



Recommended Planting Guidelines for Municipalities

Many plants originally introduced for use in ornamental landscapes have since become invasive. Invasive plants increase management costs for local government, land managers, and farmers, while also restricting recreational activities like hunting, fishing, mushrooming, hiking, and birding that are key both to the lifestyle and economy in northern Michigan. To address these challenges, the Northwest Michigan Invasive Species Network (ISN) recommends the following planting guidelines for municipalities, homeowners associations, and other interested groups. ISN partners developed the lists of recommended and prohibited plants below based on their collective experience managing natural areas across the region, as well as with input from the City of Ann Arbor's invasive plant list and with Michigan Natural Features Inventory. For more information about ISN, including a list of partner organizations, visit HabitatMatters.org.

Partners in the Invasive Species Network recommend prohibiting the use of invasive plants, while also strongly encouraging the use of native plants.

Class 1 List: Many locally uncommon plants that cause serious problems in other regions have the potential to arrive through ornamental landscaping activities.

Class 2 List: Roughly half of ISN's Top 12 Least Wanted Invasive Species are still planted in ornamental landscapes.

Class 3 List: Provides a catch-all for plants that pose any recognized invasive threat to the region.

Class 4 List: Covers grass species that, although problematic, have less of an impact when regularly mowed.

For identification assistance or to report a species occurrence, visit the Midwest Invasive Species Information Network at MISIN.msu.edu. For management advice, visit the Michigan Department of Natural Resources' invasive species website (Michigan.gov/invasivespecies), or Midwest Invasive Plant Network's control database (MIPNcontroldatabase.wisc.edu). Find out about what's going on in northwest lower Michigan on our website, HabitatMatters.org.

Native plants are strongly encouraged for all community landscapes. Native plants pose no threat of becoming invasive and provide a host of critical ecological benefits for which literally no other plants will suffice. Since invasive plants do not respect political boundaries, ISN encourages local municipalities not only to accept these recommended planting guidelines but also to encourage neighboring communities to adopt similar guidelines.

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Definitions

This document references “native,” “non-native,” and “invasive” categories of plant species. The definitions for these categories, listed below, derive from Executive Order 13112 issued on February 3, 1999.

- “Native species” means, with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.
- “Non-native species” means, with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.
- “Invasive species” means a non-native species whose introduction does or is likely to cause economic or environmental harm or harm to human health.

Native Plant Recommendations

Recommended Plants for Ornamental Landscapes

Native plants bring beauty and life to landscapes. Sporting a wide variety of colors, shapes, and textures, native plants can meet most landscaping needs. Over 400 species of native plants are available commercially in Michigan. Native plants create habitat for birds and butterflies, adding a living dimension of beauty to the landscape. Living landscapes allow children the opportunity for natural exploration at home, which encourages lifelong learners. Native plants are also part of our natural heritage. Communities that preserve, enhance, and showcase their natural and cultural heritages have economies that consistently outperform those of other communities.¹ Planting native is planting nature; re-connecting our home landscapes with the natural world carries enduring benefits for the entire region.

For more information regarding native plants for use in ornamental landscapes, visit HabitatMatters.org/other-information. Suggested plants listed below, with a few additions, are borrowed from Ann Arbor's Natural Areas Preservation program. Please note this list is far from complete; to determine if a plant not on this list is native to Michigan, contact ISN or consult the Michigan Herbarium online at www.michiganflora.net.

Native Trees

Common Name	Scientific Name	Class
fir, balsam **	<i>Abies balsamea</i>	large>40'
maple, black *	<i>Acer nigrum</i>	large>40'
maple, striped	<i>Acer pensylvanicum</i>	small<30'
maple, red **	<i>Acer rubrum</i>	large>40'
maple, silver	<i>Acer saccharinum</i>	large>40'
maple, sugar	<i>Acer saccharum</i>	large>40'
maple, mountain	<i>Acer spicatum</i>	small<30'
serviceberry, shadblow * / **	<i>Amelanchier arborea</i>	small<30'
pawpaw	<i>Asimina triloba</i>	small<30'
serviceberry, allegheny * / **	<i>Amelanchier laevis</i>	small<30'
birch, yellow * / **	<i>Betula alleghaniensis</i>	large>40'
birch, river */ **	<i>Betula nigra</i>	medium 30-40'
birch, paper * / **	<i>Betula papyrifera</i>	large>40'
musclewood **	<i>Carpinus caroliniana</i>	medium 30-40'
hickory, bitternut	<i>Carya cordiformis</i>	large>40'
hickory, shagbark	<i>Carya ovata</i>	large>40'
redbud, eastern	<i>Cercis canadensis</i>	small<30'
dogwood, flowering	<i>Cornus florida</i>	small<30'

¹ Howe, Jim, Ed McMahon, and Luther Propst. *Balancing Nature and Commerce in Gateway Communities*. Washington D.C.: Island Press, 1997.

hawthorn, dotted	<i>Crataegus punctata</i>	small < 30'
beech, American	<i>Fagus grandifolia</i>	large > 40'
walnut, black	<i>Juglans nigra</i>	large > 40'
tamarack; eastern larch * / **	<i>Larix laricina</i>	large > 40'
hop-hornbeam	<i>Ostrya virginiana</i>	medium 30-40'
spruce, white	<i>Picea glauca</i>	large > 40'
spruce, black **	<i>Picea mariana</i>	large > 40'
pine, jack *	<i>Pinus banksiana</i>	large > 40'
pine, red	<i>Pinus resinosa</i>	large > 40'
pine, white	<i>Pinus strobus</i>	large > 40'
cottonwood, eastern	<i>Populus deltoides</i>	large > 40'
aspen, bigtooth * / **	<i>Populus grandidentata</i>	large > 40'
aspen, trembling * / **	<i>Populus tremuloides</i>	large > 40'
plum, American/wild	<i>Prunus americana</i>	medium 30-40'
cherry, black *	<i>Prunus serotina</i>	large > 40'
hop-tree	<i>Ptelea trifoliata</i>	small < 30'
oak, white *	<i>Quercus alba</i>	large > 40'
oak, swamp white	<i>Quercus bicolor</i>	large > 40'
oak, northern pin	<i>Quercus ellipsoidalis</i>	large > 40'
oak, bur	<i>Quercus macrocarpa</i>	large > 40'
oak, northern red *	<i>Quercus rubra</i>	large > 40'
oak, black	<i>Quercus velutina</i>	large > 40'
sassafras	<i>Sassafras albidum</i>	small < 30'
mountain-ash, American	<i>Sorbus americana</i>	medium 30-40'
cedar, northern white * / **	<i>Thuja occidentalis</i>	medium 30-40'
basswood; American linden	<i>Tilia americana</i>	large > 40'
hemlock, eastern	<i>Tsuga canadensis</i>	large > 40'

*Above average salt tolerance

**Suitable for runoff areas

Native Shrubs

Common Name	Scientific Name
alder, speckled * / **	<i>Alnus rugosa</i>
serviceberry, round-leaved	<i>Amelanchier sanguinea</i>
serviceberry, Allegheny	<i>Amelanchier laevis</i>
leadplant	<i>Amorpha canescens</i>

bearberry *	<i>Arctostaphylos uva-ursi</i>
chokecherry, black *	<i>Aronia melanocarpa</i>
New Jersey tea	<i>Ceanothus americanus</i>
buttonbush * / **	<i>Cephalanthus occidentalis</i>
sweet-fern *	<i>Comptonia peregrina</i>
dogwood, alternate-leaf	<i>Cornus alternifolia</i>

dogwood, silky **	<i>Cornus amomum</i>
dogwood, grey	<i>Cornus foemina</i>
dogwood, roundleaf	<i>Cornus rugosa</i>
dogwood, red-osier * / **	<i>Cornus sericea</i>
hazelnut, American	<i>Corylus americana</i>
hazelnut, beaked	<i>Corylus cornuta</i>
cinquefoil, shrubby *	<i>Dasiphora fruticosa</i> , <i>Potentilla fruticosa</i>
honeysuckle, northern bush *	<i>Diervilla lonicera</i>
leatherwood	<i>Dirca palustris</i>
trailing arbutus	<i>Epigaea repens</i>
wintergreen	<i>Gaultheria procumbens</i>
witch-hazel *	<i>Hamamelis virginiana</i>
St. John's wort, Kalm's	<i>Hypericum kalmia</i>
St. John's wort, shrubby	<i>Hypericum prolificum</i>
holly, Michigan *	<i>Ilex verticillata</i>
juniper, ground *	<i>Juniperus communis</i>
juniper, creeping *	<i>Juniperus horizontalis</i>
red-cedar	<i>Juniperus virginiana</i>
sheep-laurel	<i>Kalmia angustifolia</i>
spicebush, northern	<i>Lindera benzoin</i>
honeysuckle, American fly	<i>Lonicera canadensis</i>
partridge berry	<i>Mitchella repens</i>
sweet gale *	<i>Myrica gale</i>
holly, mountain	<i>Ilex mucronata</i>
ninebark	<i>Physocarpus opulifolius</i>
sand cherry	<i>Prunus pumila</i>

* Above average salt tolerance

**Suitable for runoff areas

Native Wildflowers

Common Name	Scientific Name
Yarrow, common	<i>Achillea millefolium</i>
baneberry, red #	<i>Actaea rubra</i>
baneberry, red/doll's eyes #	<i>Actaea pachypoda</i>
agosaris, pale/false dandelion	<i>Agoseris glauca</i>
nodding wild onion	<i>Allium cernuum</i>

chokecherry * / **	<i>Prunus virginiana</i>
Somac, fragrant/low	<i>Rhus aromatica</i>
sumac, shining/winged	<i>Rhus copallina</i>
sumac, staghorn *	<i>Rhus typhina</i>
currant, wild black	<i>Ribes americanum</i>
gooseberry, prickly	<i>Ribes cynosbati</i>
currant, swamp red	<i>Ribes triste</i>
rose, wild	<i>Rosa blanda</i>
rose, Carolina/pasture	<i>Rosa carolina</i>
rose, swamp **	<i>Rosa palustris</i>
blackberry, highbush	<i>Rubus allegheniensis</i>
dewberry, northern	<i>Rubus flagellaris</i>
raspberry, wild red	<i>Rubus strigosus</i>
willow, pussy * / **	<i>Salix discolor</i>
willow, sandbar **	<i>Salix exigua</i>
elderberry, American *	<i>Sambucus canadensis</i>
elder, red-berried	<i>Sambucus racemosa</i>
meadowsweet * / **	<i>Spiraea alba</i>
steeplebush	<i>Spiraea tomentosa</i>
snowberry *	<i>Symphoricarpos albus</i>
yew	<i>Taxus canadensis</i>
blueberry *	<i>Vaccinium angustifolium</i>
blueberry, velvetleaf *	<i>Vaccinium myrtilloides</i>
viburnum, mapleleaf	<i>Viburnum acerifolium</i>
nannyberry * / **	<i>Viburnum lentago</i>
highbush-cranberry	<i>Viburnum trilobum</i>

ramp/wild leek **	<i>Allium tricoccum</i>
anemone, Canada **	<i>Anemone canadensis</i>
anemone, wood	<i>Anemone quinquefolia</i>
Thimbleweed, common #	<i>Anemone cylindrica</i>
Angelica	<i>Angelica atropurpurea</i>
Pussytoes, smooth	<i>Antennaria parlinii</i>
Dogbane, creeping	<i>Apocynum cannabinum</i>

Columbine, wild #	<i>Aquilegia canadensis</i>	Cinquefoil, prairie	<i>Drymocallis arguta</i> , <i>Potentilla arguta</i>
sarsaparilla, wild **	<i>Aralia nudicaulis</i>	Coneflower, pale	<i>Echinacea pallida</i>
Spikenard	<i>Aralia racemosa</i>	Coneflower, purple #	<i>Echinacea purpurea</i>
Jack-in-the-pulpit # / **	<i>Arisaema triphyllum</i>	Rattlesnake master	<i>Eryngium yuccifolium</i>
Sage, prairie	<i>Artemisia ludoviciana</i>	Trout lily	<i>Erythronium americanum</i>
Ginger, wild	<i>Asarum canadense</i>	Boneset, common # / **	<i>Eupatorium perfoliatum</i>
Milkweed, poke	<i>Asclepias exaltata</i>	Spurge, flowering	<i>Euphorbia corollata</i>
Milkweed, tall green	<i>Asclepias hirtella</i>	Aster, bigleaf	<i>Eurybia macrophylla</i>
Milkweed, swamp # / **	<i>Asclepias incanata</i>	Joe-pye weed, hollow	<i>Eutrochium fistulosum</i>
milkweed, common	<i>Asclepias syriaca</i>	Joe-pye weed, common # / **	<i>Eutrochium maculatum</i>
Milkweed, butterfly #	<i>Asclepias tuberosa</i>	Joe-pye weed, sweet	<i>Eutrochium purpureum</i>
Milkweed, prairie/smooth	<i>Asclepias sullivantii</i>	Queen of the prairie	<i>Filipendula rubra</i>
Milkweed, whorled	<i>Asclepias verticillata</i>	strawberry, wild #	<i>Fragaria virginiana</i>
Milk vetch, Canada	<i>Atragalus canadensis</i>	Bottle gentian **	<i>Gentiana andrewsii</i>
False indigo, blue	<i>Baptisia australis</i>	Geranium, wild/cranesbill	<i>Geranium maculatum</i>
False indigo, cream	<i>Baptisia bracteata</i>	Yellow avens	<i>Geum aleppicum</i>
Beggar-ticks, nodding	<i>Bidens cernum</i>	Prairie smoke	<i>Geum triflorum</i>
False boneset	<i>Brickellia eupatorioides</i>	Sneezeweed #	<i>Helenium autumnale</i>
marsh marigold **	<i>Caltha palustris</i>	Sunflower, woodland	<i>Helianthus divaricatus</i>
Bellflower, tall	<i>Campanula americana</i>	Sunflower, downy	<i>Helianthus mollis</i>
Harebell #	<i>Campanula rotundifolia</i>	Sunflower, western	<i>Helianthus occidentalis</i>
Pale Indian Plantain	<i>Carcalia atriplicifolia</i>	Jerusalem-artichoke	<i>Helianthus tuberosus</i>
Cohosh, blue **	<i>Caulophyllum thalictroides</i>	Sunflower, early/false #	<i>Heliopsis helianthoides</i>
Pea, partridge	<i>Chamaecrista fasciculata</i>	Hepatica, common (round or sharp) #	<i>Hepatica nobilis</i>
Fireweed, American	<i>Chamaenerion angustifolium</i>	Alumroot, American	<i>Heuchera americana</i>
Turtlehead **	<i>Chelone glabra</i>	Alumroot, prairie	<i>Heuchera richardsonii</i>
Thistle, swamp	<i>Cirsium muticum</i>	Mallow/hibiscus, swamp	<i>Hibiscus moscheutos</i>
Spring beauty, eastern #	<i>Claytonia virginica</i>	jewelweed **	<i>Impatiens capensis</i>
bluebead-lily	<i>Clintonia borealis</i>	Iris, blue flag # / * / **	<i>Iris versicolor</i>
Coreopsis, sand/lance-leaf # / *	<i>Coreopsis lanceolata</i>	Iris, southern blue flag	<i>Iris virginiana</i>
Coreopsis, prairie	<i>Coreopsis palmata</i>	Twingleaf	<i>Jeffersonia diphylla</i>
Coreopsis, tall	<i>Coreopsis tripteris</i>	Blazing star, rough	<i>Liatris aspera</i>
bunchberry	<i>Cornus canadensis</i>	Blazing star, dwarf #	<i>Liatris cylindracea</i>
Prairie clover, purple	<i>Dalea purpurea</i>	Blazing star, prairie	<i>Liatris pycnostachya</i>
Toothwort, cutleaf	<i>Dentaria lancinata</i>	Blazing star, northern	<i>Liatris scariosa</i>
Dutchman's breeches	<i>Dicentra cucullaria</i>	Blazing star, marsh	<i>Liatris spicata</i>
Squirrelcorn	<i>Dicentra canadensis</i>	Blazing star, plains/scaly	<i>Liatris squarrosa</i>

Lily, Michigan	<i>Lilium michiganense</i>
Lily, wood	<i>Lilium philadelphicum</i>
twinner	<i>Linnaea borealis</i>
Cardinal flower # / **	<i>Lobelia cardinalis</i>
Lobelia, great blue # / **	<i>Lobelia siphilitica</i>
Lupine, wild	<i>Lupinus perennis</i>
loosestrife, fringed # / **	<i>Lysimachia ciliata</i>
Loosestrife, winged	<i>Lythrum alatum</i>
Mayflower, Canada/wild lily-of-the-valley	<i>Maianthemum canadense</i>
False Solomon's seal, feathery #	<i>Maianthemum racemosum</i>
False Solomon's seal, starry #	<i>Maianthemum stellatum</i>
Bluebells, Virginia	<i>Mertensia virginica</i>
Monkey flower **	<i>Mimulus ringens</i>
Bishop's cap	<i>Mitella diphylla</i>
Bergamot, wild/bee balm #	<i>Monarda fistulosa</i>
Horsemint	<i>Monarda punctata</i>
Evening primrose, common	<i>Oenothera biennis</i>
Prickly pear, eastern	<i>Opuntia humifusa</i>
Wild quinine	<i>Parthenium integrifolium</i>
Beardtongue, foxglove	<i>Penstemon digitalis</i>
Beardtongue, slender	<i>Penstemon gracilis</i>
Beardtongue, hairy # / *	<i>Penstemon hirsutus</i>
Phlox, woodland/wild blue	<i>Phlox divaricata</i>
Phlox, prairie/downy	<i>Phlox pilosa</i>
Obedient plant/false dragonhead	<i>Physostegia virginiana</i>
Mayapple	<i>Podophyllum peltatum</i>
Jacob's ladder	<i>Polemonium reptans</i>
Solomon's seal	<i>Polygonatum biflorum</i>
Mountain mint, Virginia	<i>Pycnanthemum virginianum</i>
Coneflower, grey-headed	<i>Ratibida pinnata</i>
Coneflower, showy	<i>Rudbeckia fulgida</i>
Black-eyed Susan #	<i>Rudbeckia hirta</i>
Coneflower, cutleaf # / **	<i>Rudbeckia laciniata</i>
Black-eyed Susan, sweet #	<i>Rudbeckia subtomentosa</i>
Petunia, wild	<i>Ruellia humilis</i>
Bloodroot #	<i>Sanguinaria canadensis</i>

Ragwort, golden	<i>Senecio aureus</i>
Ragwort, round-leaf	<i>Senecio obovatus</i>
Senna, wild	<i>Senna hebecarpa</i>
Rosinweed	<i>Silphium integrifolium</i>
Compass plant	<i>Silphium laciniatum</i>
Cup plant	<i>Silphium perfoliatum</i>
Dock, prairie	<i>Silphium terebinthinaceum</i>
Blue-eyed grass	<i>Sisyrinchium angustifolium</i>
Goldenrod, bluestem	<i>Solidago caesia</i>
Goldenrod, hairy	<i>Solidago hispida</i>
Goldenrod, grey/field	<i>Solidago nemoralis</i>
Goldenrod, Riddell's	<i>Solidago riddellii</i>
Goldenrod, stiff	<i>Solidago rigida</i>
Goldenrod, showy	<i>Solidago speciosa</i>
Celandine poppy	<i>Stylophorum diphyllum</i>
Aster, heart-leaved	<i>Symphotrichum cordifolium</i>
Aster, smooth #	<i>Symphotrichum laeve</i>
Aster, calico	<i>Symphotrichum lateriflorum</i>
Aster, bigleaf #	<i>Symphotrichum macrophyllum</i>
Aster, New England #	<i>Symphotrichum novae-angliae</i>
Aster, sky blue	<i>Symphotrichum oolengagiense</i>
Meadow-rue, purple **	<i>Thalictrum dasycarpum</i>
Meadow-rue, early	<i>Thalictrum dioicum</i>
Foamflower, heartleaf #	<i>Tiarella cordifolia</i>
Spiderwort #	<i>Tradescantia ohiensis</i>
starflower	<i>Trientalis borealis</i>
Trillium, red	<i>Trillium erectum</i>
Trillium, large-flowered	<i>Trillium grandiflorum</i>
Trillium, yellow	<i>Trillium luteum</i>
Bellwort, tall #	<i>Uvularia grandiflora</i>
Vervain, blue # / **	<i>Verbena hastata</i>
Vervain, hoary #	<i>Verbena stricta</i>
Ironweed	<i>Veronia missurica</i>
Culver's root	<i>Veronicastrum virginicum</i>

Wood violet	<i>Viola palmata</i>
violet, downy yellow	<i>Viola pubescens</i>
violet, long spurred	<i>Viola rostrata</i>

Golden Alexander #	<i>Zizia aurea</i>
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* Above average salt tolerance. Salt tolerance data not available for the majority of native herbaceous plants.

**Suitable for runoff areas

Recommended for beginning gardeners because of their ease of propagation and season-long attractiveness

Native Vines, Grasses, Rushes, Sedges, and Ferns

Vines

Common Name	Scientific Name
virgin's bower **	<i>Clematis virginiana</i>
honeysuckle, smooth	<i>Lonicera dioica</i>
honeysuckle, trumpet	<i>Lonicera sempervirens</i>
moonseed	<i>Menispermum canadensis</i>
thicket creeper	<i>Parthenocissus inserta</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
grape, riverbank **	<i>Vitis riparia</i>

Grasses, Rushes, and Sedges

Common Name	Scientific Name
beachgrass, American	<i>Ammophila brevigulata</i>
bluestem, big	<i>Andropogon gerardii</i>
sweetgrass	<i>Anthoxanthum hirtum</i>
side-oats grama	<i>Bouteloua curtipendula</i>
wood grass, long-awned	<i>Brachyelytrum erectum</i>
brome, prairie	<i>Bromus kalmii</i>
blue-joint	<i>Calamagrostis canadensis</i>
sedge, Bicknell's	<i>Carex bicknellii</i>
sedge, bristly **	<i>Carex comosa</i>
sedge, fringed **	<i>Carex crinita</i>
sedge, field oval	<i>Carex molesta</i>
sedge, Pennsylvania	<i>Carex pennsylvanica</i>
sedge, plantain-leaf	<i>Carex plantaginea</i>
sedge, silver	<i>Carex platyphylla</i>

sedge, Sprengel's	<i>Carex sprengelii</i>
sedge, tussock **	<i>Carex stricta</i>
wood sedge, straight-styled	<i>Carex radiata</i>
sedge, retrorse	<i>Carex retrorsa</i>
Sedge, brown fox	<i>Carex vulpinoidea</i>
sea oats, northern	<i>Chasmanthium latifolium</i>
wild-rye, Canada	<i>Elymus canadensis</i>
bottlebrush grass	<i>Elymus hystrix</i>
slender wheatgrass	<i>Elymus trachycaulus</i>
wild-rye, silky	<i>Elymus villosus</i>
wild-rye, Virginia	<i>Elymus virginicus</i>
fescue, nodding	<i>Festuca subverticillata</i>
fowl manna grass	<i>Glyceria striata</i>
rush, path	<i>Juncus tenuis</i>
rush, soft-stemmed **	<i>Juncus effusus</i>
June grass	<i>Koeleria macrantha</i>
dunegrass, American	<i>Leymus mollis</i>
switchgrass	<i>Panicum virgatum</i>
fowl meadow grass	<i>Poa palustris</i>
bluestem, little *	<i>Schizachyrium scoparium</i>
bulrush, hardstem **	<i>Scirpus acutus</i>
bulrush, green	<i>Scirpus atrovirens</i>
wool-grass **	<i>Scirpus cyperinus</i>
bulrush, softstem **	<i>Scirpus validus</i>
Indian grass	<i>Sorghastrum nutans</i>
prairie cord grass	<i>Spartina pectinata</i>
sand dropseed	<i>Sporobolus cryptandrus</i>
prairie dropseed	<i>Sporobolus heterolepis</i>
purpletop	<i>Tridens flavus</i>

Ferns	
Common Name	Scientific Name
bracken fern	<i>Pteridium aquilinum</i>
christmas fern	<i>Polystichum acrosichoides</i>
cinnamon fern **	<i>Osmunda cinnamomea</i>
interrupted fern	<i>Osmunda claytoniana</i>
lady fern, northern **	<i>Athyrium filix-femina</i>
maidenhair fern	<i>Adiantum pedatum</i>
oak fern	<i>gymnocarpium dryopteris</i>
ostrich fern	<i>Matteuccia struthiopteris</i>

rattlesnake fern	<i>Botrychium virginianum</i>
royal fern **	<i>Osmunda regalis</i>
sensitive fern **	<i>Onoclea sensibilis</i>
woodfern; crested shield fern **	<i>Dryopteris cristata</i>
woodfern, clinton's **	<i>Dryopteris clintoniana</i>
woodfern, evergreen **	<i>Dryopteris intermedia</i>
woodfern, goldie's	<i>Dryopteris goldiana</i>
Fern Ally	
horsetail, water **	<i>Equisetum fluviatile</i>

* Above average salt tolerance. Salt tolerance data not available for the majority of native vines, grasses, rushes, sedges, and ferns.

**Suitable for runoff areas

Suggested Invasive Plant Guidelines

Class I Plants – Planting Prohibited; Management required

The plants below are not yet common in our region, but have proven highly invasive in similar regions. Although plants like kudzu or water hyacinth might be surprising, populations of both species now overwinter in Michigan. Preventing new introductions and managing existing populations while small is the most affordable approach to safeguarding natural resources.

Common Name	Scientific Name	Type
black alder *	<i>Alnus glutinosa</i>	Tree
flowering rush ^ *	<i>Butomus umbellatus</i>	Forb
plumeless thistle ^	<i>Carduus acanthoides</i>	Forb
musk thistle ^	<i>Carduus nutans</i>	Forb
Brazilian water-weed *	<i>Egeria densa</i>	Aquatic
water-hyacinth *	<i>Eichhornia crassipes</i>	Aquatic
Japanese knotweed^ / giant knotweed / Bohemian knotweed	<i>Reynoutria japonica</i> / <i>R. sachalinensis</i> / <i>R. xbohemica</i> ; could also be listed under <i>Fallopia</i> spp. or <i>Polygonum cuspidatum</i>	Forb
reed manna grass *	<i>Glyceria maxima</i>	Grass
giant hogweed ^ *	<i>Heracleum mantegazzianum</i>	Forb
Japanese hops *	<i>Humulus japonicus</i>	Vine
hydrilla *	<i>Hydrilla verticillata</i>	Aquatic
European frog-bit *	<i>Hydrocharis morsus-ranae</i>	Aquatic

Himalayan balsam*	<i>Impatiens glandulifera</i> or <i>Balsamina glandulifera</i>	Forb
Indian balsam *	<i>Lagarosiphon major</i>	Aquatic
dotted duck-weed *	<i>Landoltia punctata</i>	Aquatic
moneywort *	<i>Lysimachia nummularia</i>	Forb
European water-clover *	<i>Marsilea quadrifolia</i>	Aquatic
Japanese stiltgrass	<i>Microstegium vimineum</i>	Grass
Parrot-feather *	<i>Myriophyllum aquaticum</i>	Aquatic
lesser naiad *	<i>Najas minor</i>	Aquatic
sacred lotus *	<i>Nelumbo nucifera</i>	Aquatic
yellow floating heart *	<i>Nymphoides peltata</i>	Aquatic
cotton thistle *	<i>Onopordon acanthium</i>	Forb
coltsfoot *	<i>Petasites hybridus</i>	Forb
amur cork-tree *	<i>Phellodendron amurense</i>	Tree
phragmites (non-native) ^	<i>Phragmites australis</i>	Grass
water lettuce *	<i>Pistea stratioides</i>	Aquatic
Japanese knotweed ^ *	<i>Polygonum cuspidatum</i>	Forb
mile-a-minute-weed	<i>Polygonum perfoliatum</i>	Forb
giant knotweed ^ *	<i>Polygonum sachalinense</i>	Forb
kudzu	<i>Pueraria lobata</i>	Vine
giant salvinia *	<i>Salvinia spp.</i>	Aquatic
water chestnut *	<i>Trapa natans</i>	Aquatic
coltsfoot	<i>Tussilago farfara</i>	Forb
black swallow-wort *	<i>Vincetoxicum nigrum</i>	Vine
pale swallow-wort *	<i>Vincetoxicum rossicum</i>	Vine

* Ornamental plant.

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Class 2 Plants – Planting Prohibited; Management Recommended

The plants below are all on the Top 20 list of the most serious threats to natural areas in northwest Michigan. Management is strongly recommended but not required due to the potential costs involved. If complete removal is not realistic for the site, a plan should be developed to minimize the potential for spread to natural areas.

Common Name	Scientific Name	Type
tree-of-heaven *	<i>Ailanthus altissima</i>	Tree
garlic mustard	<i>Alliaria petiolata</i>	Forb
Japanese barberry *	<i>Berberis thunbergii</i>	Shrub
common barberry	<i>Berberis vulgaris</i> or <i>B. sylvestris</i>	Shrub
Oriental bittersweet *	<i>Celastrus orbiculatus</i>	Vine
Canada thistle ^	<i>Cirsium arvense</i>	Forb
European swamp thistle	<i>Cirsium palustre</i>	Forb
bull thistle ^ *	<i>Cirsium vulgare</i>	Forb
Russian olive *	<i>Elaeagnus angustifolia</i>	Shrub
autumn olive *	<i>Elaeagnus umbellata</i>	Shrub
leafy spurge ^	<i>Euphorbia esula</i>	Forb
glossy buckthorn	<i>Frangula alnus</i> or <i>Rhamnus frangula</i>	Shrub
baby's breath *	<i>Gypsophila paniculata</i>	Forb
dame's rocket *	<i>Hesperis matronalis</i>	Forb
lyme grass *	<i>Leymus arenarius</i>	Grass
honeysuckle(s) (non-native) *	<i>Lonicera fragrantissima</i> , <i>L. maackii</i> , <i>L. morrowii</i> , <i>L. tatarica</i> , <i>L. xbella</i> , <i>L. xylosteum</i> , <i>L. japonica</i>	Shrub
moneywort/creeping Jenny*	<i>Lysimachia nummularia</i>	Forb
purple loosestrife ^ *	<i>Lythrum salicaria</i>	Forb
wild parsnip	<i>Pastinaca sativa</i>	Forb
Ribbon grass (aka reed canary grass) *	<i>Phalaris arundinacea</i>	Grass
Callery/Bradford/Cleveland pear*	<i>Pyrus calleryana</i>	Tree
common buckthorn *	<i>Rhamnus cathartica</i>	Shrub
multiflora rose *	<i>Rosa multiflora</i>	Shrub
narrow-leaved cattail	<i>Typha angustifolia</i>	Forb

* Ornamental plant.

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Class 3 Plants – Planting Prohibited

The plants listed below are all either invasive in the region or are showing signs of becoming invasive in this or in similar regions, and should not be planted. Alternatives should be explored, and management is recommended where possible, and reporting to the Midwest Invasive Species Information Network and/or ISN is appreciated.

Common Name	Scientific Name	Type
velvetleaf ^	<i>Abutilon theophrasti</i>	Forb
amur maple *	<i>Acer ginnala</i>	Tree
Norway maple *	<i>Acer platanoides</i>	Tree
Snow-on-the-mountain (aka goutweed) *	<i>Aegopodium podagraria</i>	Forb
quack grass ^	<i>Agropyron repens</i>	Grass
chocolate-vine *	<i>Akebia quinata</i>	Vine
amaranth species	<i>Amaranthus spp.</i>	Forb
Turquoise/porcelain berry *	<i>Ampelopsis brevipedunculata</i>	Vine
common burdock	<i>Arctium minus</i>	Forb
yellow rocket	<i>Barbarea vulgaris</i>	Forb
smooth brome *	<i>Bromus inermis</i>	Grass
butterfly bush *	<i>Buddleja spp.</i>	Shrub
roving bellflower	<i>Campanula rapunculoides</i>	Forb
bitter cress	<i>Cardamine impatiens</i>	Forb
spotted knapweed ^	<i>Centaurea maculosa</i>	Forb
mouse-ear chickweed	<i>Cerastium fontanum</i>	Forb
celandine *	<i>Chelidonium majus</i>	Forb
lamb's quarters	<i>Chenopodium album</i>	Forb
chicory	<i>Cichorium intybus</i>	Forb
lily of the valley *	<i>Convallaria majalis</i>	Forb
field bindweed ^	<i>Convolvulus arvensis</i>	Forb
crown vetch	<i>Coronilla varia</i>	Forb
orchard grass	<i>Dactylis glomerata</i>	Grass
Jimsonweed ^	<i>Datura stramonium</i>	Forb
queen-anne's-lace ^ *	<i>Daucus carota</i>	Forb
chinese yam	<i>Dioscorea oppositifolia</i>	Vine
common teasel	<i>Dipsacus fullonum/sylvestris</i>	Forb
cut-leaved teasel	<i>Dipsacus laciniatus</i>	Forb
indian strawberry	<i>Duchesnea indica</i>	Forb

barnyard grass	<i>Echinochloa crusgalli</i>	Grass
great hairy willow-herb *	<i>Epilobium hirsutum</i>	Forb
hellebore orchid	<i>Epipactis helleborine</i>	Forb
winged wahoo/burning bush *	<i>Euonymus alatus (including 'compacta')</i>	Shrub
spindle tree *	<i>Euonymus europaea</i>	Shrub
wintercreeper *	<i>Euonymus fortunei</i>	Vine
cypress spurge *	<i>Euphorbia cyparissias</i>	Forb
tall fescue *	<i>Festuca arundinacea</i>	Grass
meadow fescue *	<i>Festuca pratensis</i>	Grass
white bedstraw	<i>Galium mullugo</i>	Forb
sweet woodruff *	<i>Galium odoratum</i>	Forb
avens	<i>Geum urbanum</i>	Forb
ground ivy	<i>Glechoma hederacea</i>	Forb
English ivy *	<i>Hedera helix</i>	Vine
orange day lily *	<i>Hemerocallis fulva</i>	Forb
common St. John's-wort *	<i>Hypericum perforatum</i>	Forb
yellow flag *	<i>Iris pseudacorus</i>	Forb
kalopanax *	<i>Kalopanax septemlobus</i>	Tree
golden archangel *	<i>Lamiastrum galeobdolon</i>	Forb
everlasting pea *	<i>Lathyrus latifolius</i>	Forb
motherwort	<i>Leonurus cardiaca</i>	Forb
silky bush-clover	<i>Lespedeza cuneata</i>	Forb
border privet *	<i>Ligustrum obtusifolium</i>	Shrub
common privet *	<i>Ligustrum vulgare</i>	Shrub
butter-and-eggs	<i>Linaria vulgaris</i>	Forb
birdfoot trefoil *	<i>Lotus corniculatus</i>	Forb
money plant *	<i>Lunaria annua</i>	Forb
white sweet clover	<i>Melilotus alba</i>	Forb
yellow sweet clover	<i>Melilotus officinalis</i>	Forb
white mulberry *	<i>Morus alba</i>	Tree
forget-me-not *	<i>Myosotis scorpioides</i>	Forb
perilla mint *	<i>Perilla frutescens</i>	Forb
timothy	<i>Phleum pratense</i>	Grass
Butterbur	<i>Petasites hybridus, P. japonicus</i>	
Austrian pine *	<i>Pinus nigra</i>	Tree
Scotch pine *	<i>Pinus sylvestris</i>	Tree
English plantain ^	<i>Plantago lanceolata</i>	Forb
common plantain	<i>Plantago major</i>	Forb

Canada bluegrass	<i>Poa compressa</i>	Grass
lady's thumb *	<i>Polygonum persicaria</i>	Forb
white poplar *	<i>Populus alba</i>	Tree
Lombardy poplar *	<i>Populus nigra var. italica</i>	Tree
rough-fruited cinquefoil *	<i>Potentilla recta</i>	Forb
sawtooth oak *	<i>Quercus acutissima</i>	Tree
tall or common buttercup	<i>Ranunculus acris</i>	Forb
lesser-celandine *	<i>Ranunculus ficaria</i>	Forb
buckthorn	<i>Rhamnus utilis</i>	Shrub
black jetbead *	<i>Rhodotypos scandens</i>	Shrub
bristly locust	<i>Robinia hispida</i>	Shrub
black locust *	<i>Robinia pseudoacacia</i>	Tree
Himalayan blackberry	<i>Rubus bifrons</i>	Shrub
Japanese wine raspberry	<i>Rubus phoenicolasius</i>	Shrub
curly dock ^	<i>Rumex crispus</i>	Forb
white willow *	<i>Salix alba</i>	Tree
crack willow *	<i>Salix fragilis</i>	Tree
basket willow *	<i>Salix purpurea</i>	Shrub
bouncing bet *	<i>Saponaria officinalis</i>	Forb
bladder campion	<i>Silene cucubalus</i>	Forb
white catchfly	<i>Silene pratensis (lychnis alba)</i>	Forb
bittersweet nightshade ^	<i>Solanum dulcamara</i>	Forb
perennial sow thistle ^	<i>Sonchus arvensis (s. Uliginosus)</i>	Forb
common chickweed	<i>Stellaria media</i>	Forb
common tansy *	<i>Tanacetum vulgare</i>	Forb
common dandelion	<i>Taraxacum officinale</i>	Forb
field hedge parsley	<i>Torilis arvensis</i>	Forb
Japanese hedge parsley	<i>Torilis japonica</i>	Forb
red clover	<i>Trifolium pratense</i>	Forb
white clover *	<i>Trifolium repens</i>	Forb
Chinese elm, lace bark elm *	<i>Ulmus parvifolia</i>	Tree
Siberian elm *	<i>Ulmus pumila</i>	Tree
mullein *	<i>Verbascum thapsus</i>	Forb
wayfaring tree *	<i>Viburnum lantana</i>	Shrub
European highbush cranberry *	<i>Viburnum opulus</i>	Shrub
cow-vetch	<i>Vicia villosa</i>	Forb
bigleaf periwinkle *	<i>Vinca major</i>	Vine
periwinkle *	<i>Vinca minor</i>	Shrub

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Class 4 Plants – Mowing Recommended

These species should only be planted in areas that will be mowed on a regular basis to prevent the plants from reseeding, and should only be planted outside of wetland areas, natural feature open space, or other natural areas.

Common Name	Scientific Name	Type
See agrostis gigantea	<i>Agrostis alba</i>	Grass
Redtop	<i>Agrostis gigantea</i>	Grass
See agrostis stolonifera	<i>Agrostis palustris</i>	Grass
Creeping bent	<i>Agrostis stolonifera</i>	Grass
Velvet grass	<i>Holcus lanatus</i>	Grass
Perennial rye grass	<i>Lolium perenne</i>	Grass
Kentucky bluegrass	<i>Poa pratensis</i>	Grass
Bluegrass	<i>Poa trivialis</i>	Grass