



# Finton Natural Area

## Floristic Quality Assessment Results

A Floristic Quality Assessment of Finton Natural Area was conducted by Liana May during the summer of 2019.

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 Finton Natural Area the total number of species and native species are:

Native Species	Total Species
118	152

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 Finton Natural Area the mean C-values are:

Native Mean C	Mean C w/ Adventives
4.1	3.2

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 Finton Natural Area the mean coefficients of wetness are:

Native Mean W	Mean W w/ Adventives
0.4	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 Finton Natural Area the FQI's are:

Native FQI	FQI w/ Adventives
44.5	36.1

May, L. 2019. Floristic Quality Assessment and Habitat Mapping of Finton 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.



# Finton Natural Area

## High Quality Plant Species

This list represents the most ecologically significant and high quality plants found at the Finton Natural Area during a 2019 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.

<b>C</b>	<b>Scientific Name</b>	<b>Common Name</b>
7	<i>Betula alleghaniensis</i>	Yellow birch
7	<i>Carex eburnea</i>	Sedge
8	<i>Hepatica acutiloba</i>	Sharp-lobed hepatica
8	<i>Rhamnus alnifolia</i>	Alder-leaved buckthorn
8	<i>Schoenoplectus subterminalis</i>	Cyperaceae
10	<i>Carex disperma</i>	Sedge
10	<i>Epifagus virginiana</i>	Beech-drops
10	<i>Medeola virginiana</i>	Indian cucumber-root
10	<i>Veronica beccabunga</i> var. <i>americana</i>	American brooklime

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.

Finton FQA

**Finton Natural Area**

1/8/20

Leelanau County

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>

Practitioner:

Liana May

Latitude:

Longitude:

Weather Notes:

Duration Notes:

growing season 2019

Community Type Notes:

forested wetland, boreal forest, mesic northern forest

Other Notes:

Private/Public:

Public

**Conservatism-Based Metrics:**

Total Mean C: 3.2

Native Mean C: 4.1

Total FQI: 39.5

Native FQI: 44.5

Adjusted FQI: 36.1

% C value 0: 24.3

% C value 1-3: 27

% C value 4-6: 43.4

% C value 7-10: 5.3

Native Tree Mean C: 4

Native Shrub Mean C: 4.7

Native Herbaceous Mean C: 4.1

**Species Richness:**

Total Species: 152

Native Species: 118 77.60%

Non-native Species: 34 22.40%

**Species Wetness:**

Mean Wetness: 1

Native Mean Wetness: 0.4

**Physiognomy Metrics:**

Tree:	23	15.10%
Shrub:	11	7.20%
Vine:	1	0.70%
Forb:	75	49.30%
Grass:	11	7.20%
Sedge:	17	11.20%
Rush:	2	1.30%
Fern:	12	7.90%
Bryophyte:	0	0%

**Duration Metrics:**

Annual:	7	4.60%
Perennial:	140	92.10%
Biennial:	5	3.30%
Native Annual:	5	3.30%
Native Perennial:	111	73%
Native Biennial:	2	1.30%

**Species:**

<b>Scientific Name</b>	<b>Family</b>	<b>Acronym</b>	<b>Native?</b>	<b>C</b>	<b>W</b>	<b>Physiognomy</b>	<b>Duration</b>	<b>Common Name</b>
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 saccharum	Sapindaceae	ACESAU	native	5	3	tree	perennial	sugar maple
Acer spicatum	Sapindaceae	ACESPI	native	5	3	tree	perennial	mountain maple
Agrostis gigantea	Poaceae	AGRGIG	non-native	0	-3	grass	perennial	redtop
Allium tricoccum	Alliaceae	ALLTRI	native	5	3	forb	perennial	wild leek
Amelanchier arborea	Rosaceae	AMEARB	native	4	3	tree	perennial	juneberry
Anemone cylindrica	Ranunculaceae	ANECYL	native	6	5	forb	perennial	thimbleweed
Apocynum androsaemifolium	Apocynaceae	APOAND	native	3	5	forb	perennial	spreading dogbane
Aralia nudicaulis	Araliaceae	ARANUD	native	5	3	forb	perennial	wild sarsaparilla
Arisaema triphyllum	Araceae	ARITRI	native	5	0	forb	perennial	jack-in-the-pulpit
Asparagus officinalis	Asparagaceae	ASPOFF	non-native	0	3	forb	perennial	garden asparagus
Berberis aquifolium; mahonia a.	Berberidaceae	BERAQU	non-native	0	5	shrub	perennial	oregon-grape
Betula alleghaniensis	Betulaceae	BETALL	native	7	0	tree	perennial	yellow birch
Betula papyrifera	Betulaceae	BETPAP	native	2	3	tree	perennial	paper birch
Bidens frondosa	Asteraceae	BIDFRO	native	1	-3	forb	annual	common beggar-tick
Bromus inermis	Poaceae	BROINE	non-native	0	5	grass	perennial	smooth brome
Cardamine pensylvanica	Brassicaceae	CARPEN	native	1	-3	forb	biennial	pennsylvania bitter c
Carex arctata	Cyperaceae	CXARTT	native	3	5	sedge	perennial	sedge
Carex aurea	Cyperaceae	CXAURE	native	3	-3	sedge	perennial	sedge
Carex bebbii	Cyperaceae	CXBEBB	native	4	-5	sedge	perennial	sedge

Finton FQA

Carex communis	Cyperaceae	CXCOMM	native	2	5	sedge	perennial	sedge
Carex deweyana	Cyperaceae	CXDEWE	native	3	3	sedge	perennial	sedge
Carex disperma	Cyperaceae	CXDISP	native	10	-5	sedge	perennial	sedge
Carex eburnea	Cyperaceae	CXEBUR	native	7	3	sedge	perennial	sedge
Carex gracillima	Cyperaceae	CXGRAA	native	4	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 leptoneura	Cyperaceae	CXLEPO	native	3	0	sedge	perennial	sedge
Carex peckii	Cyperaceae	CXPECK	native	3	5	sedge	perennial	sedge
Carex pedunculata	Cyperaceae	CXPEDU	native	5	3	sedge	perennial	sedge
Carex radiata; c. rosea	Cyperaceae	CXRADI	native	2	0	sedge	perennial	straight-styled wood 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
Cerastium fontanum	Caryophyllaceae	CERFON	non-native	0	3	forb	perennial	mouse-ear chickweed
Circaea canadensis; c. lutetiana	Onagraceae	CIRCAN	native	2	3	forb	perennial	enchanters-nightshade
Clintonia borealis	Convallariaceae	CLIBOR	native	5	0	forb	perennial	bluebead-lily; corn-lily
Convallaria majalis	Convallariaceae	CONMAJ	non-native	0	5	forb	perennial	lily-of-the-valley
Coptis trifolia	Ranunculaceae	COPTRI	native	5	-3	forb	perennial	goldthread
Cornus alternifolia	Cornaceae	CORALT	native	5	3	tree	perennial	alternate-leaved dogwood
Cypripedium parviflorum; c. calceolus	Orchidaceae	CYPPAR	native	5	0	forb	perennial	yellow 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-anne's-lace
Dendrolycopodium dendroideum; lycopodium d.	Lycopodiaceae	DENDEN	native	5	3	fern	perennial	tree clubmoss
Dendrolycopodium obscurum; lycopodium o.	Lycopodiaceae	DENOBS	native	5	3	fern	perennial	ground-pine
Dryopteris carthusiana	Dryopteridaceae	DRYCAR	native	5	-3	fern	perennial	spinulose woodfern
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
Epilobium ciliatum	Onagraceae	EPICIL	native	3	-3	forb	perennial	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
Erechtites hieraciifolius	Asteraceae	EREHIE	native	2	3	forb	annual	fireweed
Erigeron strigosus	Asteraceae	ERISTR	native	4	3	forb	perennial	daisy fleabane
Erythronium americanum	Liliaceae	ERYAME	native	5	5	forb	perennial	yellow trout lily
Eurybia macrophylla; aster m.	Asteraceae	EURMAC	native	4	5	forb	perennial	big-leaved aster
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
Festuca occidentalis	Poaceae	FESOC	native	6	5	grass	perennial	western fescue
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

## Finton FQA

<i>Galium odoratum</i>	Rubiaceae	GALODO	non-native	0	5	forb	perennial	sweet woodruff
<i>Galium palustre</i>	Rubiaceae	GALPAL	native	3	-5	forb	perennial	marsh bedstraw
<i>Galium verum</i>	Rubiaceae	GALVEM	non-native	0	5	forb	perennial	yellow bedstraw
<i>Geranium robertianum</i>	Geraniaceae	GERROB	native	3	3	forb	annual	herb robert
<i>Glyceria striata</i>	Poaceae	GLYSTR	native	4	-5	grass	perennial	fowl manna grass
<i>Gymnocarpium dryopteris</i>	Cystopteridaceae	GYMDRY	native	5	3	fern	perennial	oak fern
<i>Hepatica acutiloba</i>	Ranunculaceae	HEPACU	native	8	5	forb	perennial	sharp-lobed hepatica
<i>Hepatica americana</i>	Ranunculaceae	HEPAME	native	6	5	forb	perennial	round-lobed hepatica
<i>Hieracium aurantiacum</i>	Asteraceae	HIEAUR	non-native	0	5	forb	perennial	orange hawkweed
<i>Hieracium lachenalii</i>	Asteraceae	HIELAC	non-native	0	5	forb	perennial	european hawkweed
<i>Huperzia lucidula</i>	Lycopodiaceae	HUPLUC	native	5	0	fern	perennial	shining clubmoss
<i>Impatiens capensis</i>	Balsaminaceae	IMPCAP	native	2	-3	forb	annual	spotted touch-me-not
<i>Juncus balticus</i>	Juncaceae	JUNBAL	native	4	-5	rush	perennial	rush
<i>Juncus dudleyi</i>	Juncaceae	JUNDUD	native	1	-3	rush	perennial	dudleys rush
<i>Lapsana communis</i>	Asteraceae	LAPCOM	non-native	0	3	forb	annual	nipplewort
<i>Leucanthemum vulgare; chrysanthemum leucanthemum</i>	Asteraceae	LEUVUL	non-native	0	5	forb	perennial	ox-eye daisy
<i>Linnaea borealis</i>	Linnaeaceae	LINBOR	native	6	0	forb	perennial	twinflower
<i>Lonicera xylosteum</i>	Caprifoliaceae	LONXYL	non-native	0	5	shrub	perennial	european fly honeysuckle
<i>Lycopus uniflorus</i>	Lamiaceae	LYCUNI	native	2	-5	forb	perennial	northern bugle weed
<i>Maianthemum canadense</i>	Convallariaceae	MAICAN	native	4	3	forb	perennial	canada mayflower
<i>Maianthemum racemosum; smilacina r.</i>	Convallariaceae	MAIRAC	native	5	3	forb	perennial	false spikenard
<i>Maianthemum stellatum; smilacina s.</i>	Convallariaceae	MAISTE	native	5	0	forb	perennial	starry false solomon-seal
<i>Medeola virginiana</i>	Convallariaceae	MEDVIR	native	10	3	forb	perennial	indian cucumber-root
<i>Medicago lupulina</i>	Fabaceae	MEDLUP	non-native	0	3	forb	annual	black medick
<i>Melilotus albus</i>	Fabaceae	MELALB	non-native	0	3	forb	biennial	white sweet-clover
<i>Miscanthus sinensis</i>	Poaceae	MISSIN	non-native	0	5	grass	perennial	eulalia
<i>Mitchella repens</i>	Rubiaceae	MITREP	native	5	3	forb	perennial	partridge-berry
<i>Monotropa uniflora</i>	Ericaceae	MONOUN	native	5	3	forb	perennial	indian-pipe
<i>Myosotis sylvatica</i>	Boraginaceae	MYOSYL	non-native	0	5	forb	perennial	garden forget-me-not
<i>Oenothera parviflora</i>	Onagraceae	OENPAR	native	2	3	forb	biennial	evening-primrose
<i>Onoclea sensibilis</i>	Onocleaceae	ONOSEN	native	2	-3	fern	perennial	sensitive fern
<i>Osmunda regalis</i>	Osmundaceae	OSMREG	native	5	-5	fern	perennial	royal fern
<i>Ostrya virginiana</i>	Betulaceae	OSTVIR	native	5	3	tree	perennial	ironwood; hop-hornbeam
<i>Phalaris arundinacea</i>	Poaceae	PHAARU	native	0	-3	grass	perennial	reed canary grass
<i>Pinus strobus</i>	Pinaceae	PINSTR	native	3	3	tree	perennial	white pine
<i>Poa nemoralis</i>	Poaceae	POANEM	non-native	0	3	grass	perennial	bluegrass
<i>Poa pratensis</i>	Poaceae	POAPRA	non-native	0	3	grass	perennial	kentucky bluegrass
<i>Populus balsamifera</i>	Salicaceae	POPBAL	native	2	-3	tree	perennial	balsam poplar
<i>Populus grandidentata</i>	Salicaceae	POPGRA	native	4	3	tree	perennial	big-tooth aspen
<i>Populus tremuloides</i>	Salicaceae	POPTRE	native	1	0	tree	perennial	quaking aspen
<i>Potentilla anserina</i>	Rosaceae	POTANS	native	5	-3	forb	perennial	silverweed
<i>Potentilla argentea</i>	Rosaceae	POTARG	non-native	0	3	forb	perennial	silvery cinquefoil
<i>Prunus serotina</i>	Rosaceae	PRUSER	native	2	3	tree	perennial	wild black cherry
<i>Pteridium aquilinum</i>	Dennstaedtiaceae	PTEAQU	native	0	3	fern	perennial	bracken fern

Finton FQA

<i>Quercus rubra</i>	Fagaceae	QUERUB	native	5	3	tree	perennial	red oak
<i>Ranunculus abortivus</i>	Ranunculaceae	RANABO	native	0	0	forb	perennial	small-flowered buttercup
<i>Ranunculus acris</i>	Ranunculaceae	RANACR	non-native	0	0	forb	perennial	tall or common buttercup
<i>Ranunculus recurvatus</i>	Ranunculaceae	RANREC	native	5	-3	forb	perennial	hooked crowfoot
<i>Rhamnus alnifolia</i>	Rhamnaceae	RHAALN	native	8	-5	shrub	perennial	alder-leaved buckthorn
<i>Ribes americanum</i>	Grossulariaceae	RIBAME	native	6	-3	shrub	perennial	wild black currant
<i>Ribes cynosbati</i>	Grossulariaceae	RIBCYN	native	4	3	shrub	perennial	prickly or wild gooseberry
<i>Rosa rubiginosa</i> ; <i>r. eglanteria</i>	Rosaceae	ROSRUB	non-native	0	3	shrub	perennial	sweetbrier
<i>Rumex obtusifolius</i>	Polygonaceae	RUMOBT	non-native	0	0	forb	perennial	bitter dock
<i>Salix exigua</i>	Salicaceae	SALEXI	native	1	-3	shrub	perennial	sandbar willow
<i>Schedonorus pratensis</i> ; <i>festuca p.</i>	Poaceae	SCHPRA	non-native	0	3	grass	perennial	meadow fescue
<i>Schizachyrium scoparium</i> ; <i>andropogon s.</i>	Poaceae	SCHSCO	native	5	3	grass	perennial	little bluestem
<i>Scirpus cyperinus</i>	Cyperaceae	SCICYP	native	5	-5	sedge	perennial	wool-grass
<i>Scutellaria galericulata</i>	Lamiaceae	SCUGAL	native	5	-5	forb	perennial	marsh skullcap
<i>Scutellaria lateriflora</i>	Lamiaceae	SCULAT	native	5	-5	forb	perennial	mad-dog skullcap
<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 flexicaulis</i>	Asteraceae	SOLFLE	native	6	3	forb	perennial	zigzag goldenrod
<i>Solidago rugosa</i>	Asteraceae	SOLRUG	native	3	0	forb	perennial	rough-leaved goldenrod
<i>Spinulum annotinum</i> ; <i>lycopodium a.</i>	Lycopodiaceae	SPIANN	native	5	0	fern	perennial	stiff clubmoss
<i>Symphyotrichum laeve</i> ; <i>aster l.</i>	Asteraceae	SYMLAE	native	5	3	forb	perennial	smooth aster
<i>Symphyotrichum lanceolatum</i> ; <i>aster l.</i>	Asteraceae	SYMLAN	native	2	-3	forb	perennial	panicled aster
<i>Symphyotrichum lateriflorum</i> ; <i>aster l.</i>	Asteraceae	SYMLAT	native	2	0	forb	perennial	calico aster
<i>Symphyotrichum puniceum</i> ; <i>aster p.</i>	Asteraceae	SYMPUN	native	5	-5	forb	perennial	swamp aster
<i>Symplocarpus foetidus</i>	Araceae	SYMFOE	native	6	-5	forb	perennial	skunk-cabbage
<i>Taraxacum officinale</i>	Asteraceae	TAROFF	non-native	0	3	forb	perennial	common dandelion
<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</i> ; <i>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>Ulmus americana</i>	Ulmaceae	ULMAME	native	1	-3	tree	perennial	american elm
<i>Verbascum thapsus</i>	Scrophulariaceae	VERTHA	non-native	0	5	forb	biennial	common mullein
<i>Veronica beccabunga</i> var. <i>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 acerifolium</i>	Adoxaceae	VIBACE	native	6	5	shrub	perennial	maple-leaved viburnum
<i>Vinca minor</i>	Apocynaceae	VINMIN	non-native	0	5	shrub	perennial	periwinkle
<i>Viola labradorica</i> ; <i>v. conspersa</i>	Violaceae	VIOLAB	native	3	0	forb	perennial	dog violet
<i>Viola pubescens</i>	Violaceae	VIOPUB	native	4	3	forb	perennial	yellow violet
<i>Vitis riparia</i>	Vitaceae	VITRIP	native	3	0	vine	perennial	river-bank grape