

Appendix A: Land Conservancy of West Michigan
Minnie Skwarek Preserve Species List

Scientific Name	Common Name	WL1	WL2	UPL1	UPL2	CC	CW
Ferns/Allies							
<i>Asplenium platyneuron</i>	Ebony spleenwort				X	2	3
<i>Athyrium felix-femina</i>	Lady fern				x	4	0
<i>Botrychium sp.</i>	Grape fern				x		
<i>Dryopteris carthusiana</i>	Spinulose woodfern			x	x	5	-2
<i>Equisetum arvense</i>	Field horsetail	x	x	x		0	0
<i>Equisetum palustre</i>	Horsetail				x	3	-3
<i>Huperzia lucidula</i>	Shining clubmoss				x	5	-1
<i>Lycopodium obscurum</i>	Clubmoss				x	5	3
<i>Matteucia struthiopteris</i>	Ostrich fern				x	2	-3
<i>Onoclea sensibilis</i>	Sensitive fern	x	x	x	x	2	-3
<i>Osmunda cinnamomea</i>	Cinnamon fern	x	x	x	x	5	-3
<i>Osmunda regalis</i>	Royal fern	x	x	x		5	-5
<i>Polystichum acrostichoides</i>	Christmas fern				x	6	5
<i>Pteridium aquilinum</i>	Bracken fern	x		x	x	0	3
<i>Thelypteris noveboracensis</i>	New York fern				x	5	-1
<i>Thelypteris palustris</i>	Marsh fern		x	x		2	-4
Graminoids							
<i>AGROPYRON REPENS</i>	Quack grass			x	x	-	3
<i>Andropogon virginicus</i>	Broomsedge				x	4	1
<i>Aristida purpurascens</i>	Three-awned grass				x	8	5
<i>BROMUS INERMIS</i>	Smooth brome	x	x			-	5
<i>Carex blanda</i>	Sedge			x	x	1	0
<i>Carex brunnescens</i>	Sedge	x				5	-3
<i>Carex comosa</i>	Sedge				x	6	-4
<i>Carex gracillima</i>	Sedge			x	x	4	3
<i>Carex grayi</i>	Sedge				x	3	-5
<i>Carex hirtifolia</i>	Sedge			x		5	5
<i>Carex lacustris</i>	Sedge		x			6	-5
<i>Carex lurida</i>	Sedge	x			x	5	5
<i>Carex muhlenbergii</i>	Sedge			x	x	7	5
<i>Carex pensylvanica</i>	Sedge			x	x	4	5
<i>Carex stipata</i>	Sedge	x				1	-5
<i>Cinna arundinacea</i>	Wood reedgrass	x	x			7	-3
<i>DACTYLIS GLOMERATA</i>	Orchard grass	x	x			-	3
<i>Danthonia spicata</i>	Poverty oat grass			x	x	4	5
<i>Elymus virginicus</i>	Virginia wildrye		x			4	-2
<i>Eragrostis pectinacea</i>	Love grass			x		0	0
<i>Eragrostis spectabilis</i>	Purple love grass				x	3	5
<i>Glyceria striata</i>	Fowl manna grass		x			4	-5
<i>Hystrix patula</i>	Bottlebrush grass				x	5	5
<i>Leersia virginica</i>	White grass	x				5	-3
<i>LOLIUM PERENNE</i>	Perennial rye grass		x			-	3
<i>Panicum clandestinum</i>	Panic grass			x		3	-3

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<i>Panicum virgatum</i>	Switchgrass			x	x	4	-1
<i>Phalaris arundinacea</i>	Reed canary grass		x		x	4	3
<i>POA COMPRESSA</i>	Canada bluegrass			x	x	-	2
<i>POA PRATENSIS</i>	Kentucky bluegrass		x		x	-	1
<i>Scirpus atrovirens</i>	Bulrush				x	6	-5
<i>Scirpus pendulus</i>	Bulrush	x				3	-5
<i>Typha latifolia</i>	Broad-leaved cattail		x			1	-5
Herbaceous Forbs							
<i>Achillea millefolium</i>	Yarrow		x			1	3
<i>Actaea pachypoda</i>	White baneberry	x		x	x	7	5
<i>Agrimonia gryposepala</i>	Tall agrimony	x				2	2
<i>Alisma plantago-aquatica</i>	Water plantain	x				1	-5
<i>ALLIARIA PETIOLATA</i>	Garlic mustard			x	x	-	0
<i>Ambrosia artemisiifolia</i>	Common ragweed			x	x	0	3
<i>Ambrosia trifida</i>	Giant ragweed		x			0	-1
<i>Amphicarpaea bracteata</i>	Hog-peanut		x	x		5	0
<i>Anaphalis margaritacea</i>	Pearly everlasting				x	3	5
<i>Anemone cylindrica</i>	Thimbleweed			x		6	5
<i>Aquilegia canadensis</i>	Wild columbine				x	5	-2
<i>Aralia nudicaulis</i>	Wild sarsaparilla			x		5	3
<i>ARCTIUM MINUS</i>	Burdock		x			-	5
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit			x	x	5	-2
<i>Asclepias incarnata</i>	Swamp milkweed		x			6	-5
<i>Asclepias syriaca</i>	Common milkweed		x			1	5
<i>Asclepias tuberosa</i>	Butterfly-weed				x	5	5
<i>Aster firmus</i>	Smooth swamp aster	x				4	-5
<i>Aster lanceolatus</i>	Eastern lined aster	x				2	-3
<i>Aster lateriflorus</i>	Calico aster	x	x			2	-2
<i>Aster macrophyllus</i>	Big-leaved aster	x			x	4	5
<i>Aster puniceus</i>	Swamp aster	x			x	-	4
<i>Bidens cernuus</i>	Nodding bur-marigold	x				3	-5
<i>Boehmeria cylindrica</i>	False nettle	x	x	x		5	-5
<i>Caltha palustris</i>	Marsh marigold				x	7	-5
<i>CENTAUREA MACULOSA</i>	Spotted knapweed				x	-	5
<i>CERASTIUM GLOMERATUM</i>	Chickweed				x	-	5
<i>Chelone glabra</i>	Turtlehead				x	5	-2
<i>CICHORIUM INTYBUS</i>	Chickory	x				-	5
<i>Cicuta maculata</i>	Poison hemlock	x				4	-5
<i>Conopholis americana</i>	Squawroot	x		x	x	10	5
<i>CONVALLARIA MAJALIS</i>	Lily-of-the-valley				x	5	0
<i>Conyza canadensis</i>	Horseweed				x	0	1
<i>Cuscuta gronovii</i>	Common dodder		x			3	-3
<i>DAUCUS CAROTA</i>	Queen Anne's lace	x	x	x	x	-	5
<i>DIANTHUS ARMERIA</i>	Deptford pink				x	-	5
<i>ECHINOPS SPHAEROCEPHALUS</i>	Globe thistle		x			-	5

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<i>Epifagus virginiana</i>	Beech drops		x	x	x	10	-5
<i>Epilobium ciliatum</i>	Willow-herb		x	x		3	3
<i>Eupatorium maculatum</i>	Joe-pye weed		x		x	4	-4
<i>Eupatorium perfoliatum</i>	Boneset		x		x	4	-4
<i>Euthamia graminifolia</i>	Grass-leaved goldenrod		x			3	-2
<i>Fragaria vesca</i>	Woodland strawberry			x		2	4
<i>Fragaria virginiana</i>	Wild strawberry			x	x	2	1
<i>Galium lanceolatum</i>	Yellow wild licorice		x			4	5
<i>Galium pilosum</i>	Hairy bedstraw				x	6	5
<i>Gentiana andrewsii</i>	Bottle gentian				x	5	-3
<i>Geranium maculatum</i>	Wild geranium			x		4	3
<i>Geum canadense</i>	White arvens				x	2	-3
<i>Hepatica americana</i>	Round-lobed hepatica			x	x	6	5
HYPERICUM PERFORATUM	St. John's-wort			x	x	-	5
<i>Hypericum punctatum</i>	Spotted St. John's-wort			x		4	-1
<i>Impatiens capensis</i>	Spotted touch-me-not	x	x	x	x	2	-3
<i>Iris virginica</i>	Southern blue flag		x			5	-5
<i>Juncus effusus</i>	Soft-stemmed rush	x				3	-5
<i>Lespedeza hirta</i>	Hairy bushclover				x	7	5
<i>Lobelia cardinalis</i>	Cardinal flower				x	2	-5
<i>Lobelia siphilitica</i>	Great blue lobelia		x			4	-4
<i>Lycopus americanus</i>	Common water horehound	x				2	-5
<i>Lycopus uniflorus</i>	Northern bugleweed				x	5	2
LYSIMACHIHA NUMMULARIA	Moneywort		x			-	-4
LYTHRUM SALICARIA	Purple loosestrife		x			-	-5
<i>Maianthemum canadense</i>	Canada mayflower			x	x	4	0
<i>Medeola virginiana</i>	Indian cucumber root			x		10	5
<i>Monarda punctata</i>	Horsemint			x	x	4	5
<i>Monotropa uniflora</i>	Indian pipe			x	x	5	3
NASTURTIUM OFFICINALE	Watercress	x				-	-5
<i>Oenothera biennis</i>	Evening primrose		x			2	3
<i>Oxalis fontana</i>	Yellow wood-sorrel			x	x	0	3
<i>Oxypolis rigidior</i>	Cowbane	x		x	x	6	-5
<i>Phytolacca americana</i>	Pokeweed	x	x		x	2	-1
<i>Pilea pumila</i>	Clearweed		x			5	-3
<i>Podophyllum peltatum</i>	Mayapple			x	x	3	3
<i>Polygonatum biflorum</i>	Solomon-seal			x	x	4	3
<i>Polygonum arifolium</i>	Tear-thumb		x		x	7	-5
<i>Polygonum sagittatum</i>	Arrow-leaved tear-thumb		x			5	-5
<i>Polygonum virginianum</i>	Jumpseed			x		4	0
<i>Prenanthes alba</i>	White lettuce			x	x	5	3
PRUNELLA VULGARIS	Lawn prunella	x				-	0
<i>Pyrola asarifolia</i>	Wintergreen				x	9	-5
<i>Ranunculus recurvatus</i>	Hooked crowfoot		x			5	-3
RUMEX ACETOSELLA	Sheep sorrel			x	x	-	0
RUMEX OBTUSIFOLIUS	Bitter dock		x			-	-3

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<i>Rumex orbiculatus</i>	Great water dock	x				9	-5
<i>Sagittaria latifolia</i>	Common arrowhead		x			1	-5
<i>Sanicula gregaria</i>	Black snakeroot			x		2	-1
<i>SAPONARIA OFFICINALIS</i>	Bouncing bet	x				-	3
<i>Saururus cernuus</i>	Lizard's tail	x	x	x	x	9	-5
<i>Scutellaria lateriflora</i>	Mad dog skullcap	x				5	-5
<i>Smilacina racemosa</i>	False Solomon's seal				x	5	3
<i>SOLANUM CAROLINENSE</i>	Horse nettle		x			-	4
<i>Solidago caesia</i>	Blue-stemmed goldenrod			x	x	7	3
<i>Solidago canadensis</i>	Canada goldenrod	x	x			1	3
<i>Solidago flexicaulis</i>	Broad leaved goldenrod			x		6	3
<i>Solidago gigantea</i>	Late goldenrod		x	x		3	-3
<i>Solidago nemoralis</i>	Old-field goldenrod			x	x	2	5
<i>Solidago patula</i>	Swamp goldenrod		x		x	6	-5
<i>Solidago rugosa</i>	Rough-leaved goldenrod	x				3	-1
<i>Sparganium eurycarpum</i>	Common bur-reed		x			5	-5
<i>Streptopus roseus</i>	Rose twisted Stalk			x		5	0
<i>Symplocarpus foetidus</i>	Skunk cabbage	x	x	x	x	6	-5
<i>TARAXACUM OFFICINALE</i>	Dandelion			x		-	3
<i>Thalictrum dioicum</i>	Early meadow rue			x		6	2
<i>Urtica dioica</i>	Stinging nettle		x		x	1	-1
<i>VERBASCUM THAPSIS</i>	Common mullein			x		-	5
<i>VICIA VILLOSA</i>	Hairy vetch			x		-	5
Woody							
<i>ACER NEGUNDO</i>	Boxelder		x			-	-2
<i>Acer rubrum</i>	Red maple	x	x	x	x	1	0
<i>Acer saccharum</i>	Sugar maple			x	x	5	3
<i>Alnus rugosa</i>	Speckled alder		x			5	-5
<i>Amelanchier laevis</i>	Smooth shadbrush		x			4	5
<i>Aronia prunifolia</i>	Black chokeberry				x	5	-3
<i>BERBERIS THUNBERGII</i>	Japanese barberry			x	x	-	4
<i>Betula alleghaniensis</i>	Yellow birch	x	x	x	x	7	0
<i>Betula papyrifera</i>	Paper birch				x	2	2
<i>CAMPISIS RADICANS</i>	Trumpet flower	x				-	0
<i>Carpinus caroliniana</i>	Hornbeam	x	x	x	x	6	0
<i>Carya ovata</i>	Shagbark hickory			x	x	5	3
<i>Castanea dentata</i>	American chestnut			x		9	5
<i>Cephalanthus occidentalis</i>	Buttonbush		x			7	-5
<i>Chimaphila maculata</i>	Spotted wintergreen				x	8	5
<i>Chimaphila umbellata</i>	Pipsissewa				x	8	5
<i>Clematis virginiana</i>	Virgin's bower	x	x			4	0
<i>Cornus canadensis</i>	Bunchberry			x		6	0
<i>Cornus florida</i>	Flowering dogwood			x	x	8	4
<i>Cornus foemina</i>	Gray dogwood	x				1	-2
<i>Cornus stolonifera</i>	Red-stemmed dogwood		x		x	2	-3

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<i>Crataegus pedicellata</i>	Hawthorn		x			4	5
<i>ELAEAGNUS UMBELLATA</i>	Autumn olive			x	x	-	3
<i>EUONYMUS FORTUNEI</i>	Wintercreeper		x	x		-	5
<i>Euonymus obovata</i>	Running strawberry bush			x	x	5	5
<i>Fagus grandifolia</i>	American beech		x	x	x	6	3
<i>Fraxinus americana</i>	White ash		x	x	x	5	3
<i>Fraxinus nigra</i>	Black ash	x			x	6	-4
<i>Fraxinus pennsylvanica</i>	Green ash			x	x	2	-3
<i>Gaultheria procumbens</i>	Wintergreen			x	x	5	3
<i>Hamamelis virginiana</i>	Witch hazel		x	x	x	5	3
<i>Ilex verticillata</i>	Michigan holly	x	x		x	5	-4
<i>Juglans nigra</i>	Black walnut			x	x	5	3
<i>Juniperus virginiana</i>	Red-cedar			x	x	3	3
<i>Lindera benzoin</i>	Spicebush	x	x	x	x	7	-2
<i>LONICERA sp.</i>	Honeysuckle	x			x		
<i>Mitchella repens</i>	Partridge berry		x	x	x	5	2
<i>Ostrya virginiana</i>	Musclewood			x		5	4
<i>Parthenocissus quinquefolia</i>	Virginia creeper	x	x	x	x	5	1
<i>Pinus strobus</i>	White pine			x	x	3	3
<i>PINUS SYLVESTRIS</i>	Scotch pine			x		-	5
<i>Populus grandidentata</i>	Big-toothed poplar			x		4	3
<i>Populus tremuloides</i>	Quaking aspen			x		1	0
<i>Prunus serotina</i>	Wild black cherry		x	x	x	2	3
<i>Prunus virginiana</i>	Chokecherry	x				2	1
<i>Quercus alba</i>	White oak		x	x	x	5	3
<i>Quercus palustris</i>	Pin oak			x	x	8	-3
<i>Quercus rubra</i>	Red oak			x	x	5	3
<i>Quercus velutina</i>	Black oak		x	x	x	6	5
<i>Rhus copallina</i>	Winged sumac			x	x	3	5
<i>Rhus typhina</i>	Staghorn sumac			x	x	2	5
<i>Ribes cynosbati</i>	Prickly gooseberry			x		4	5
<i>Ribes sp.</i>			x				
<i>Rosa carolina</i>	Carolina rose				x	4	4
<i>ROSA MULTIFLORA</i>	Multiflora rose	x		x	x	-	3
<i>Rosa palustris</i>	Swamp rose	x			x	5	-5
<i>Rubus allegheniensis</i>	Common blackberry			x		1	2
<i>Rubus flagellaris</i>	Northern dewberry			x	x	1	4
<i>Rubus occidentalis</i>	Black raspberry	x				1	5
<i>Salix nigra</i>	Black willow		x			5	-5
<i>Sambucus canadensis</i>	Common elder	x			x	3	-2
<i>Sassafras albidum</i>	Sassafras		x	x	x	5	3
<i>Smilax rotundifolia</i>	Common greenbrier			x	x	6	0
<i>Smilax sp.</i>	Greenbrier			x	x		
<i>Sorbus decora</i>	Mountain ash			x		4	3
<i>Taxus canadensis</i>	Canada yew				x	5	3
<i>Toxicodendron radicans</i>	Poison ivy	x	x			2	-1

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<i>Tsuga canadensis</i>	Eastern hemlock			x	x	5	3
<i>Ulmus americana</i>	American elm	x	x			1	-2
<i>Viburnum acerfolium</i>	Maple-leaved viburnum				x	6	5
<i>Viburnum opulus</i>	High-bush cranberry				x	5	-3
<i>Vitis riparia</i>	Riverbank grape	x	x	x	x	3	-2

Total # Species = 227

Native Species = 192

Non-native Species = 35

Native:Non-native ratio = 5.5:1

$\Sigma cc = 793$

FQI = 57.74