

Landscaping for Biodiversity with Ohio Native Plants: A Species Guide for Plantings.

Cleveland Metroparks Technical Report 2017 NR/02



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Cover photos beginning top left clockwise: Native plant rain garden (photo by: Jennifer Grieser), Carpenter Bees on Swamp Milkweed (photo by: Tim Krynak), Native plant rain garden (photo by: Jennifer Grieser) Ohio Buckeye Butterfly on New England Aster (photo by: Tim Krynak)

Landscaping for Biodiversity with Ohio Native Plants: A Species Guide for Plantings.

Biodiversity encompasses the variety of life and connectedness among species. Incorporating native plants into the landscape provides natural beauty and enhances beneficial interactions by creating habitat, food, nest sites, pollen and nectar sources for various wildlife including pollinators and birds. Our native plants are best adapted to local environments. These adaptations allow plants to have significant impact on local ecosystem services. These ecosystem services include: provisioning (providing food, clean water and fiber), regulating (climate regulation, stormwater management), supporting (nutrient and water cycling) and cultural (gardening, education in nature).

In recent years, there has been significant decline in pollinator populations. Bumblebees and butterflies including Monarchs have suffered dramatic, declining populations in the last 20 years. The causes of decline are attributed to many environmental stressors including; habitat fragmentation, loss of adequate food resource, climate change and unusual weather patterns, pesticides, diseases and pests. Native plants are a good option for providing the necessary habitat, pollen, nectar and foliage to support pollinators. Even the smallest parcel in an urban backyard can provide beneficial habitat. The suggested lists of native plants will enhance any landscape planting and provide beneficial ecosystem services.

This document is applicable for any type of native planting. Users of this resource can range from professional landscape designers, urban foresters and consultants to novice homeowners and garden club members. The species included represent a variety of forms and are organized into six tables:

- Table 1.** Forbs
- Table 2.** Grasses, Sedges and Rushes
- Table 3.** Ferns
- Table 4.** Vines
- Table 5.** Shrubs
- Table 6.** Trees

Species included in each table represent generalized plant characteristics and are sorted by various attributes. Note that while various resources were consulted to develop this list, some level of subjectivity is inherent when making a suggested list of plant species.

Tables 1-5 Organization: Each table is sorted by size (height), light tolerance, and bloom time.

1. **Height class.** From shortest to tallest.
 - Low (under 1 foot)
 - Medium (1-3 feet)
 - Tall (3-6 feet)
 - Extra tall (> 6 feet)
2. **Light tolerance.** Included as either a constrained light environment or a range of tolerance.
 - Full sun
 - Full sun to (Partial shade) to (Shade)
 - Partial shade
 - Shade
3. **Bloom times.** Duration of flowering may fall within a range, but is unique for each species
 - Spring (April-May)
 - Late Spring (May-June)
 - Summer (June-August)
 - Fall (August- October)

Tables 1-5 also includes attributes describing each species bloom color, soil moisture tolerance, Wetland Indicator Status and Coefficient of Conservation (CofC) (Andreas et al. 2004). The CofC value is assigned to each species based on the range of their ecological tolerance and is scored from 0 to 10. The higher the CofC value, the greater a species habitat specificity and narrower ecological tolerance range will be. (See NOTES section below for additional information)

Table 6 (Trees) Organization: Native tree species are sorted by their overall tolerance to a variety of urban stress.

1. **Relative tolerance to urban stress.**
 - High (Can successfully adapt to a variety of urban conditions)
 - Medium (Can adapt to a few urban conditions)
 - Low (Will not grow well in urban conditions)

Table 6 also includes generalized characteristics and tolerance levels for various stressors common in urban and landscaped environments including salt tolerance, soil compaction, drought tolerance, heat tolerance, and soil pH.

Three additional tables provide definition or clarification for species attributes.

Table 7. Describes wetland indicator categories as defined by the USDA (2008)

Table 8. Describes soil moisture tolerance ranges.

Table 9. Describes Coefficient of Conservatism (C of C)

The diversity of species and forms included in this resource ensure native plant options for any planting environment. The selected species represent plants that are available for purchase from several Ohio native plant nurseries. Prior to using this document, please read the list of special considerations below.

NOTE:

1. Caution should be used when considering a plant with a CofC value of 9 or 10 as these species have a very narrow range of ecological tolerances and may be challenging to establish and care for in a landscape environment.
2. Species highlighted in yellow are state listed in Ohio as extirpated, endangered, threatened or potentially threatened. Please consider carefully the source of seed or propagules and be aware that these species may not always be appropriate.
3. Species highlighted in blue are recommended native plants by the Lake Erie Allegheny Partnership (LEAP) www.leapbio.org
4. When purchasing native plants, ensure that the scientific name matches the plant you are buying. Note that common names are sometimes used for more than one species and that species names do change over time. The most recent list of plant species in Ohio can be found at: www.epa.ohio.gov/Portals/35/401/LU_Veg_Species.html

Web Resources:

To locate a native plant nursery:

<http://leapbio.github.io/nurseries/>

<http://npn.rngr.net/resources/directory>

For more information on native plants and please visit

<http://www.wildflower.org/plants-main>

http://web4.audubon.org/bird/at_home/PlantNativeSpecies.html

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Table 1: Ohio native forbs species list and traits. These are generalized plant characteristics: variability occurs in height, bloom time, bloom color, soil moisture, and sun/shade tolerance.

| | |
|-----------------------------|---|
| | Plants listed as rare in the state of Ohio |
| | Native Plants of the Year as designated by LEAP |
| Color Key for Plant Heights | |
| | Low (under 1ft) |
| | Medium (1 to 3ft) |
| | Tall (3 to 6ft) |
| | Extra Tall (over 6ft) |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|--------------------------------|-----------------------|----------------|-------------------|-----------------------|----------------|-------------------------|--------------------------|--------|
| <i>Anemone canadensis</i> | Canada Anemone | Low (1ft) | Partial Shade | Late Spring (May-Jun) | White | Wet-Moist | Facultative Wetland | 5 |
| <i>Asarum canadense</i> | Wild Ginger | Low (0-1ft) | Partial Shade | Spring (Apr-Jun) | Maroon | Moist | Facultative - | 6 |
| <i>Calopogon tuberosus</i> | Grass-Pink | Low (0-2ft) | Full Sun | Summer (Jun-Aug) | Magenta | Wet-Moist | Facultative Wetland + | 9 |
| <i>Caltha palustris</i> | Marsh Marigold | Low (0-1ft) | Full Sun | Spring (Apr-May) | Yellow | Wet | Obligate Wetland | 6 |
| <i>Chrysogonum virginianum</i> | Golden Knees | Low (<1ft) | Partial Shade | Spring (Apr-May) | Yellow | Dry | Upland | 6 |
| <i>Claytonia caroliniana</i> | Carolina springbeauty | Low (<1ft) | Partial Shade | Spring (Mar-Jun) | White, Pink | Moist | Facultative Upland | 6 |
| <i>Claytonia virginica</i> | Spring Beauty | Low (<1ft) | Shade | Spring (Mar-May) | Pink | Moist | Facultative | 2 |
| <i>Dicentra canadensis</i> | Squirrel Corn | Low (0-1ft) | Partial Shade | Spring (Apr-May) | White, Yellow | Moist | Upland | 6 |
| <i>Dicentra cucullaria</i> | Dutchman's Breeches | Low (0-1ft) | Shade | Spring (Apr-May) | White | Dry | Upland | 6 |
| <i>Erythronium americanum</i> | Yellow Trout Lily | Low (0-1ft) | Partial Shade | Spring (Mar-May) | Yellow | Moist | Upland | 4 |
| <i>Fragaria virginiana</i> | Wild Strawberry | Low (<1ft) | Full Sun to Shade | Spring (Apr-Jun) | White | Moist | Facultative | 1 |
| <i>Geranium maculatum</i> | Wild Geranium | Low (0-1ft) | Partial Shade | Late Spring (May-Jun) | Pink, Lavender | Moist | Facultative | 4 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|--|--------------------------------------|----------------|---------------------------|-----------------------|----------------|-------------------------|--------------------------|--------|
| <i>Hepatica acutiloba</i> | Sharp-Lobed Hepatica | Low (<1ft) | Full Sun to Partial Shade | Spring (Mar-Apr) | White, Pink | Moist | Upland | 5 |
| <i>Hydrophyllum virginianum</i> | Virginia Waterleaf | Low (0-1ft) | Shade | Late Spring (May-Jun) | White, Purple | Moist | Facultative | 4 |
| <i>Menyanthes trifoliata</i> | Buckbean (Bog Bean) | Low (0-2ft) | Full Sun to Partial Shade | Spring (Apr-Jun) | White | Wet | Obligate Wetland | 9 |
| <i>Mitchella repens</i> | Partridge-Berry | Low (<1ft) | Partial Shade | Summer (Jun-Jul) | White, Pink | Moist-Dry | Facultative Upland | 5 |
| <i>Opuntia humifusa</i> | Prickly Pear Cactus | Low (<1ft) | Full Sun | Summer (May-Jul) | Yellow | Dry | Upland | 8 |
| <i>Phlox pilosa</i> | Downy Phlox | Low (1-2ft) | Full Sun to Partial Shade | Spring (Apr-May) | Magenta | Moist | Facultative | 6 |
| <i>Sedum ternatum</i> | Wild Stonecrop (Woodland Stone Crop) | Low (0-1ft) | Shade | Spring (Apr-Jun) | White | Dry | Upland | 5 |
| <i>Sisyrinchium albidum</i> | Pale Blue-Eyed Grass | Low (<1ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | Blue | Moist | Facultative | 6 |
| <i>Sisyrinchium angustifolium</i> | Stout Blue-Eyed Grass | Low (<1ft) | Full Sun to Shade | Late Spring (May-Jun) | Blue | Wet-Moist | Facultative Wetland - | 2 |
| <i>Thalictrum thalictroides</i> | Rue-anemone | Low (0-1ft) | Partial Shade | Spring (Mar-Jun) | White, pink | Moist | Upland | 6 |
| <i>Trillium grandiflorum</i> | Large-Flowered Trillium | Low (0-1ft) | Shade | Spring (Apr-May) | White | Dry | Upland | 5 |
| <i>Viola canadensis</i> | Canadian white violet | Low (1ft) | Shade | Late Spring (May-Jun) | White | Moist | Upland | 5 |
| <i>Viola cucullata</i> | Marsh Blue Violet | Low (<1ft) | Full Sun to Shade | Spring (Apr-Jun) | Blue, Purple | Wet-Moist | Facultative Wetland + | 6 |
| <i>Viola sororia</i> | Common Blue Violet | Low (<1ft) | Full Sun to Partial Shade | Spring (Mar-May) | White, Blue | Moist | Facultative - | 1 |
| <i>Viola sp. (rotundifolia, hastata,)</i> | Violet | Low (<1ft) | Full Sun to Partial Shade | Spring (Apr-May) | Yellow, Violet | Moist | Upland | 7 |
| <i>Waldsteinia fragarioides</i> | Barren strawberry | Low (0-1ft) | Partial Shade | Spring (Apr-May) | Yellow | Moist-Dry | Upland | 6 |
| <i>Acorus americanus</i> | Sweet Flag | Medium (1-3ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | Yellow, Green | Wet | Obligate Wetland | 6 |
| <i>Actaea pachypoda</i> | Doll's Eyes (White Baneberry) | Medium (1-3ft) | Shade | Late Spring (May-Jun) | White | Dry | Upland | 7 |
| <i>Ageratina altissima</i> | White Snakeroot | Medium (1-4ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White | Moist | Facultative | 3 |
| <i>Allium cernuum</i> | Nodding Wild Onion | Medium (1-3ft) | Full Sun to Shade | Summer (Jul-Aug) | Purple | Moist-Dry | Facultative Upland | 5 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|--|----------------------------|----------------|---------------------------|-----------------------|----------------|-------------------------|--------------------------|--------|
| <i>Anaphalis margaritacea</i> | Western Pearly-everlasting | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Oct) | White, yellow | Dry | Upland | 5 |
| <i>Anemone virginiana</i> | Thimbleweed | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Aug) | White | Moist | Facultative | 3 |
| <i>Apocynum cannabinum</i> | Dogbane (Indian Hemp) | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Jul) | White | Moist | Facultative | 1 |
| <i>Aquilegia canadensis</i> | Wild Columbine | Medium (2-3ft) | Full Sun to Shade | Spring (Apr-Jun) | Orange, Yellow | Moist | Facultative | 6 |
| <i>Arisaema dracontium</i> | Green Dragon | Medium (1-3ft) | Shade | Spring (Apr-Jun) | Green, yellow | Wet-Moist | Facultative Wetland - | 5 |
| <i>Arisaema triphyllum subsp. triphyllum</i> | Jack-in-the-Pulpit | Medium(1-3ft) | Full Sun to Partial Shade | Spring (Apr-Jun) | Green | Moist | Facultative - | 3 |
| <i>Asclepias sullivantii</i> | Sullivant's Milkweed | Medium (2-3ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | Pink | Dry | Upland | 8 |
| <i>Asclepias tuberosa</i> | Butterfly Weed | Medium (1-3ft) | Full Sun | Summer (Jun-Aug) | Orange, Yellow | Dry, Sand | Upland | 4 |
| <i>Asclepias verticillata</i> | Whorled Milkweed | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White | Dry | Upland | 4 |
| <i>Astragalus canadensis</i> | Canada Milk Vetch | Medium (1-3ft) | Full Sun to Partial Shade | Summer (May-Jul) | Cream | Moist | Facultative | 3 |
| <i>Baptisia tinctoria</i> | Yellow-False Indigo | Medium (1-3ft) | Full Sun | Summer (May-Aug) | Yellow | Dry | Upland | 6 |
| <i>Bidens frondosa</i> | Spanish Needles | Medium (1-3ft) | Partial Shade | Summer (Jul-Aug) | Yellow | Moist | Facultative Wetland | 2 |
| <i>Blephilia hirsuta</i> | Hairy Woodmint | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Sep) | White | Moist | Facultative - | 4 |
| <i>Camassia scilloides</i> | Wild Hyacinth | Medium (1-3ft) | Full Sun or Shade | Late Spring (May-Jun) | Lavender | Moist | Facultative | 6 |
| <i>Caulophyllum thalictroides</i> | Blue Cohosh | Medium (1-3ft) | Shade | Spring (Apr-May) | Yellow, Brown | Moist | Upland | 7 |
| <i>Chamaecrista fasciculata</i> | Showy Partridge Pea | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Moist-Dry | Facultative Upland | 3 |
| <i>Chelone glabra</i> | Turtlehead | Medium (2-4ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White | Wet | Obligate Wetland | 6 |
| <i>Cryptotaenia canadensis</i> | Canadian Honewort | Medium (1-3ft) | Partial Shade | Summer (Jun-Sep) | White | Moist | Facultative | 3 |
| <i>Dalea purpurea</i> | Purple Prairie Clover | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Aug) | Purple | Dry | Upland | 9 |
| <i>Desmodium paniculatum</i> | Showy Tick Trefoil | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Aug) | Pink | Dry | Upland | 3 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|--------------------------------|--------------------------|----------------|---------------------------|------------------|--------------|-------------------------|--------------------------|--------|
| <i>Echinacea purpurea</i> | Purple Coneflower | Medium (1-3ft) | Full Sun | Summer (Jun-Sep) | Purple | Dry | Upland | 6 |
| <i>Euphorbia corollata</i> | Flowering Spurge | Medium (1-3ft) | Full Sun | Summer (Jun-Aug) | White | Dry | Upland | 4 |
| <i>Eurybia macrophylla</i> | Big Leaf Aster | Medium (1-3ft) | Partial Shade | Fall (Aug-Oct) | White | Dry | Upland | 5 |
| <i>Euthamia graminifolia</i> | Flat-Topped Goldenrod | Medium (1-4ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Moist | Facultative | 2 |
| <i>Froelichia floridana</i> | Large Cottonweed | Medium (1-3ft) | Full Sun | Summer (Jul-Sep) | White | Dry, Sand | Upland | 2 |
| <i>Gnaphalium obtusifolium</i> | Fragrant Cudweed | Medium (1-3ft) | Full Sun | Summer (Jul-Sep) | Cream | Dry | Upland | 2 |
| <i>Helianthus occidentalis</i> | Western Sunflower | Medium (2-3ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Dry | Upland | 7 |
| <i>Hypericum punctatum</i> | Spotted St John's Wort | Medium (1-3ft) | Partial Shade | Summer (Jun-Jul) | Yellow | Moist | Facultative - | 2 |
| <i>Impatiens capensis</i> | Jewelweed | Medium (1-3ft) | Partial Shade | Summer (Jul-Sep) | Orange | Wet-Moist | Facultative Wetland | 2 |
| <i>Iris versicolor</i> | Blueflag Iris | Medium (1-3ft) | Full Sun to Partial Shade | Summer (May-Jul) | Blue, Purple | Wet | Obligate Wetland | 6 |
| <i>Iris virginica</i> | Southern Blue Flag | Medium (1-3ft) | Full Sun to Partial Shade | Summer (May-Jul) | Blue, Yellow | Wet | Obligate Wetland | 6 |
| <i>Justicia americana</i> | Water Willow | Medium (1-3ft) | Full Sun to Partial Shade | Summer (May-Sep) | White, Pink | Wet | Obligate Wetland | 9 |
| <i>Lespedeza hirta</i> | Hairy Bush-Clover | Medium (2-4ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White, Green | Dry, Sand | Upland | 5 |
| <i>Liatris aspera</i> | Rough Blazing Star | Medium (1-4ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Lavender | Dry | Upland | 6 |
| <i>Liatris cylindracea</i> | Cylindrical Blazing Star | Medium (1-3ft) | Full Sun | Summer (Jul-Sep) | Lavender | Dry, Sand | Upland | 8 |
| <i>Liatris squarrosa</i> | Scaly Blazing Star | Medium (1-3ft) | Full Sun | Summer (Jul-Sep) | Lavender | Dry | Upland | 8 |
| <i>Lobelia cardinalis</i> | Cardinal Flower | Medium (2-5ft) | Partial Shade | Summer (Jul-Sep) | Red | Wet-Moist | Facultative Wetland + | 5 |
| <i>Lobelia inflata</i> | Indian Tobacco | Medium (1-3ft) | Full to Partial Shade | Summer (Jun-Oct) | Purple | Moist | Facultative Upland | 1 |
| <i>Lobelia siphilitica</i> | Great Blue Lobelia | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Blue | Wet-Moist | Facultative Wetland + | 3 |
| <i>Ludwigia alternifolia</i> | Seedbox | Medium (1-3ft) | Full Sun | Summer (Jun-Sep) | Yellow | Wet-Moist | Facultative Wetland + | 3 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|-------------------------------|--------------------------|----------------|---------------------------|-----------------------|---------------|-------------------------|--------------------------|--------|
| <i>Lupinus perennis</i> | Wild Lupine | Medium (1-2ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | Blue | Dry, Sand | Upland | 7 |
| <i>Lysimachia ciliata</i> | Fringed Loosestrife | Medium (1-3ft) | Partial Shade | Summer (Jun-Sep) | Yellow | Wet-Moist | Facultative Wetland | 4 |
| <i>Lysimachia lanceolata</i> | Lance-Leaved Loosestrife | Medium (1-3ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | Yellow | Wet-Moist | Facultative Wetland + | 6 |
| <i>Lysimachia terrestris</i> | Swamp Candles | Medium (1-3ft) | Partial Shade | Summer (Jun-Aug) | Yellow | Wet | Obligate Wetland | 6 |
| <i>Lysimachia thyrsiflora</i> | Tufted Loosestrife | Medium (1-3ft) | Full Sun to Shade | Late Spring (May-Jun) | Yellow | Wet | Obligate Wetland | 6 |
| <i>Mentha arvensis</i> | Wild Mint | Medium (1-3ft) | Partial Shade | Summer (Jul-Sep) | White, Purple | Wet-Moist | Facultative Wetland | 2 |
| <i>Mertensia virginica</i> | Bluebells | Medium (1-3ft) | Full to Partial Shade | Spring (Apr-Jun) | Blue, Pink | Wet-Moist | Facultative Wetland | 6 |
| <i>Mimulus ringens</i> | Common Monkey Flower | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Sep) | Blue, Purple | Wet | Obligate Wetland | 4 |
| <i>Mitella diphylla</i> | Bishop's Cap | Medium (1-3ft) | Shade | Spring (Apr-Jun) | White | Moist | Facultative Upland | 6 |
| <i>Monarda fistulosa</i> | Wild Bergamot | Medium (2-4ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Purple, Pink | Dry | Upland | 3 |
| <i>Monarda didyma</i> | Bee Balm | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | Red | Moist | Facultative + | 6 |
| <i>Monarda punctata</i> | Dotted Mint | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Lavender | Dry, Sand | Upland | 7 |
| <i>Packera aurea</i> | Golden Ragwort | Medium (1-3ft) | Full Sun to Shade | Spring (Apr-Jun) | Yellow | Wet-Moist | Facultative Wetland | 4 |
| <i>Packera obovata</i> | Round-leaf Ragwort | Medium (1-3ft) | Partial Shade | Spring (Apr-Jun) | Yellow | Moist | Facultative - | 4 |
| <i>Peltandra virginica</i> | Arrow arum | Medium (1-3ft) | Full Sun | Spring (Apr-May) | Green | Wet | Obligate Wetland | 5 |
| <i>Penstemon digitalis</i> | Foxglove Beard-Tounge | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Sep) | White | Moist | Facultative | 2 |
| <i>Penstemon hirsutus</i> | Hairy Penstemon | Medium (1-3ft) | Full Sun to Shade | Summer (Jun-Jul) | Pink, Purple | Dry | Upland | 3 |
| <i>Persicaria amphibia</i> | Water Smartweed | Medium (1-3ft) | Full Sun | Summer (Jun-Sep) | Pink, Red | Wet | Obligate Wetland | 4 |
| <i>Podophyllum peltatum</i> | Mayapple | Medium (1-3ft) | Full to Partial Shade | Late Spring (May-Jun) | White | Moist | Facultative | 4 |
| <i>Polemonium reptans</i> | Jacob's Ladder | Medium (1-3ft) | Shade | Late Spring (May-Jun) | Blue | Moist | Facultative | 5 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|--|------------------------|----------------|---------------------------|------------------|----------------|-------------------------|--------------------------|--------|
| <i>Pontederia cordata</i> | Pickereel Weed | Medium (1-3ft) | Full Sun | Spring (Apr-May) | White, Blue | Wet | Obligate Wetland | 6 |
| <i>Potentilla arguta</i> | Tall Cinquefoil | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Jul) | White | Dry | Upland | 5 |
| <i>Potentilla norvegica</i> | Rough Cinquefoil | Medium (1-3ft) | Full Sun | Summer (Jun-Aug) | Yellow | Moist | Facultative Upland | 1 |
| <i>Pycnanthemum verticillatum var. pilosum</i> | Hairy Mountain-Mint | Medium (2-4ft) | Full Sun to Partial Shade | Summer (Jul-Aug) | White | Moist | Facultative | 5 |
| <i>Pycnanthemum virginianum</i> | Virginia Mountain Mint | Medium (2-3ft) | Full Sun to Partial Shade | Summer (Jun-Sep) | White | Moist | Facultative | 4 |
| <i>Rudbeckia hirta</i> | Black-Eyed Susan | Medium (1-3ft) | Full Sun | Summer (Jun-Sep) | Yellow | Moist-Dry | Facultative Upland | 1 |
| <i>Sagittaria latifolia</i> | Common Arrowhead | Medium (1-3ft) | Full Sun | Summer (Jul-Sep) | White | Wet | Obligate Wetland | 1 |
| <i>Saururus cernuus</i> | Lizard's tail | Medium (1-3ft) | Shade | Summer (May-Aug) | White | Wet | Obligate Wetland | 8 |
| <i>Silene regia</i> | Royal Catchfly | Medium (2-4ft) | Full Sun to Shade | Summer (Jul-Aug) | Red | Dry | Upland | 8 |
| <i>Solidago caesia</i> | Blue-stemmed Goldenrod | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Dry | Facultative | 5 |
| <i>Solidago flexicaulis</i> | Zig Zag Goldenrod | Medium (1-3ft) | Full Sun to Shade | Summer (Jul-Oct) | Yellow | Moist | Facultative Upland | 5 |
| <i>Solidago nemoralis</i> | Gray Goldenrod | Medium (1-3ft) | Full Sun | Fall (Aug-Oct) | Yellow | Dry | Upland | 2 |
| <i>Solidago riddellii</i> | Riddell's Goldenrod | Medium (1-3ft) | Full Sun | Fall (Aug-Oct) | Yellow | Wet | Obligate Wetland | 8 |
| <i>Solidago speciosa</i> | Showy Goldenrod | Medium (2-3ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Yellow | Dry, Sand | Upland | 5 |
| <i>Solidago ulmifolia</i> | Elm-Leaved Goldenrod | Medium (2-6ft) | Partial Shade | Summer (Jul-Oct) | Yellow | Dry | Upland | 5 |
| <i>Sparganium americanum</i> | American Bur-Reed | Medium (1-3ft) | Full Sun | Summer (May-Aug) | Yellow, Green | Wet | Obligate Wetland | 6 |
| <i>Stylophorum diphyllum</i> | Wood Poppy | Medium (1-3ft) | Full to Partial Shade | Spring (Apr-May) | Orange, Yellow | Dry | Upland | 6 |
| <i>Symphotrichum cordifolium</i> | Blue Wood Aster | Medium (1-3ft) | Partial Shade | Fall (Sep-Oct) | Purple | Dry | Upland | 4 |
| <i>Symphotrichum ericoides</i> | White Heath Aster | Medium (1-3ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | White | Moist | Facultative | 2 |
| <i>Symphotrichum laeve</i> | Smooth Aster | Medium (1-3ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Blue | Dry | Upland | 6 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|-------------------------------------|----------------------------|-----------------|---------------------------|-----------------------|---------------|-------------------------|--------------------------|--------|
| <i>Symphotrichum lanceolatum</i> | Lance-leaf Aster | Medium (1-3ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | White | Wet-Moist | Facultative Wetland | 3 |
| <i>Symphotrichum lateriflorum</i> | Calico Aster | Medium (1-3ft) | Full to Partial Shade | Fall (Aug-Oct) | White | Wet-Moist | Facultative Wetland - | 2 |
| <i>Symphotrichum oolentangiense</i> | Sky Blue Aster | Medium (1- 3ft) | Full Sun to Shade | Fall (Sep-Oct) | Blue, Purple | Dry | Upland | 7 |
| <i>Symphotrichum puniceum</i> | Purplestem Aster | Medium (1-3ft) | Full Sun | Fall (Aug-Oct) | White, Purple | Wet | Obligate Wetland | 7 |
| <i>Symphotrichum racemosum</i> | Small-flower Aster | Medium (1-3ft) | Shade | Fall (Aug-Oct) | White, Yellow | Wet-Moist | Facultative Wetland | 2 |
| <i>Symphotrichum shortii</i> | Short's aster | Medium (1-3ft) | Full to Partial Shade | Fall (Sep-Oct) | Purple | Moist | Upland | 4 |
| <i>Symplocarpus foetidus</i> | Skunk Cabbage | Medium (1-3ft) | Full Sun to Partial Shade | Spring (Mar-Apr) | Green, Brown | Wet | Obligate Wetland | 7 |
| <i>Tephrosia virginiana</i> | Goat's Rue | Medium (1-3ft) | Partial Shade | Summer (Jun-Jul) | Pink, Cream | Dry, Sand | Upland | 6 |
| <i>Teucrium canadense</i> | American Germanader | Medium (1-3ft) | Partial Shade | Summer (May-Aug) | White | Moist | Facultative Wetland - | 3 |
| <i>Thaspium barbinode</i> | Hairy-joint Meadow-parsnip | Medium (1-3ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | Yellow | Moist | Facultative | 4 |
| <i>Tiarella cordifolia</i> | Foam Flower | Medium (1-3ft) | Shade | Spring (Apr-Jun) | White | Moist | Facultative - | 6 |
| <i>Tradescantia ohioensis</i> | Ohio Spiderwort | Medium (2-4ft) | Full Sun | Spring (May-Jul) | Blue, Violet | Moist | Facultative | 5 |
| <i>Uvularia grandiflora</i> | Largeflower Bellwort | Medium (1-3ft) | Shade | Spring (May) | Yellow | Moist | Upland | 5 |
| <i>Verbena stricta</i> | Hoary Vervain | Medium (2-3ft) | Full Sun | Summer (Jun-Sep) | Purple | Dry | Upland | 3 |
| <i>Zizia aurea</i> | Golden Alexanders | Medium (1-3ft) | Full Sun to Partial Shade | Spring (Apr-Jun) | Yellow | Moist | Facultative | 6 |
| <i>Agrimonia parviflora</i> | Small-Flowered Agrimony | Tall (3-6ft) | Shade | Summer (Jun-Aug) | Yellow | Moist | Facultative | 2 |
| <i>Antennaria neglecta</i> | Field Pussytoes | Tall (3-6ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | White | Moist | Facultative - | 1 |
| <i>Aralia racemosa</i> | American Spikenard | Tall (3-6ft) | Full Sun | Summer (Jun-Jul) | White | Dry | Upland | 5 |
| <i>Aruncus dioicus</i> | Goat's beard | Tall (3-6ft) | Full Sun to Shade | Late Spring (May-Jun) | White | Moist | Facultative | 6 |
| <i>Asclepias incarnata</i> | Swamp Milkweed | Tall (3-6ft) | Full Sun | Summer (Jul-Aug) | Pink, Purple | Wet | Obligate Wetland | 4 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|-------------------------------|----------------------------------|----------------|---------------------------|-------------------|---------------|-------------------------|--------------------------|--------|
| <i>Asclepias syriaca</i> | Common Milkweed | Tall (3-6ft) | Full Sun | Summer (Jun-Aug) | Purple | Moist-Dry | Facultative Upland - | 1 |
| <i>Baptisia australis</i> | Blue False Indigo | Tall (3-6ft) | Full Sun | Summer (Jun-Jul) | Blue, purple | Moist-Dry | Facultative Upland - | 6 |
| <i>Baptisia lactea</i> | White False Indigo | Tall (3-4ft) | Full Sun to Partial Shade | Summer (Jun-Jul) | White | Moist | Facultative | 8 |
| <i>Boltonia asteroides</i> | False Aster | Tall (3-5ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | White | Wet-Moist | Facultative Wetland | 7 |
| <i>Cacalia atriplicifolia</i> | Pale Indian Plaintain | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White | Dry | Upland | 6 |
| <i>Campanula americana</i> | Tall Bellflower | Tall (3-6ft) | Partial Shade | Summer (Jun-Aug) | Blue, Purple | Moist | Facultative | 4 |
| <i>Cimicifuga racemosa</i> | Black Snakeroot (Black Cohosh) | Tall (3-6ft) | Shade | Summer (May-Aug) | White | Moist-Dry | Facultative Upland | 7 |
| <i>Cirsium discolor</i> | Pasture Thistle | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jun-Sep) | Purple | Dry | Upland | 4 |
| <i>Cirsium muticum</i> | Swamp thistle | Tall (3-6ft) | Full Sun | Summer (Jul-Sep) | White, Purple | Moist | Obligate Wetland | 8 |
| <i>Coreopsis tripteris</i> | Tall Tickseed | Tall (3-6ft) | Full Sun | Summer (Jul-Oct) | Yellow | Moist | Facultative | 5 |
| <i>Decodon verticillatus</i> | Swamp Loosestrife (Water willow) | Tall (3-6ft) | Full Sun to Partial Sun | Summer (Jul-Sep) | Pink, Purple | Wet | Obligate Wetland | 6 |
| <i>Desmodium canadense</i> | Canada Tick-Trefoil | Tall (3-6ft) | Full Sun | Summer (Jun-Sep) | Pink, Purple | Moist | Facultative | 4 |
| <i>Doellingeria umbellata</i> | Flat-Topped White Aster | Tall (3-6ft) | Full Sun to Shade | Fall (Aug-Oct) | White | Wet-Moist | Facultative Wetland | 3 |
| <i>Eryngium yuccifolium</i> | Rattlesnake Master | Tall (3-6ft) | Full Sun | Summer (Jun-Aug) | White | Moist | Facultative | 7 |
| <i>Eupatorium altissimum</i> | Tall Boneset | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Oct) | White | Dry | Upland | 0 |
| <i>Eupatorium perfoliatum</i> | Boneset | Tall (3-6ft) | Full Sun | Summer (Jul-Sep) | White | Wet-Moist | Facultative Wetland + | 3 |
| <i>Eupatorium serotinum</i> | Late Boneset | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Oct) | White | Moist | Facultative - | 2 |
| <i>Eutrochium maculatum</i> | Spotted Joe-Pye Weed | Tall (3-6ft) | Full Sun | Summer (Aug- Sep) | Red, Purple | Wet-Moist | Facultative Wetland | 6 |
| <i>Eutrochium purpureum</i> | Sweet Joe Pye-Weed | Tall (3-6ft) | Partial Shade | Summer (Aug-Sep) | Pink, Purple | Moist | Facultative | 5 |
| <i>Filipendula rubra</i> | Queen of the Prairie | Tall (4-6ft) | Full Sun to Partial Shade | Summer (Jun-Jul) | Pink | Wet-Moist | Facultative Wetland | 8 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|---------------------------------|----------------------------------|----------------|---------------------------|------------------|--------------|-------------------------|--------------------------|--------|
| <i>Helenium autumnale</i> | Common Sneezeweed | Tall (3-6ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Yellow | Wet-Moist | Facultative Wetland + | 4 |
| <i>Helianthus divaricatus</i> | Woodland Sunflower | Tall (3-6ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Yellow | Wet-Moist | Facultative Wetland + | 4 |
| <i>Helianthus mollis</i> | Ashy Sunflower | Tall (3-6ft) | Full Sun to Partial Shade | Fall (Aug-Sep) | Yellow | Dry | Upland | 7 |
| <i>Heliopsis helianthoides</i> | Smooth Oxeye | Tall (3-6ft) | Full Sun | Summer (Jun-Sep) | Yellow | Dry | Upland | 5 |
| <i>Hibiscus Laevis</i> | Halberd-Leaved Rose Mallow | Tall (3-6ft) | Full Sun to Partial Shade | Fall (Aug-Sep) | Pink, White | Wet | Obligate Wetland | 7 |
| <i>Hibiscus moscheutos</i> | Swamp Mallow | Tall (3-6ft) | Full Sun | Summer (Jul-Sep) | White, Pink | Wet | Obligate Wetland | 4 |
| <i>Hypericum pyramidatum</i> | Great St. John's Wort | Tall (3-6ft) | Full Sun | Summer (Jul-Aug) | Yellow | Moist | Facultative | 7 |
| <i>Lespedeza capitata</i> | Round-Headed Bush-Clover | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White, Green | Moist | Facultative - | 5 |
| <i>Liatris spicata</i> | Spiked Blazing Star | Tall (3-6ft) | Full Sun | Summer (Aug-Sep) | Purple | Moist | Facultative + | 7 |
| <i>Lilium superbum</i> | Turk's Cap Lily | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | Orange | Wet-Moist | Facultative Wetland + | 8 |
| <i>Oenothera biennis</i> | Common Evening Primrose | Tall (3-6ft) | Full Sun to Shade | Summer (Jul-Sep) | Yellow | Moist | Facultative - | 1 |
| <i>Physostegia virginiana</i> | Obedient Plant | Tall (3-6ft). | Full Sun to Shade | Summer (Aug-Sep) | Pink, Purple | Moist | Facultative + | 5 |
| <i>Ratibida pinnata</i> | Gray-Headed Coneflower | Tall (3-6ft) | Full Sun | Summer (Jun-Sep) | Yellow | Dry | Upland | 5 |
| <i>Rudbeckia laciniata</i> | Green-Headed Coneflower | Tall (3-6ft) | Full Sun to Shade | Summer (Jul-Sep) | Yellow | Wet-Moist | Facultative Wetland | 6 |
| <i>Rudbeckia triloba</i> | Three-Lobed Coneflower | Tall (3-6ft) | Full Sun to Shade | Summer (Jul-Oct) | Yellow | Moist-Dry | Facultative upland | 5 |
| <i>Scrophularia marilandica</i> | Late Figwort | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jun-Oct) | Red, Green | Moist | Facultative Upland - | 4 |
| <i>Senna hebecarpa</i> | Northern Wild Senna (Wild Senna) | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Aug) | Yellow | Moist | Facultative | 4 |
| <i>Silphium laciniatum</i> | Compass Plant | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jun-Sep) | Yellow | Dry | Upland | 8 |
| <i>Silphium perfoliatum</i> | Cup Plant | Tall (3-6ft) | Full Sun | Summer (Jul-Sep) | Yellow | Moist | Facultative | 6 |
| <i>Silphium trifoliatum</i> | Carpenter's Square | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Moist-Dry | Facultative | 5 |

| Scientific Name | Common Name | Maximum Height | Light tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|------------------------------------|---------------------|----------------------|---------------------------|------------------|--------------|-------------------------|--------------------------|--------|
| <i>Sium suave</i> | Water Parsnip | Tall (3-6ft) | Full Sun to Shade | Summer (Jul-Sep) | White | Wet | Obligate Wetland | 6 |
| <i>Solidago canadensis</i> | Canada Goldenrod | Tall (3-6ft) | Full Sun to Partial Shade | Fall (Sep-Nov) | Yellow | Moist-Dry | Facultative Upland | 1 |
| <i>Solidago juncea</i> | Early Goldenrod | Tall (3-6ft) | Full Sun to Shade | Summer (Jun-Aug) | Yellow | Moist-Dry | Upland | 2 |
| <i>Solidago rigida</i> | Stiff Goldenrod | Tall (3-6ft) | Full Sun | Fall (Aug-Oct) | Yellow | Dry | Upland | 8 |
| <i>Solidago rugosa</i> | Rough Goldenrod | Tall (3-6ft) | Full Sun | Fall (Sep) | Yellow | Moist | Facultative | 2 |
| <i>Sparganium eurycarpum</i> | Giant Bur-reed | Tall (3-6ft) | Partial Shade | Summer (Jun-Aug) | Green | Wet | Obligate Wetland | 4 |
| <i>Symphotrichum firmum</i> | Smooth swamp aster | Tall (3-6ft) | Full Sun | Fall (Aug-Oct) | White, Blue | Wet-Moist | Obligate Wetland | 7 |
| <i>Symphotrichum novae-angliae</i> | New England Aster | Tall (3-6ft) | Full Sun | Fall (Aug-Oct) | Purple | Wet-Moist | Facultative Wetland - | 2 |
| <i>Thalictrum pubescens</i> | Tall Meadow-Rue | Tall (3-8ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | White | Wet-Moist | Facultative Wetland + | 5 |
| <i>Verbena hastata</i> | Blue Vervain | Tall (3-6ft) | Full Sun | Summer (Jul-Sep) | Blue, Purple | Wet-Moist | Facultative Wetland + | 4 |
| <i>Verbena urticifolia</i> | White Vervain | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jun-Oct) | White | Moist | Facultative Upland | 3 |
| <i>Verbesina alternifolia</i> | Wingstem | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Oct) | Yellow | Moist | Facultative | 5 |
| <i>Vernonia fasciculata</i> | Western Ironweed | Tall (3-6ft) | Full Sun to Shade | Summer (Aug-Sep) | Purple, Red | Moist | Facultative + | 8 |
| <i>Vernonia gigantea</i> | Tall Ironweed | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Purple | Moist | Facultative | 2 |
| <i>Vernonia noveboracensis</i> | New York Ironweed | Tall (3-6ft) | Full Sun | Summer (Aug-Sep) | Red, Purple | Wet-Moist | Facultative Wetland + | 3 |
| <i>Veronicastrum virginicum</i> | Culver's Root | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | White | Moist | Facultative | 7 |
| <i>Amorpha fruticosa</i> | False Indigo | Extra Tall (8 -12ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | Purple | Wet-Moist | Facultative Wetland | 3 |
| <i>Eutrochium fistulosum</i> | Hollow Joe-Pye-Weed | Extra Tall (8 -12ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Rose | Wet-Moist | Facultative Wetland | 6 |
| <i>Helianthus giganteus</i> | Swamp Sunflower | Extra Tall (8 -12ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Wet-Moist | Facultative Wetland | 6 |
| <i>Helianthus grosseserratus</i> | Sawtooth Sunflower | Extra Tall (8 -12ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Yellow | Wet-Moist | Facultative Wetland | 4 |
| <i>Helianthus tuberosus</i> | Jerusalem Artichoke | Extra Tall (8 -12ft) | Full Sun | Summer (Jul-Sep) | Yellow | Moist | Facultative | 3 |
| <i>Silphium terebinthinaceum</i> | Prairie Dock | Extra Tall (8 -12ft) | Full Sun to Partial Shade | Summer (Jul-Sep) | Yellow | Dry | Upland | 8 |

Table 2: Ohio native grasses, sedges and rushes species list and traits. These are generalized plant characteristics: variability occurs in height, bloom time, bloom color, soil moisture, and sun/shade tolerance.

| | |
|-----------------------------|---|
| | Plants listed as rare in the state of Ohio |
| | Native Plants of the Year as designated by LEAP |
| Color Key for Plant Heights | |
| | Low (under 1ft) |
| | Medium (1 to 3ft) |
| | Tall (3 to 6ft) |
| | Extra Tall (over 6ft) |

| Scientific Name | Common Name | Form | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | Clumping or Spreading | C of C |
|---------------------------------|-------------------------|-------|----------------|---------------------------|------------------------|---------------------|-------------------------|--------------------------|-----------------------------|--------|
| <i>Deschampsia flexuosa</i> | Wavy Hair-grass | Grass | Low (0-1ft) | Partial Shade | Summer (Jul-Sep) | Green | Dry | Upland | Clumping | 8 |
| <i>Bouteloua curtipendula</i> | Sideoats Grama Grass | Grass | Medium (1-3ft) | Full Sun to Shade | Summer (Jul-Sep) | Red, Orange, Yellow | Dry | Upland | Spreading | 8 |
| <i>Calamagrostis canadensis</i> | Bluejoint Grass | Grass | Medium (1-3ft) | Full Sun | Summer (Jun-Aug) | Green | Wet-Moist | Facultative Wetland + | Spreading | 4 |
| <i>Diarrhena americana</i> | American Beak Grass | Grass | Medium (1-3ft) | Shade | Summer (Jun-Aug) | Green | Moist | Facultative + | Spreading | 7 |
| <i>Elymus hystrix</i> | Bottlebrush Grass | Grass | Medium (1-3ft) | Full Sun to Shade | Summer (June-Aug) | Green | Dry | Upland | Clumping but spreads easily | 4 |
| <i>Elymus macgregorii</i> | Early Wildrye | Grass | Medium (1-3ft) | Full to Partial Shade | Late Spring (May-Jun) | Green | Wet-Moist | Facultative Wetland | Clumping | 6 |
| <i>Elymus virginicus</i> | Virginia Wild Rye | Grass | Medium (1-3ft) | Full Sun to Shade | Late Spring (May-June) | Yellow | Wet-Moist | Facultative Wetland - | Spreading | 3 |
| <i>Eragrostis spectabilis</i> | Purple Love Grass | Grass | Medium (1-3ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Red, Purple | Dry, Sand | Upland | Spreading | 2 |
| <i>Glyceria canadensis</i> | Rattlesnake Manna Grass | Grass | Medium (1-3ft) | Full Sun | Summer (Jun-Jul) | Green | Wet | Obligate Wetland | Clumping | 7 |

| Scientific Name | Common Name | Form | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | Clumping or Spreading | C of C |
|-----------------------------------|----------------------|-------|----------------|-----------------------|-----------------------|----------------------------|-------------------------|--------------------------|-----------------------------------|--------|
| <i>Glyceria striata</i> | Fowl Manna Grass | Grass | Medium (1-3ft) | Full Sun to Shade | Summer (Jun-Jul) | Green | Wet | Obligate Wetland | Clumping | 2 |
| <i>Koeleria pyramidata</i> | June Grass | Grass | Medium (1-3ft) | Full Sun | Late Spring (May-Jun) | Yellow | Dry, Sand | Upland | Clumping | 10 |
| <i>Muhlenbergia mexicana</i> | Mexican Muhly | Grass | Medium (1-3ft) | Full Sun | Summer (Jul -Aug) | Green | Moist | Facultative Wetland | Spreading | 4 |
| <i>Panicum rigidulum</i> | Redtop Panicgrass | Grass | Medium (1-3ft) | Full Sun | Summer (Jul-Aug) | Green | Moist | Facultative Wetland + | Spreading and Clumping | 5 |
| <i>Schizachyrium scoparium</i> | Little Bluestem | Grass | Medium (1-3ft) | Full Sun to Shade | Summer (Aug-Sep) | White, Green, Brown | Moist-Dry | Facultative Upland - | Clumping | 5 |
| <i>Sporobolus cryptandrus</i> | Sand Dropseed | Grass | Medium (1-3ft) | Full Sun | Summer (Jun-Oct) | Yellow | Dry, Sand | Upland | Clumping | 6 |
| <i>Sporobolus heterolepis</i> | Prairie Dropseed | Grass | Medium (1-3ft) | Full Sun | Summer (Jun-Aug) | Pink, Yellow, Green, Brown | Dry | Upland | Clumping | 8 |
| <i>Andropogon virginicus</i> | Broomsedge | Grass | Tall (3-6ft) | Partial Shade | Fall (Sept-Nov) | Yellow | Moist | Facultative Upland | Clumping | 3 |
| <i>Bromus pubescens</i> | Hairy Woodland Brome | Grass | Tall (3-6ft) | Full to Partial Shade | Summer (May-Jul) | Green | Moist | Facultative Upland | Clumping | 4 |
| <i>Chasmanthium latifolium</i> | Wild River Oats | Grass | Tall (3-6ft) | Shade | Summer (Jun-Sep) | Green | Moist-Dry | Facultative upland | Clumping | 7 |
| <i>Cinna arundinacea</i> | Wood-reed | Grass | Tall (3-6ft) | Shade | Summer (Jul-Sep) | Green | Wet-Moist | Facultative Wetland | Spreading | 4 |
| <i>Dichanthelium clandestinum</i> | Deertongue | Grass | Tall (3-6ft) | Full Sun | Summer (May-Sep) | N/A | Wet | Facultative + | Spreading and Clumping | 2 |
| <i>Elymus canadensis</i> | Canada Wild-Rye | Grass | Tall (3-6ft) | Full Sun to Shade | Summer (Jul-Sep) | Yellow, Green, Brown | Moist-Dry | Facultative Upland + | Clumping and Spreads Aggressively | 6 |
| <i>Elymus riparius</i> | Riverbank Wildrye | Grass | Tall (3-6ft) | Full to Partial Shade | Summer (Jul) | Yellow | Moist | Facultative Wetland | Clumping | 5 |
| <i>Elymus villosus</i> | Hairy Wildrye | Grass | Tall (3-6ft) | Full to Partial Shade | Summer (Jul) | Green | Moist-Dry | Facultative Upland - | Clumping | 4 |
| <i>Glyceria grandis</i> | Tall Manna Grass | Grass | Tall (3-6ft) | Full Sun | Summer (Jun-Jul) | Green | Wet | Obligate Wetland | Clumping | 7 |
| <i>Panicum virgatum</i> | Switch Grass | Grass | Tall (3-6ft) | Full Sun | Summer (Aug-Sep) | Green, Brown | Moist | Facultative | Clumping | 4 |
| <i>Scirpus cyperinus</i> | Wool-Grass | Grass | Tall (3-6ft) | Full Sun | Summer (Jun-Sep) | Green, Brown | Wet-Moist | Facultative Wetland + | Clumping | 1 |
| <i>Spartina pectinata</i> | Prairie Cord Grass | Grass | Tall (3-6ft) | Full Sun | Summer (Jun) | Yellow | Wet | Obligate Wetland | Spreading | 5 |

| Scientific Name | Common Name | Form | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | Clumping or Spreading | C of C |
|--|-------------------------|-------|-------------------|---------------------------|-----------------------|------------------|-------------------------|--------------------------|---------------------------------|--------|
| <i>Sorghastrum nutans</i> | Indian Grass | Grass | Tall (3-6ft) | Full Sun to Partial Shade | Fall (Aug-Oct) | Yellow | Dry | Upland | Clumping | 5 |
| <i>Tridens flavus</i> | Purpletop Tridens | Grass | Tall (3-6ft) | Partial Shade | Fall (Aug-Nov) | Purple | Dry | Facultative Upland | Spreading | 1 |
| <i>Andropogon gerardii</i> | Big Bluestem | Grass | Extra Tall (>6ft) | Full Sun to Shade | Fall (Aug-Oct) | Red, Blue, Brown | Moist | Facultative | Clumping | 5 |
| <i>Carex communis</i> | Fibrousroot Sedge | Sedge | Low (0-1ft) | Full Sun to Partial Shade | Spring (Apr-Jun) | N/A | Moist | Upland | Clumping | 4 |
| <i>Carex glaucoidea</i> | Blue Wood Sedge | Sedge | Low (0-1ft) | Partial Shade | Late Spring (May-Jun) | N/A | Moist | Facultative | Clumping | 5 |
| <i>Carex hirtifolia</i> | Pubescent Sedge | Sedge | Low (0-1ft) | Shade | Summer (May-Jul) | N/A | Moist-Dry | Upland | Spreading and Somewhat Clumping | 3 |
| <i>Carex laxiculmis</i> var. <i>laxiculmis</i> | Spreading Sedge | Sedge | Low (0-1ft) | Shade | Summer (Jun-Jul) | N/A | Wet-Moist | Upland | Spreading and Clumping | 3 |
| <i>Carex platyphylla</i> | Broad-Leaved Wood Sedge | Sedge | Low (0-1ft) | Shade | Spring (May) | N/A | Dry | Upland | Clumping | 6 |
| <i>Carex woodii</i> | Pretty Sedge | Sedge | Low (0-1ft) | Partial Shade | Spring (Apr-May) | N/A | Moist | Upland | Spreading | 7 |
| <i>Carex brevior</i> | Tufted-Fescue Sedge | Sedge | Medium (1-3ft) | Full Sun | Summer (Jun-Jul) | N/A | Dry | Upland | Clumping | 8 |
| <i>Carex careyana</i> | Carey's Sedge | Sedge | Medium (1-3ft) | Partial Shade | Spring (Apr-Jun) | N/A | Moist | Upland | Spreading and Clumping | 7 |
| <i>Carex crinita</i> | Drooping Sedge | Sedge | Medium (1-3ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Clumping | 3 |
| <i>Carex cristatella</i> | Crested Sedge | Sedge | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | N/A | Wet-Moist | Facultative Wetland | Spreading | 3 |
| <i>Carex davisii</i> | Davis' Sedge | Sedge | Medium (1-3ft) | Partial Shade | Summer (May-Jul) | N/A | Moist | Facultative - | Spreading | 5 |
| <i>Carex frankii</i> | Frank's Sedge | Sedge | Medium (1-3ft) | Full Sun to Shade | Summer (Jun-Aug) | N/A | Wet | Obligate Wetland | Spreading | 2 |
| <i>Carex gracilescens</i> | Slender Sedge | Sedge | Medium (1-3ft) | Full to Partial Shade | Spring (Apr-Jun) | N/A | Moist-Dry | Upland | Spreading and Clumping | 3 |
| <i>Carex gracillima</i> | Graceful Sedge | Sedge | Medium (1-3ft) | Partial Shade | Spring (Apr-Jul) | N/A | Wet-Moist | Facultative Upland | Clumping | 4 |
| <i>Carex grayi</i> | Gray's Sedge | Sedge | Medium (1-3ft) | Shade | Summer (May-Aug) | N/A | Wet-Moist | Facultative Wetland + | Clumping | 5 |
| <i>Carex hirsutella</i> | Hairy-leaved Sedge | Sedge | Medium (1-3ft) | S Full to Partial shade | Spring (April-May) | N/A | Dry | Facultative Upland | Spreading | 2 |

| Scientific Name | Common Name | Form | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | Clumping or Spreading | C of C |
|-----------------------------|--------------------|-------|----------------|---------------------------|------------------------|-------------|-------------------------|--------------------------|--------------------------------|--------|
| <i>Carex hystericina</i> | Porcupine Sedge | Sedge | Medium (1-3ft) | Full Sun to Shade | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Clumping | 5 |
| <i>Carex lacustris</i> | Lake Sedge | Sedge | Medium (1-3ft) | Full Sun to Shade | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Strongly Spreading | 5 |
| <i>Carex lupulina</i> | Hop Sedge | Sedge | Medium (1-3ft) | Partial Shade | Summer (Jun-Aug) | N/A | Wet | Obligate Wetland | Spreading | 3 |
| <i>Carex lurida</i> | Bottlebrush Sedge | Sedge | Medium (1-3ft) | Partial Shade | Summer (Jun) | N/A | Wet | Obligate Wetland | Spreading and Clumping | 3 |
| <i>Carex molesta</i> | Troublesome Sedge | Sedge | Medium (1-3ft) | Full Sun to Shade | Summer (Jun-Jul) | N/A | Moist-Dry | Facultative Upland | Spreading and Clumping | 3 |
| <i>Carex muskingumensis</i> | Palm Sedge Grass | Sedge | Medium (1-3ft) | Full Sun to Shade | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Spreading | 7 |
| <i>Carex pennsylvanica</i> | Pennsylvania Sedge | Sedge | Medium (1-3ft) | Full Sun to Shade | Spring (May) | N/A | Dry | Upland | Spreading | 3 |
| <i>Carex plantaginea</i> | Plantain Sedge | Sedge | Medium (1-3ft) | Shade | Spring (Apr-Jun) | N/A | Moist-Dry | Facultative Upland - | Clumping | 8 |
| <i>Carex radiata</i> | Radiate Sedge | Sedge | Medium (1-3ft) | Shade | Spring (Apr-May) | N/A | Moist | Facultative | Clumping | 6 |
| <i>Carex sparganioides</i> | Bur-reed Sedge | Sedge | Medium (1-3ft) | Full to Partial Shade | Late Spring (May-June) | N/A | Moist | Facultative Upland | Clumping | 3 |
| <i>Carex stipata</i> | Crowded Sedge | Sedge | Medium (1-3ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Spreading | 2 |
| <i>Carex stricta</i> | Tussock Sedge | Sedge | Medium (1-3ft) | Full Sun | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Spreading and Clumping | 5 |
| <i>Carex tuckermanii</i> | Tuckerman's Sedge | Sedge | Medium (1-3ft) | Partial Shade | Summer (Jun-Aug) | N/A | Wet-Moist | Obligate Wetland | Spreading and Clumping | 8 |
| <i>Carex vulpinoidea</i> | Fox Sedge | Sedge | Medium (1-3ft) | Full to Partial Shade | Late Spring (May-Jun) | N/A | Dry | Upland | Spreading and Clumping | 1 |
| <i>Carex bromoides</i> | Bromelike Sedge | Sedge | Tall (3-6ft) | Full Sun to Partial Shade | Spring (Apr-May) | N/A | Moist | Facultative Wetland | Clumping and Forms Colonies | 7 |
| <i>Carex comosa</i> | Bearded Sedge | Sedge | Tall (3-6ft) | Full Sun | Summer (Jul-Aug) | N/A | Wet | Obligate Wetland | Clumping | 2 |
| <i>Carex emoryi</i> | Emory's Sedge | Sedge | Tall (3-6ft) | Full Sun to Partial Shade | Late Spring (May-Jun) | N/A | Wet | Obligate Wetland | Spreading and Densely Clumping | 8 |

| Scientific Name | Common Name | Form | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | Clumping or Spreading | C of C |
|---------------------------------------|----------------------|-------|----------------|-----------------|-------------------|--------------|-------------------------|--------------------------|------------------------|--------|
| <i>Carex normalis</i> | Large Straw Sedge | Sedge | Tall (3-6ft) | Full Sun | Summer (May-July) | N/A | Moist | Facultative | Clumping | 4 |
| <i>Schoenoplectus pungens</i> | Common Three-square | Sedge | Tall (3-6ft) | Full Sun | Spring (Apr-May) | Brown | Wet-Moist | Facultative Wetland + | Spreading | 5 |
| <i>Schoenoplectus tabernaemontani</i> | Soft-Stemmed Bulrush | Sedge | Tall (3-6ft) | Full Sun | Spring (Apr-May) | Red | Wet | Obligate Wetland | Spreading | 2 |
| <i>Scirpus atrovirens</i> | Green Bulrush | Sedge | Tall (3-6ft) | Full Sun | Summer (Jun-Jul) | Green, Brown | Wet | Obligate Wetland | Spreading | 1 |
| <i>Juncus effusus</i> | Soft Rush | Rush | Medium (1-3ft) | Full Sun | Summer (Jun-Jul) | Green, Brown | Wet-Moist | Facultative Wetland + | Spreading and Clumping | 1 |
| <i>Juncus torreyi</i> | Torrey's Rush | Rush | Medium (1-3ft) | Full Sun | Summer (Jul-Oct) | Green | Wet-Moist | Facultative Wetland | Spreading | 3 |

Table 3: Ohio native fern species list and traits. These are generalized plant characteristics: variability occurs in height, soil moisture, and sun/shade tolerance.

| | |
|-----------------------------|---|
| | Plants listed as rare in the state of Ohio |
| | Native Plants of the Year as designated by LEAP |
| Color Key for Plant Heights | |
| | Low (under 1ft) |
| | Medium (1 to 3ft) |
| | Tall (3 to 6ft) |
| | Extra Tall (over 6ft) |

| Scientific Name | Common Name | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|--------------------------------|----------------------------|----------------|-----------------------|------------------|-------------|-------------------------|--------------------------|--------|
| <i>Dryopteris intermedia</i> | Intermediate woodfern | Low (0-1ft) | Shade | N/A | N/A | Moist | Facultative Upland | 6 |
| <i>Adiantum pedatum</i> | Maidenhair Fern | Medium (1-3ft) | Shade | Summer | N/A | Moist | Facultative - | 6 |
| <i>Athyrium filix-femina</i> | Lady Fern | Medium (1-3ft) | Shade | Summer | N/A | Moist | Facultative | 5 |
| <i>Athyrium thelypteroides</i> | Silvery glade fern | Medium (1-3ft) | Full Sun to Shade | N/A | N/A | Moist | Facultative | 6 |
| <i>Cystopteris bulbifera</i> | Bulblet bladderfern | Medium (1-3ft) | Shade | Summer (Jun-Sep) | N/A | Moist | Facultative | 7 |
| <i>Cystopteris protrusa</i> | Lowland bladderfern | Medium (1-3ft) | Shade | Spring (Apr-May) | Green | Moist | Upland | 5 |
| <i>Cystopteris tenuis</i> | Upland brittle bladderfern | Medium (1-3ft) | Full to Partial Shade | N/A | N/A | Moist | Upland | 5 |
| <i>Dryopteris carthusiana</i> | Spinulose Shield Fern | Medium (1-3ft) | Shade | Summer | N/A | Wet-Moist | Facultative Wetland + | 5 |
| <i>Dryopteris cristata</i> | Crested woodfern | Medium (1-3ft) | Full Sun to Shade | N/A | N/A | Moist | Facultative Wetland + | 8 |
| <i>Dryopteris marginalis</i> | Marginal Shield Fern | Medium (1-3ft) | Shade | Summer | N/A | Moist-Dry | Facultative Upland - | 5 |
| <i>Onoclea sensibilis</i> | Sensitive Fern | Medium (1-3ft) | Full Sun to Shade | Summer | N/A | Wet-Moist | Facultative Wetland | 2 |

| Scientific Name | Common Name | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|-----------------------------------|------------------|----------------|-----------------------|--------------|-------------|-------------------------|--------------------------|--------|
| <i>Phegopteris hexagonoptera</i> | Broad beech fern | Medium (1-3ft) | Shade | N/A | N/A | Moist | Facultative | 7 |
| <i>Polystichum acrostichoides</i> | Christmas Fern | Medium (1-3ft) | Shade | Summer | N/A | Moist-Dry | Facultative Upland - | 3 |
| <i>Pteridium aquilinum</i> | Bracken Fern | Medium (1-3ft) | Full to Partial Shade | Summer | N/A | Moist | Facultative | 1 |
| <i>Thelypteris palustris</i> | Marsh Fern | Medium (1-3ft) | Full Sun | Summer | N/A | Wet-Moist | Facultative Wetland + | 6 |
| <i>Dennstaedtia punctilobula</i> | Hay-scented Fern | Tall (3-6ft) | Shade | Summer | N/A | Dry | Upland | 6 |
| <i>Equisetum hyemale</i> | Horsetail Rush | Tall (3-6ft) | Full Sun to Shade | N/A | N/A | Wet-Moist | Facultative Wetland | 2 |
| <i>Matteuccia struthiopteris</i> | Ostrich Fern | Tall (3-6ft) | Partial Shade | Summer | N/A | Wet-Moist | Facultative Wetland | 6 |
| <i>Osmunda cinnamomea</i> | Cinnamon Fern | Tall (3-6ft) | Shade | Summer | N/A | Wet-Moist | Facultative Wetland | 6 |
| <i>Osmunda claytoniana</i> | Interrupted Fern | Tall (3-6ft) | Shade | Summer (Jun) | Brown | Moist | Facultative | 6 |
| <i>Osmunda regalis</i> | Royal Fern | Tall (3-6ft) | Full Sun to Shade | Summer | N/A | Wet | Obligate Wetland | 7 |

Table 4: Ohio native vine species list and traits. These are generalized plant characteristics: variability occurs in height, soil moisture, and sun/shade tolerance. Plants highlighted in yellow are state listed in Ohio – please be aware and use with limited application.

| | |
|-----------------------------|---|
| | Plants listed as rare in the state of Ohio |
| | Native Plants of the Year as designated by LEAP |
| Color Key for Plant Heights | |
| | Low (under 1ft) |
| | Medium (1 to 3ft) |
| | Tall (3 to 6ft) |
| | Extra Tall (over 6ft) |

| Scientific Name | Common Name | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|------------------------------------|------------------|-------------------|-----------------------|-----------------------|--------------|-------------------------|--------------------------|--------|
| <i>Apios americana</i> | Ground nut | Low (0-1ft) | Shade | Summer (Jul-Sep) | Pink, Purple | Wet-Moist | Facultative Wet | 3 |
| <i>Amphicarpaea bracteata</i> | Hog peanut | Tall (3-6ft) | Partial Shade | Summer (Aug-Sep) | Purple | Moist | Facultative | 4 |
| <i>Clitoria mariana</i> | Butterfly Pea | Tall (3-6ft) | Full to Partial Shade | Summer (Jun-Aug) | Pink, Blue | Dry | Upland | 6 |
| <i>Campsis radicans</i> | Trumpet Vine | Extra Tall (>6ft) | Full Sun | Summer (Jun-Sep) | Red, Orange | Moist-Dry | Facultative | 1 |
| <i>Clematis virginiana</i> | Virgin's Bower | Extra Tall (>6ft) | Full Sun to Shade | Summer (Jul-Sep) | White, Green | Moist-Dry | Facultative | 3 |
| <i>Dioscorea villosa</i> | Wild Yam | Extra Tall (>6ft) | Full to Partial Shade | Spring (Apr-Jun) | White, Green | Wet-Moist | Facultative + | 4 |
| <i>Echinocystis lobata</i> | Wild Cucumber | Extra Tall (>6ft) | Full Sun to Shade | Summer (Jul, Aug) | Green, White | Wet-Moist | Facultative | 2 |
| <i>Lonicera dioica</i> | Wild Honeysuckle | Extra Tall (>6ft) | Full Sun to Shade | Late Spring (May-Jun) | Red, Yellow | Moist-Dry | Facultative Upland | 5 |
| <i>Menispermum canadense</i> | Moonseed | Extra Tall (>6ft) | Full Sun to Shade | Summer (Jun-Jul) | White, Green | Moist | Facultative Upland | 5 |
| <i>Parthenocissus quinquefolia</i> | Virginia Creeper | Extra Tall (>6ft) | Full to Partial Shade | Late Spring (May-Jun) | White, Green | Moist-Dry | Facultative Upland | 2 |
| <i>Vitis aestivalis</i> | Summer Grape | Extra Tall (>6ft) | Full Sun to Shade | Summer (May-Jul) | Green, White | Moist | Facultative Upland | 4 |

Table 5: Ohio native shrubs species list and traits. These are generalized plant characteristics: variability occurs in height, bloom time, bloom color, soil moisture, and sun/shade tolerance.

| | |
|-----------------------------|---|
| | Plants listed as rare in the state of Ohio |
| | Native Plants of the Year as designated by LEAP |
| Color Key for Plant Heights | |
| | Low (under 1ft) |
| | Medium (1 to 3ft) |
| | Tall (3 to 6ft) |
| | Extra Tall (over 6ft) |

| Scientific Name | Common Name | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|-----------------------|-------------------------|----------------|---------------------------|------------------|---------------------|-------------------------|--------------------------|--------|
| Cornus canadensis | Bunchberry | Low (0-1ft) | Full Sun to Shade | Summer (Jun-Sep) | White | Moist | Facultative - | 8 |
| Gaultheria procumbens | American wintergreen | Low (0-1ft) | Partial Shade | Spring (Mar-May) | White | Moist-Dry | Facultative Upland | 5 |
| Ceanothus americanus | New Jersey Tea | Medium (1-3ft) | Full Sun to Partial Shade | Summer (Jun-Aug) | White | Dry | Upland | 5 |
| Diervilla lonicera | Bush-Honeysuckle | Medium (1-3ft) | Shade | Summer (Jun-Aug) | Red, Orange, Yellow | Dry | Upland | 7 |
| Hypericum prolificum | Shrubby St. John's Wort | Medium (1-3ft) | Full Sun | Summer (Jul-Aug) | Yellow | Moist | Facultative | 3 |
| Ledum groenlandicum | Labrador Tea | Medium (1-3ft) | Full Sun to Partial Shade | Summer (May-Aug) | White | Wet | Obligate Wetland | 10 |
| Rosa carolina | Pasture Rose | Medium (1-3ft) | Full Sun | Summer (Jul-Sep) | Pink | Dry, Sand | Upland | 4 |
| Rosa palustris | Swamp Rose | Medium (1-3ft) | Full Sun | Summer (Jul-Aug) | Pink | Wet | Obligate Wetland | 5 |
| Rubus odoratus | Flowering Raspberry | Medium (1-3ft) | Full Sun to Shade | Summer (Jun-Aug) | Pink, Purple | Dry | Upland | 5 |
| Vaccinium pallidum | Hillside blueberry | Medium (1-3ft) | Full Sun to Shade | Spring (Apr-May) | Green, Pink | Dry | Upland | 6 |
| Comptonia peregrina | Sweetfern | Tall (3-6ft) | Partial Shade | Summer (May-Jun) | White, Green, Brown | Dry, Sand | Upland | 8 |
| Cornus amomum | Silky Dogwood | Tall (3-6ft) | Full Sun to Partial Shade | Spring (May-Jul) | White | Wet-Moist | Facultative Wetland | 2 |

| Scientific Name | Common Name | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|---------------------------------|--------------------------|-------------------|---------------------------|-----------------------|----------------------|-------------------------|--------------------------|--------|
| Nemopanthus mucronatus | Catberry | Tall (3-6ft) | Full Sun to Partial Shade | Summer (Jul-Aug) | White | Wet | Obligate Wetland | 10 |
| Prunus pumila | Sand Cherry | Tall (3-6ft) | Full Sun | Summer (Jun-Jul) | White | Dry, Sand | Upland | 10 |
| Spiraea alba | Meadow-Sweet | Tall (3-6ft) | Full Sun | Summer (Jun-Sep) | White | Wet-Moist | Facultative Wetland + | 3 |
| Symphoricarpos albus var. albus | Snowberry | Tall (3-6ft) | Full Sun to Shade | Summer (Jun-Jul) | White, Pink | Moist-Dry | Facultative Upland - | 8 |
| Alnus incana | Speckled Alder | Extra Tall (>6ft) | Full Sun | Late Spring (May-Jun) | Yellow, Green, Brown | Wet-Moist | Facultative Wetland + | 6 |
| Alnus serrulata | Smooth Alder | Extra Tall (>6ft) | Full Sun | Spring (Apr) | Red, Green, Brown | Wet | Obligate Wetland | 6 |
| Amelanchier arborea | Downy Serviceberry | Extra Tall (>6ft) | Full Sun to Partial Shade | Spring (Apr-May) | White | Moist | Facultative - | 5 |
| Amelanchier laevis | Allegheny Serviceberry | Extra Tall (>6ft) | Full Sun to Shade | Spring (Mar-May) | White | Moist | Facultative | 5 |
| Aralia spinosa | Devil's Walkingstick | Extra Tall (>6ft) | Partial Shade | Summer (Jun-Aug) | White | Moist | Facultative | 5 |
| Asimina triloba | Paw-Paw | Extra Tall (>6ft) | Full Sun to Shade | Spring (Apr-May) | Purple | Moist | Facultative + | 6 |
| Calycanthus floridus | Sweet Shrub | Extra Tall (>6ft) | Partial Shade | Summer (May-Jul) | Red | Dry | Facultative Upland | 6 |
| Cephalanthus occidentalis | Buttonbush | Extra Tall (>6ft) | Full Sun | Summer (Jun-Aug) | White | Wet | Obligate Wetland | 6 |
| Cercis canadensis | Redbud | Extra Tall (>6ft) | Full Sun to Shade | Spring (Apr-May) | Magenta | Moist | Facultative - | 3 |
| Cornus drummondii | Rough-Leaved Dogwood | Extra Tall (>6ft) | Shade | Spring (Apr-Jun) | White | Moist | Facultative | 3 |
| Cornus racemosa | Gray Dogwood | Extra Tall (>6ft) | Full Sun to Shade | Late Spring (May-Jun) | White, Green | Moist | Facultative - | 1 |
| Cornus sericea | Red-Osier Dogwood | Extra Tall (>6ft) | Full Sun | Late Spring (May-Jun) | Creamy White | Wet-Moist | Facultative Wetland + | 3 |
| Corylus americana | American Hazelnut | Extra Tall (>6ft) | Shade | Spring (Apr-May) | Brown, Red | Moist | Facultative - | 4 |
| Euonymus americanus | American Strawberry Bush | Extra Tall (>6ft) | Partial Shade | Spring (May- Jun) | Green | Moist | Facultative | 6 |
| Euonymus atropurpureus | Burning-Bush | Extra Tall (>6ft) | Partial Shade | Spring (April -Jun) | Purple | Moist-Dry | Facultative Upland | 3 |
| Hamamelis virginiana | Witch-hazel | Extra Tall (>6ft) | Partial Shade | Fall (Oct-Nov) | Yellow | Moist | Facultative - | 5 |

| Scientific Name | Common Name | Maximum Height | Light Tolerance | Bloom Time | Bloom Color | Soil Moisture Tolerance | Wetland Indicator Status | C of C |
|-------------------------------|---------------------|-------------------|---------------------------|-----------------------|---------------------|-------------------------|--------------------------|--------|
| Hydrangea arborescens | Wild Hydrangea | Extra Tall (>6ft) | Partial Shade | Summer (Jun-Aug) | White | Moist | Facultative | 7 |
| Ilex verticillata | Winterberry | Extra Tall (>6ft) | Full Sun to Shade | Summer (May-Jul) | White | Wet-Moist | Facultative Wetland + | 6 |
| Lindera benzoin | Spice Bush | Extra Tall (>6ft) | Shade | Spring (Apr-May) | Yellow | Wet-Moist | Facultative Wetland - | 5 |
| Morella pensylvanica | Northern Bayberry | Extra Tall (>6ft) | Partial Shade | Summer (Jul-Oct) | Yellow | Moist | Facultative | 10 |
| Physocarpus opulifolius | Ninebark | Extra Tall (>6ft) | Full Sun to Partial Shade | Spring (May-Jun) | White, Pink | Wet-Moist | Facultative Wetland - | 4 |
| Ptelea trifoliata | Wafer Ash | Extra Tall (>6ft) | Full Sun | Spring (Apr) | White | Dry | Facultative | 5 |
| Rhododendron calendulaceum | Flame Azalea | Extra Tall (>6ft) | Partial Shade | Late Spring (May-Jun) | Red, Orange, Yellow | Dry | Upland | 8 |
| Rhododendron periclymenoides | Pinkster-Flower | Extra Tall (>6ft) | Partial Shade | Spring (Mar-May) | White, Pink | Moist | Facultative | 7 |
| Rhododendron prinophyllum | Roseshell Azalea | Extra Tall (>6ft) | Partial Shade | Late Spring (May-Jun) | Pink, Purple | Moist | Facultative | 7 |
| Rhus aromatica var. aromatica | Fragrant Sumac | Extra Tall (>6ft) | Full Sun to Shade | Spring (April -Jun) | Yellow | Dry | Upland | 3 |
| Rhus typhina | Staghorn Sumac | Extra Tall (>6ft) | Full Sun to Shade | Summer (Jun-Jul) | Red, Yellow, Green | Dry | Upland | 2 |
| Salix discolor | Pussy Willow | Extra Tall (>6ft) | Full Sun | Spring (Mar-May) | Gray, Silver | Moist | Facultative Wetland | 3 |
| Salix exigua | Sandbar Willow | Extra Tall (>6ft) | Full Sun to Partial Shade | Spring (Mar-Apr) | White, Yellow | Wet | Obligate Wetland | 1 |
| Salix sericea | Silky Willow | Extra Tall (>6ft) | Full Sun to Partial Shade | Spring (Apr) | Green | Wet | Obligate Wetland | 4 |
| Sambucus canadensis | Common Elderberry | Extra Tall (>6ft) | Full Sun to Shade | Late Spring (May-Jun) | White | Wet-Moist | Facultative Wetland - | 3 |
| Staphylea trifolia | Bladdernut | Extra Tall (>6ft) | Shade | Spring (Apr-May) | White | Moist | Facultative | 6 |
| Vaccinium corymbosum | High Bush Blueberry | Extra Tall (>6ft) | Shade | Late Spring (May-Jun) | White | Wet-Moist | Facultative Wetland - | 6 |
| Viburnum cassinoides | WitheRod | Extra Tall (>6ft) | Full Sun to Shade | Summer (Jun-Jul) | White | Wet-Moist | Facultative Wetland | 5 |
| Viburnum lentago | Nannyberry | Extra Tall (>6ft) | Full Sun to Shade | Spring (Apr-Jun) | White | Moist | Facultative | 5 |
| Viburnum prunifolium | Black-Haw | Extra Tall (>6ft) | Partial Shade | Spring (Apr-May) | White | Moist-Dry | Facultative Upland | 4 |

Table 6: Ohio native tree species list and urban environment tolerance ratings. These are generalized characteristics and tolerance levels for various stressors common urban and landscape environments. The box below defines the each stress factor and describes the condition levels of tolerance. Growing conditions were filled in based on available information and may not be complete for every condition.

| | |
|--|---|
| | Plants listed as rare in the state of Ohio |
| | Native Plants of the Year as designated by LEAP |

Relative Tolerance to Urban Stress

- High - Tree can adapt to a variety of urban conditions and will grow well
- Medium - Tree can adapt to a few urban conditions and will generally grow well
- Low - Tree will not grow well in the urban environment

Salt Tolerance:

- Sensitive - Intolerant to either aerial salt spray and/or salt being present in the soil
- Tolerant - Tolerant to both aerial salt spray and salt being present in the soil
- Tolerant to Salt in Soil - Trees will not become stressed when salt is present in the soil
- Tolerant to Aerial Salt Spray - Trees will not become stressed when salt drifts in the air

Heat Tolerance:

- Sensitive - Tree will become stressed from increased temperatures due to urban heat island effects
- Tolerant - Tree will not become stressed from increased temperatures due to urban heat island effects

Drought Tolerance:

- Sensitive - Tree will become stressed during periods of drought
- Tolerant - Tree will not become stressed during periods of drought

Soil Compaction Tolerance:

- Sensitive - Tree will become stressed from soil being compacted
- Tolerant - Tree will not become stressed from soil being compacted

| Scientific Name | Common Name | Maximum Height | Relative Tolerance to Urban Stress | Salt Tolerant | Soil Compaction Tolerance | Drought Tolerance | Heat Tolerance | Soil pH | C of C |
|------------------------------|------------------------|------------------|------------------------------------|-------------------------------|---------------------------|-------------------|----------------|----------------------------|--------|
| DECIDUOUS TREES | | | | | | | | | |
| <i>Nyssa sylvatica</i> | Blackgum | Medium (30-60ft) | High | Tolerant | Tolerant | Tolerant | | Acidic (pH<6.8) | 7 |
| <i>Acer negundo</i> | Box Elder | Medium (30-50ft) | High | Tolerant | Tolerant | Tolerant | Tolerant | Circumneutral (pH 6.8-7.2) | 3 |
| <i>Quercus macrocarpa</i> | Bur Oak | Large (70-100ft) | High | Tolerant | Tolerant | Tolerant | Tolerant | Acidic (pH<6.8) | 6 |
| <i>Populus deltoides</i> | Eastern Cottonwood | Large (70-100ft) | High | Tolerant | Tolerant | Tolerant | | Circumneutral (pH 6.8-7.2) | 3 |
| <i>Gymnocladus dioicus</i> | Kentucky Coffee Tree | Large (70-100ft) | High | Tolerant | Tolerant | Tolerant | Tolerant | Circumneutral (pH 6.8-7.2) | 3 |
| <i>Quercus palustris</i> | Pin Oak | Large (70-100ft) | High | Tolerant | Tolerant | Tolerant | | Acidic (pH<6.8) | 5 |
| <i>Betula nigra</i> | River Birch | Medium (30-50ft) | High | Tolerant | Tolerant | | Tolerant | Circumneutral (pH 6.8-7.2) | 9 |
| <i>Platanus occidentalis</i> | American Sycamore | Large (70-100ft) | High | Tolerant to Salt in Soil | Tolerant | Tolerant | | Circumneutral (pH 6.8-7.2) | 7 |
| <i>Carya cordiformis</i> | Bitternut Hickory | Medium (50-75ft) | High | Tolerant to Salt in Soil | | | | Circumneutral (pH 6.8-7.2) | 5 |
| <i>Celtis occidentalis</i> | Hackberry | Large (60-100ft) | High | Tolerant to Salt in Soil | Tolerant | Tolerant | Tolerant | Circumneutral (pH 6.8-7.2) | 4 |
| <i>Gleditsia triacanthos</i> | Honey Locust | Medium (30-70ft) | High | Tolerant to Salt in Soil | Tolerant | Tolerant | Tolerant | Circumneutral (pH 6.8-7.2) | 4 |
| <i>Carya ovata</i> | Shagbark Hickory | Large (70-100ft) | High | Tolerant to Salt in Soil | | Tolerant | Tolerant | Acidic (pH<6.8) | 6 |
| <i>Quercus bicolor</i> | Swamp White Oak | Large (70-100ft) | High | Tolerant to Salt in Soil | Tolerant | | | Acidic (pH<6.8) | 7 |
| <i>Quercus muehlenbergii</i> | Chinkapin Oak | Medium (50-75ft) | High | Tolerant to Aerial Salt Spray | Tolerant | | | Alkaline (pH>7.2) | 7 |
| <i>Amelanchier laevis</i> | Allegheny Serviceberry | Small (12-25ft) | High | Sensitive | | | Tolerant | Acidic (pH<6.8) | 5 |
| <i>Ulmus americana</i> | American Elm | Large (60-80ft) | High | Sensitive | Tolerant | Tolerant | | Circumneutral (pH 6.8-7.2) | 2 |
| <i>Amelanchier arborea</i> | Downy Serviceberry | Small (12-25ft) | High | Sensitive | | | Tolerant | Acidic (pH<6.8) | 5 |
| <i>Carya laciniosa</i> | Pignut Hickory | Large (70-100ft) | High | Sensitive | | Tolerant | | Circumneutral (pH 6.8-7.2) | 7 |
| <i>Sassafras albidum</i> | Sassafras | Medium (30-50ft) | High | Sensitive | | Tolerant | | Acidic (pH<6.8) | 3 |

| Scientific Name | Common Name | Maximum Height | Relative Tolerance to Urban Stress | Salt Tolerant | Soil Compaction Tolerance | Drought Tolerance | Heat Tolerance | Soil pH | C of C |
|-------------------------|-------------------|------------------|------------------------------------|-------------------------------|---------------------------|-------------------|----------------|----------------------------|--------|
| Ulmus rubra | Slippery Elm | Medium (40-60ft) | High | Sensitive | Tolerant | | | Circumneutral (pH 6.8-7.2) | 3 |
| Quercus velutina | Black Oak | Medium (50-60ft) | Medium | Tolerant | Sensitive | Tolerant | | Acidic (pH<6.8) | 7 |
| Juglans nigra | Black Walnut | Medium (50-75ft) | Medium | Tolerant | Tolerant | Tolerant | Tolerant | Circumneutral (pH 6.8-7.2) | 5 |
| Quercus coccinea | Scarlet Oak | Large (70-100ft) | Medium | Tolerant | Sensitive | | | Acidic (pH<6.8) | 6 |
| Quercus rubra | Northern Red Oak | Large (70-100ft) | Medium | Tolerant to Salt in Soil | Tolerant | Tolerant | Tolerant | Acidic (pH<6.8) | 6 |
| Aesculus glabra | Ohio Buckeye | Medium (50-75ft) | Medium | Tolerant to Aerial Salt Spray | | | | Acidic (pH<6.8) | 6 |
| Ostrya virginiana | Hop Hornbeam | Medium (30-50ft) | Medium | Sensitive | Tolerant | | | Circumneutral (pH 6.8-7.2) | 5 |
| Carpinus caroliniana | Ironwood | Medium (30-50ft) | Medium | Sensitive | | | | Circumneutral (pH 6.8-7.2) | 5 |
| Acer rubrum | Red Maple | Medium (35-60ft) | Medium | Sensitive | Tolerant | | Tolerant | Circumneutral (pH 6.8-7.2) | 2 |
| Cercis canadensis | Redbud | Small (10-25ft) | Medium | Sensitive | Tolerant | Tolerant | Sensitive | Circumneutral (pH 6.8-7.2) | 3 |
| Liriodendron tulipifera | Tulip Poplar | Large (70-120ft) | Medium | Sensitive | Sensitive | | | Acidic (pH<6.8) | 6 |
| Hamamelis virginiana | Witch-hazel | Small(12-36ft) | Medium | Sensitive | | | | Acidic (pH<6.8) | 5 |
| Magnolia acuminata | Cucumber Magnolia | Medium (50-75ft) | Medium | | Sensitive | Sensitive | | Acidic (pH<6.8) | 7 |
| Liquidambar styraciflua | Sweetgum | Large (70-100ft) | Medium | | Tolerant | | | Acidic (pH<6.8) | 6 |
| Populus grandidentata | Big-toothed Aspen | Medium (50-75ft) | Low | Tolerant | Sensitive | | | Acidic (pH<6.8) | 2 |
| Prunus serotina | Black Cherry | Medium (50-75ft) | Low | Tolerant | Sensitive | | | Circumneutral (pH 6.8-7.2) | 3 |
| Betula alleghaniensis | Yellow Birch | Large (60-100ft) | Low | Tolerant | | | | Acidic (pH<6.8) | 7 |
| Quercus alba | White Oak | Large (70-100ft) | Low | Tolerant to Salt in Soil | Tolerant | Tolerant | Tolerant | Circumneutral (pH 6.8-7.2) | 6 |
| Tilia americana | American Basswood | Large (60-80ft) | Low | Sensitive | Sensitive | | | Circumneutral (pH 6.8-7.2) | 6 |
| Fagus grandifolia | American Beech | Medium (50-75ft) | Low | Sensitive | Sensitive | | Sensitive | Acidic (pH<6.8) | 7 |

| Scientific Name | Common Name | Maximum Height | Relative Tolerance to Urban Stress | Salt Tolerant | Soil Compaction Tolerance | Drought Tolerance | Heat Tolerance | Soil pH | C of C |
|-------------------------------------|------------------|------------------|------------------------------------|---------------|-------------------------------|-------------------|----------------|----------------------------|--------|
| <i>Acer saccharum</i> | Sugar Maple | Medium (50-75ft) | Low | Sensitive | Sensitive | | Sensitive | Circumneutral (pH 6.8-7.2) | 5 |
| <i>Betula populifolia</i> | Grey Birch | Medium (50-75ft) | | Tolerant | | | | Acidic (pH<6.8) | 5 |
| <i>Larix laricina</i> | Eastern Larch | Medium (50-75ft) | | Sensitive | | | | Acidic (pH<6.8) | 9 |
| <i>Salix discolor</i> | Pussy Willow | Small (10-25ft) | | Sensitive | | | | Circumneutral (pH 6.8-7.2) | 3 |
| <i>Acer nigrum</i> | Black Maple | Medium (50-75ft) | | | Tolerant | | | Acid-Neutral (pH 5.5-7.5) | 5 |
| <i>Asimina triloba</i> | Paw-Paw | Small (10-25ft) | | | | | | Acid-Neutral (pH 5.5-7.0) | 6 |
| <i>Salix amygdaloides</i> | Peachleaf Willow | Medium (30-50ft) | | | | | | Circumneutral (pH 6.8-7.2) | 3 |
| EVERGREEN TREES | | | | | | | | | |
| <i>Juniperus virginiana</i> | Eastern Redcedar | Small (20-40ft) | High | Tolerant | | Tolerant | Tolerant | Acidic (pH<6.8) | 3 |
| <i>Pinus strobus</i> | White Pine | Large (70-100ft) | Medium | Sensitive | Sensitive | Tolerant | | Acidic (pH<6.8) | 6 |
| <i>Tsuga canadensis</i> | Eastern Hemlock | Medium (40-70ft) | Low | Sensitive | Sensitive | | | Acidic (pH<6.8) | 8 |
| <i>Myrica pensylvanica</i> | Bayberry | (6-12ft) | | Tolerant | Tolerant | Tolerant | | Acid-Neutral (pH 5.5-7.5) | 10 |
| <i>Ilex verticillata</i> | Winterberry | (6-12ft) | | | Tolerant to Salt in Soil | | | Acidic (pH<6.8) | 6 |
| <i>Ilex opaca</i> | American Holly | Small (10-25ft) | | | Tolerant to Aerial Salt Spray | | Tolerant | Acidic (pH<6.8) | * |
| <i>Thuja occidentalis</i> | Arborvitae | Small (20-40ft) | | | | | | Circumneutral (pH 6.8-7.2) | 9 |
| <i>Rhododendron periclymenoides</i> | Rhododendron | (3-6ft) | | | | | | Acidic (pH<6.8) | 7 |
| <i>Kalmia latifolia</i> | Mountain Laurel | Small (10-20ft) | | | | | | Acidic (pH 4.5-5.5) | 7 |

Table 7: Definitions for the 5 wetland indicator categories as defined by the USDA (2008)

| Wetland Indicator Status | Definition |
|---------------------------------|---|
| Obligate Wetland | Occurs almost always (estimated probability 99%) under natural conditions in wetlands. |
| Facultative Wetland | Usually occurs in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands. |
| Facultative | Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%). |
| Facultative Upland | Usually occurs in non-wetlands (estimated probability 67%-99%), but occasionally found on wetlands (estimated probability 1%-33%). |
| Upland | Occurs in wetlands in another region, but occurs almost always (estimated probability 99%) under natural conditions in non-wetlands in the regions specified. |
| Notes: | A positive (+) or negative (-) sign was used with the Facultative Indicator categories to specifically define the regional frequency of occurrence in wetlands. The positive sign indicates a frequency toward the higher end of the category (more frequently found in wetlands), and a negative sign indicates a frequency toward the lower end of the category (less frequently found in wetlands). |
| | The wetland indicator categories should not be equated to degrees of wetness. Many obligate wetland species occur in permanently or semi-permanently flooded wetlands, but a number of obligates also occur in and some are restricted to wetlands which are only temporarily or seasonally flooded. The facultative upland species include a diverse collection of plants, which range from weedy species adapted to exist in a number of environmentally stressful or disturbed sites (including wetlands), to species in which a portion of the gene pool (an ecotype) always occurs in wetlands. Both the weedy and ecotype representatives of the facultative upland category occur in seasonally and semi-permanently flooded wetlands. |

Table 8: Broad definitions for the 5 categories of soil moisture tolerance

| Soil Moisture Tolerance | Definition |
|--------------------------------|---|
| Wet | Soil can be saturated and has the ability to retain standing water for periods of time |
| Wet-Moist | Soil is generally less saturated and generally retains less standing water for shorter periods of time as compared to wet soils |
| Moist | Soil can be damp and does not normally retain standing water |
| Moist-Dry | Soil can be damp for periods of time and can retain little to no water for periods of time |
| Dry | Soil normally retains little to no water |

Table 9. Description of the coefficient of conservatism (C of C). The C of C is a weighting factor that relates the degree of conservatism (or site fidelity) of a given species to all other species within the region. The C of C is scored on a 0-10 scale. (Andreas et al. 2004)

| C of C Score | Description |
|--------------|--|
| 0 | Plants with a wide range of ecological tolerances. Often opportunistic invaders of natural areas or native taxa that are typically part of a ruderal community |
| 1-2 | Widespread taxa that are not typical of a particular community like <i>Solidago canadensis</i> |
| 3-5 | Plants with an intermediate range of ecological tolerances that typify a stable phase of some native community but persists under some disturbance |
| 6-8 | Plants with a narrow range of ecological tolerances that typify a stable or near “climax” community |
| 9-10 | Plants with a narrow range of ecological tolerances that exhibit relatively high degrees of fidelity to a narrow range of habitat requirements |

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Additional resources for trees

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