceae	CXPEDU	native	5	3	sedge	perennial	sedge
Carex projecta	Cyperaceae	CXPROJ	native	3	-3	sedge	perennial	sedge
Carex scabrata	Cyperaceae	CXSCAB	native	4	-5	sedge	perennial	sedge
Carex stipata	Cyperaceae	CXSTIP	native	1	-5	sedge	perennial	sedge
Carex vulpinoidea	Cyperaceae	CXVULP	native	1	-5	sedge	perennial	sedge
Caulophyllum thalictroides	Berberidaceae	CAUTHA	native	5	5	forb	perennial	blue cohosh
Centaurea stoebe; c. maculosa	Asteraceae	CENSTO	non-native	0	5	forb	biennial	spotted knapweed
Cinna latifolia	Poaceae	CINLAT	native	5	-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 arvense	Asteraceae	CIRARV	non-native	0	3	forb	perennial	canada thistle
Cirsium palustre	Asteraceae	CIRPAL	non-native	0	-3	forb	biennial	marsh thistle
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
Conopholis americana	Orobanchaceae	CONAME	native	10	5	forb	perennial	squaw-root
Coptis trifolia	Ranunculaceae	COPTRI	native	5	-3	forb	perennial	goldthread
Cornus alternifolia	Cornaceae	CORALT	native	5	3	tree	perennial	alternate-leaved dogwood
Cornus canadensis	Cornaceae	CORCAA	native	6	0	shrub	perennial	bunchberry
Cornus sericea; c. stolonifera	Cornaceae	CORSER	native	2	-3	shrub	perennial	red-osier
Cypripedium parviflorum; c. calceolus	Orchidaceae	CYPPAR	native	5	0	forb	perennial	yellow lady-slipper
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
Dactylis glomerata	Poaceae	DACGLO	non-native	0	3	grass	perennial	orchard 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 clintoniana	Dryopteridaceae	DRYCLI	native	8	-3	fern	perennial	clintons 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
Epifagus virginiana	Orobanchaceae	EPIVIR	native	10	5	forb	annual	beech-drops
Epigaea repens	Ericaceae	EPIREP	native	7	3	shrub	perennial	trailing-arbutus
Epilobium ciliatum	Onagraceae	EPICIL	native	3	-3	forb	perennial	willow-herb
Epilobium coloratum	Onagraceae	EPICOL	native	3	-5	forb	perennial	cinnamon willow-herb
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 fluviatile	Equisetaceae	EQUFLU	native	7	-5	fern	perennial	water horsetail
Equisetum scirpoides	Equisetaceae	EQUSCI	native	7	0	fern	perennial	dwarf scouring rush
Erythronium americanum	Liliaceae	ERYAME	native	5	5	forb	perennial	yellow trout lily
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
Fraxinus pennsylvanica	Oleaceae	FRAPEN	native	2	-3	tree	perennial	red ash
Galium triflorum	Rubiaceae	GALTRR	native	4	3	forb	perennial	fragrant bedstraw
Gaultheria hispida	Ericaceae	GAUHIS	native	8	-3	shrub	perennial	creeping-snowberry
Gaultheria procumbens	Ericaceae	GAUPRO	native	5	3	shrub	perennial	wintergreen
Geranium robertianum	Geraniaceae	GERROB	native	3	3	forb	annual	herb robert
Geum aleppicum	Rosaceae	GEUALE	native	3	0	forb	perennial	yellow avens
Geum canadense	Rosaceae	GEUCAN	native	1	0	forb	perennial	white avens

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Geum rivale	Rosaceae	GEURIV	native	7	-5	forb	perennial	purple avens
Glyceria striata	Poaceae	GLYSTR	native	4	-5	grass	perennial	fowl manna grass
Gymnocarpium dryopteris	Cystopteridaceae	GYMDRY	native	5	3	fern	perennial	oak fern
Hieracium aurantiacum	Asteraceae	HIEAUR	non-native	0	5	forb	perennial	orange hawkweed
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
Juncus effusus	Juncaceae	JUNEFF	native	3	-5	forb	perennial	soft-stemmed rush
Lathyrus palustris	Fabaceae	LATPAL	native	7	-3	vine	perennial	marsh pea
Lemna turionifera; l. minor	Araceae	LEMTUR	native	5	-5	forb	perennial	red duckweed
Leucanthemum Vósuperbum; chrysanthemum s.	Asteraceae	LEUSUP	non-native	0	5	forb	perennial	shasta daisy
Lindera benzoin	Lauraceae	LINBEN	native	7	-3	shrub	perennial	spicebush
Linnaea borealis	Linnaeaceae	LINBOR	native	6	0	forb	perennial	twinflower
Lobelia cardinalis	Campanulaceae	LOBCAR	native	7	-5	forb	perennial	cardinal-flower
Lonicera canadensis	Caprifoliaceae	LONCAN	native	5	3	shrub	perennial	canadian fly honeysuckle
Lonicera dioica	Caprifoliaceae	LONDIO	native	5	3	vine	perennial	red honeysuckle
Lonicera morrowii	Caprifoliaceae	LONMOR	non-native	0	3	shrub	perennial	morrow honeysuckle
Lycopus uniflorus	Lamiaceae	LYCUNI	native	2	-5	forb	perennial	northern bugle weed
Lysimachia thysiflora	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 trifolium; smilacina t.	Convallariaceae	MAITRI	native	10	-5	forb	perennial	false mayflower
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
Milium effusum	Poaceae	MILEFF	native	8	3	grass	perennial	wood millet
Mimulus glaberratus	Phrymaceae	MIMGLA	native	10	-5	forb	perennial	james monkey-flower
Mitchella repens	Rubiaceae	MITREP	native	5	3	forb	perennial	partridge-berry
Mitella nuda	Saxifragaceae	MITNUD	native	8	-3	forb	perennial	naked miterwort
Muhlenbergia mexicana	Poaceae	MUHMEX	native	3	-3	grass	perennial	leafy satin grass
Myosotis laxa	Boraginaceae	MYOLAX	native	6	-5	forb	perennial	small forget-me-not
Myosotis sylvatica	Boraginaceae	MYOSYL	non-native	0	5	forb	perennial	garden forget-me-not
Nasturtium microphyllum; n. officinale	Brassicaceae	NASMIC	non-native	0	-5	forb	perennial	watercress
Onoclea sensibilis	Onocleaceae	ONOCEN	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
Parthenocissus quinquefolia	Vitaceae	PARQUI	native	5	3	vine	perennial	virginia creeper
Persicaria punctata; polygonum p.	Polygonaceae	PERPUN	native	5	-5	forb	annual	smartweed
Phalaris arundinacea	Poaceae	PHAARU	native	0	-3	grass	perennial	reed canary grass
Picea glauca	Pinaceae	PICGLA	native	3	3	tree	perennial	white spruce
Pilea fontana	Urticaceae	PILFON	native	5	-3	forb	annual	bog clearweed
Pinus strobus	Pinaceae	PINSTR	native	3	3	tree	perennial	white pine
Plantago lanceolata	Plantaginaceae	PLALAN	non-native	0	3	forb	perennial	english plantain
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 grandidentata	Salicaceae	POPGRA	native	4	3	tree	perennial	big-tooth aspen
Populus tremuloides	Salicaceae	POPTRE	native	1	0	tree	perennial	quaking aspen
Prunella vulgaris	Lamiaceae	PRUVUL	native	0	0	forb	perennial	self-heal
Prunus serotina	Rosaceae	PRUSER	native	2	3	tree	perennial	wild black 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
Rhamnus alnifolia	Rhamnaceae	RHAALN	native	8	-5	shrub	perennial	alder-leaved buckthorn
Rhamnus cathartica	Rhamnaceae	RHACAT	non-native	0	0	tree	perennial	common buckthorn
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
Ribes hudsonianum	Grossulariaceae	RIBHUD	native	10	-5	shrub	perennial	northern black currant
Ribes lacustre	Grossulariaceae	RIBLAC	native	6	-3	shrub	perennial	swamp black currant
Ribes triste	Grossulariaceae	RIBTRI	native	6	-5	shrub	perennial	swamp red currant
Rosa multiflora	Rosaceae	ROSMUL	non-native	0	3	shrub	perennial	multiflora rose
Rosa palustris	Rosaceae	ROSPAL	native	5	-5	shrub	perennial	swamp rose
Rubus allegheniensis	Rosaceae	RUBALL	native	1	3	shrub	perennial	common blackberry
Rubus pubescens	Rosaceae	RUBPUB	native	4	-3	shrub	perennial	dwarf raspberry
Rubus setosus	Rosaceae	RUBSET	native	3	-3	shrub	perennial	bristly blackberry
Rubus strigosus	Rosaceae	RUBSTR	native	2	0	shrub	perennial	wild red raspberry
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 eriocephala	Salicaceae	SALERI	native	2	-3	shrub	perennial	willow
Salix fragilis	Salicaceae	SALFRA	non-native	0	0	tree	perennial	crack willow
Salix lucida	Salicaceae	SALLUC	native	3	-3	shrub	perennial	shining willow

Appendix A

Greeno Preserve All Communities

<i>Sambucus canadensis</i>	Adoxaceae	SAMCAN	native	3	-3	shrub	perennial	elderberry
<i>Sambucus racemosa</i>	Adoxaceae	SAMRAC	native	3	3	shrub	perennial	red-berried elder
<i>Sanicula marilandica</i>	Apiaceae	SANMAR	native	4	3	forb	perennial	black snakeroot
<i>Schedonorus arundinaceus; festuca a.</i>	Poaceae	SCHARU	non-native	0	3	grass	perennial	tall fescue
<i>Scirpus atrovirens</i>	Cyperaceae	SCIATV	native	3	-5	sedge	perennial	bulrush
<i>Scirpus cyperinus</i>	Cyperaceae	SCICYP	native	5	-5	sedge	perennial	wool-grass
<i>Scirpus pedicellatus; s. cyperinus</i>	Cyperaceae	SCIPED	native	5	-5	sedge	perennial	wool-grass
<i>Scutellaria lateriflora</i>	Lamiaceae	SCULAT	native	5	-5	forb	perennial	mad-dog skullcap
<i>Silene vulgaris</i>	Caryophyllaceae	SILVUL	non-native	0	5	forb	perennial	bladder campion
<i>Solanum dulcamara</i>	Solanaceae	SOLDUL	non-native	0	0	vine	perennial	bittersweet nightshade
<i>Solidago altissima</i>	Asteraceae	SOLALT	native	1	3	forb	perennial	tall goldenrod
<i>Solidago caesia</i>	Asteraceae	SOLCAE	native	6	3	forb	perennial	bluestem goldenrod
<i>Solidago patula</i>	Asteraceae	SOLPAT	native	6	-5	forb	perennial	swamp goldenrod
<i>Solidago rugosa</i>	Asteraceae	SOLRUG	native	3	0	forb	perennial	rough-leaved goldenrod
<i>Sorbus aucuparia</i>	Rosaceae	SORAUC	non-native	0	5	tree	perennial	european mountain-ash
<i>Symphotrichum lateriflorum; aster l.</i>	Asteraceae	SYMLAT	native	2	0	forb	perennial	calico aster
<i>Taraxacum officinale</i>	Asteraceae	TAROFF	non-native	0	3	forb	perennial	common dandelion
<i>Thalictrum dioicum</i>	Ranunculaceae	THADIO	native	6	3	forb	perennial	early meadow-rue
<i>Thelypteris noveboracensis</i>	Thelypteridaceae	THENOV	native	5	0	fern	perennial	new york fern
<i>Thelypteris palustris</i>	Thelypteridaceae	THEPAL	native	2	-3	fern	perennial	marsh fern
<i>Thuja occidentalis</i>	Cupressaceae	THUOCC	native	4	-3	tree	perennial	arbor vitae
<i>Tilia americana</i>	Malvaceae	TILAME	native	5	3	tree	perennial	basswood
<i>Toxicodendron rydbergii; t. radicans</i>	Anacardiaceae	TOXRYD	native	3	0	shrub	perennial	poison-ivy
<i>Trientalis borealis</i>	Myrsinaceae	TRIBOR	native	5	0	forb	perennial	star-flower
<i>Trifolium pratense</i>	Fabaceae	TRIPRA	non-native	0	3	forb	perennial	red clover
<i>Trillium grandiflorum</i>	Trilliaceae	TRIGRA	native	5	3	forb	perennial	common trillium
<i>Tsuga canadensis</i>	Pinaceae	TSUCAN	native	5	3	tree	perennial	hemlock
<i>Typha angustifolia</i>	Typhaceae	TYPANG	non-native	0	-5	forb	perennial	narrow-leaved cat-tail
<i>Typha latifolia</i>	Typhaceae	TYPLAT	native	1	-5	forb	perennial	broad-leaved cat-tail
<i>Ulmus americana</i>	Ulmaceae	ULMAME	native	1	-3	tree	perennial	american elm
<i>Ulmus rubra</i>	Ulmaceae	ULMRUB	native	2	0	tree	perennial	slippery elm
<i>Uvularia grandiflora</i>	Convallariaceae	UVUGRA	native	5	5	forb	perennial	bellwort
<i>Vaccinium myrtilloides</i>	Ericaceae	VACMYR	native	4	-3	shrub	perennial	canada blueberry
<i>Veronica beccabunga var. americana</i>	Plantaginaceae	VERBEA	native	10	-5	forb	perennial	american brooklime
<i>Veronica officinalis</i>	Plantaginaceae	VEROOF	non-native	0	3	forb	perennial	common speedwell
<i>Viburnum trilobum; v. opulus</i>	Adoxaceae	VIBTRI	native	5	-3	shrub	perennial	american highbush-cranberry
<i>Viola blanda</i>	Violaceae	VIOBLA	native	5	-3	forb	perennial	sweet white violet
<i>Viola cucullata</i>	Violaceae	VIOCUC	native	5	-5	forb	perennial	marsh violet
<i>Viola labradorica; v. conspersa</i>	Violaceae	VIOLAB	native	3	0	forb	perennial	dog violet
<i>Viola rostrata</i>	Violaceae	VIOROS	native	6	3	forb	perennial	long-spurred violet
<i>Vitis riparia</i>	Vitaceae	VITRIP	native	3	0	vine	perennial	river-bank grape