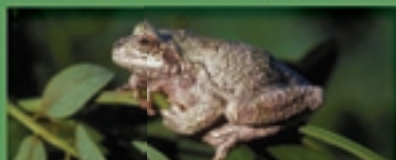




NIAGARA PENINSULA  
**CONSERVATION**  
AUTHORITY



A GUIDE TO CELEBRATE  
NIAGARA PENINSULA'S NATIVE PLANTS

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Introduction .....	2 to 5
Flowering Times and Bloom Colour .....	6 to 7
Native Plant List .....	8 to 15
Dry Conditions - Sunny - Wildflowers .....	16 to 22
Dry Conditions - Sunny - Grasses .....	23
Dry Conditions - Sunny - Trees .....	24
Moist to Wet Conditions - Sunny - Wildflowers .....	25 to 28
Moist to Wet Conditions - Sunny - Grasses & Sedges .....	29 to 32
Moist to Wet Conditions - Sunny - Shrubs .....	33 to 34
Moist to Wet Conditions - Sunny - Trees .....	35 to 38
Moist to Wet Conditions - Part-Shade - Wildflowers .....	39 to 43
Moist to Wet Conditions - Part-Shade - Grasses & Sedges .....	44
Moist to Wet Conditions - Part-Shade - Shrubs .....	45,48
Watershed Map .....	46 to 47
Moist to Wet Conditions - Part-Shade - Trees .....	49 to 50
Moist to Wet Conditions - Shade - Shrubs .....	51
Moist to Wet Conditions - Shade - Trees .....	52 to 53
Normal or Moist Conditions - Sunny - Wildflowers .....	54 to 56
Normal or Moist Conditions - Sunny - Grasses .....	57 to 59
Normal or Moist Conditions - Sunny - Shrubs .....	60
Normal or Moist Conditions - Sunny - Trees .....	61 to 62
Normal or Moist Conditions - Part-Shade - Grasses .....	63
Normal or Moist Conditions - Part-Shade - Shrubs .....	64
Normal or Moist Conditions - Part-Shade - Trees .....	65
Normal or Moist Conditions - Part-Shade - Vines .....	66
Normal or Moist Conditions - Shade - Wildflowers .....	67 to 71
Normal or Moist Conditions - Shade - Shrubs .....	72 to 73
Normal or Moist Conditions - Shade - Trees .....	74 to 75
Adaptable Plants For Almost All Conditions - Wildflowers .....	76 to 77
Adaptable Plants For Almost All Conditions - Grasses .....	78
Adaptable Plants For Almost All Conditions - Shrubs .....	79 to 80
Adaptable Plants For Almost All Conditions - Trees .....	81 to 83
Adaptable Plants For Almost All Conditions - Vines .....	84
Aquatic Plants .....	85 to 88
Index .....	89 to 91
Contact Information .....	92





Alison Thomson, photographer

Established in 1959, the Niagara Peninsula Conservation Authority serves approximately 500,000 people and covers an area of 2,424 square kilometres encompassing the entire Niagara Region, 21% of the City of Hamilton and 25% of Haldimand County. The driving force behind the Conservation Authority movement was its grassroots land stewardship focus and involvement with water programs. Today, this vital commitment continues, as we strive to address the impact on the watershed from current human activities and the effects of urban growth and rural activities.

Our programs focus on environmental protection and preservation and watershed management activities. These include planning, regulations, water quality monitoring and improvement through stewardship and restoration, community outreach, and conservation through land acquisition and public ownership.

This ongoing commitment is also reflected in the Niagara Peninsula Conservation Authority's successful acquisition of some of the most sensitive conservation lands found within Niagara. It now owns over 2,870 hectares (7091 acres) that are held in public trust. The Authority's stewardship allows the public to enjoy Niagara's distinctive heritage and natural resources at conservation areas such as St. Johns, Beamer Memorial, Ball's Falls, Woodend, Chippawa Creek, Long Beach, Wainfleet Bog, Morgan's Point and Binbrook. Each of these unique resources offer diverse recreational and educational opportunities to experience nature's beauty.

With its unique resources, the Niagara Peninsula is one of the most complex watersheds in the Province. It includes lands drained by the Niagara River, Twenty Mile Creek, the Welland River, and the Welland Canal. Nestled between Lake Erie and Lake Ontario and transversed by the Niagara Escarpment, the Niagara Peninsula has truly unique climatic and biotic zones that are unlike anywhere else in North America.

Understanding that water is an essential part of our daily lives, the Niagara Peninsula Conservation Authority continues to focus on protecting and improving this vital resource. We are committed to providing strong leadership in the wise use and stewardship of natural resources to achieve and maintain a healthy and sustainable environment. Restoration programs focus on achieving and maintaining habitat goals. These programs include: wetland protection and rehabilitation, reforestation, naturalization projects (including buffer strips and riparian plantings), aquatic restoration, and erosion control. These projects contribute to improving local water quality, wildlife habitat protection and species diversity.

Species diversity is key in Niagara, where well over 2,200 species of plants and animals live. Unfortunately, nearly 10% of these species are considered to be rare or at risk due to habitat loss, urban sprawl, invasive species competition, pollution and climate change. The Conservation Authority has long recognized the importance of partnerships to assist in addressing these challenges, realizing that our strength lies in the continued involvement and cooperation of many community groups, all levels of government, and area residents. As a watershed resident, you can help ensure that our water and land is as healthy as possible. Please read on to find out how you can make a difference in creating a healthy and sustainable environment.

## The Importance of Natural Areas

Water quality is a report card of our treatment of the land. What we do to the land will be reflected in the water around us. This is because when it rains, water sinks into the ground, dissolving pollutants from the surface. This same water makes its way to our streams and lakes, to eventually become our drinking water.

Every year, over 150 species of plants and animals become extinct globally. Protecting water quality and wildlife habitat is everyone's responsibility. By incorporating natural areas on your property, pollutants are filtered from the surface, erosion is reduced, flooding is slowed and water can keep flowing in our creeks and streams throughout the year. Your efforts to improve and protect local water quality, will help protect wildlife populations and species diversity for future generations.

## Create Your Own Natural Haven

To establish your own natural area, assess your site conditions to determine the best plant species. Light, moisture and soil conditions such as pH levels and the amount of organic material are all important considerations. The species lists provided will help you choose plants that are appropriate for your site conditions.

The secret to encouraging a diversity of wildlife is to create a variety of habitat features. Plant both evergreens and deciduous trees, young and old, tall and short. Layer your plants with the tallest trees at the edge of your property and smaller trees planted towards your house. Allowing native vegetation to grow along fence and property lines also creates corridors to connect natural areas. You can even work with your neighbours to create corridors between properties, which will help provide safe travel routes for wildlife.







### Why Go Native ?

Always try to use plants native to the Niagara Peninsula. These plants have evolved through thousands of years of changing geological conditions which have shaped their physical features and biology. This natural evolution makes the use of native plants ideal for use in local climate and environmental conditions.

Native plants do not require extra watering and thrive without the application of pesticides and fertilizers. Adapted to deal with local bugs and diseases, they get all the nutrients they need from the existing soil. They can be easily incorporated into your landscaping to reduce mowing, improve water quality and provide food and breeding areas for many species of birds, butterflies and desirable insects.



### Caring for Native Plants

Planting in Niagara can start from early May until mid to late October. Spring planting is best when the soil is moist, but not saturated. Fall planting can be very successful when using hardy plant stock and when plants have a few weeks to establish before the first frost.

Native plants are well adapted to local climate conditions, but will require watering for the first 3-4 weeks after planting. Deep, infrequent watering is best. Allow the soil to dry out between watering as this will encourage deep root growth. Unless the plants have been planted in the wrong type of soil, they will not require fertilizing. Many environmentally friendly alternatives do exist if fertilizing is needed.

Some weeding may be required until the plants become established. Mulch can help reduce the need to weed and water while adding aesthetic value. Remember that mulch can trap water near the surface of the root zone, and may encourage shallow rooting and plants that are prone to drought. Mulch can also decompose quickly and rob the soil of vital plant nutrients.

## Take a Pass on Manicured Grass

Lawn maintenance can impact the environment. Although perfectly manicured lawns may look attractive, they provide little environmental benefit. Manicured grass actually acts like “green cement”, and speeds the runoff of rainwater. This water can be loaded with fertilizers, pesticides and is often headed straight to the nearest body of water.

Evaluate the areas on your property that you are currently mowing and consider “retiring” areas that you are not actively using. In this way, even a small area in your yard can become a wildlife haven.

## Your Garden is a Natural Refuge

Imagine a butterfly flying northwards over the peninsula during a long migratory journey. It looks for nourishment, but finds nothing more than acres and acres of manicured lawn or asphalt. Sadly, this scenario is a reality for an increasing number of wildlife species in Niagara.

Now imagine that the butterfly can spot a refuge – your naturalized garden. It is able to rest and recharge and continue on its important journey. If every landowner in Niagara created or protected a small natural area on their property, these small changes would add up to make a big difference in protecting the environment.



FLOWERING TIMES AND BLOOM COLOUR

APRIL TO MAY

RED	WHITE	BLUE	PURPLE	PINK	YELLOW
Wild Columbine <i>Aquilegia canadensis</i>	White Baneberry <i>Actaea pachypoda</i> Canada Mayflower <i>Maianthemum canadense</i> Twinleaf <i>Jeffersonia diphylla</i> Dutchman's Breeches <i>Dicentra cucullaria</i> Hairy Solomon's Seal <i>Polygonatum pubescens</i>		Hairy Beardtongue <i>Penstemon hirsutus</i> Running Strawberry Bush <i>Euonymus obovata</i> Jack-in-the Pulpit <i>(Arisaema triphyllum)</i>		

JUNE

Bee Balm <i>Monarda didyma</i>	Star-flowered Solomon's Seal <i>Maianthemum stellatum</i> Wild Strawberry <i>Fragaria virginiana</i> Foxglove Beardtongue <i>Penstemon digitalis</i> Poke Milkweed <i>Asclepias exaltata</i> Tall Meadow Rue <i>Thalictrum pubescens</i> Water Arum <i>Calla pallustris</i> White Water Lily <i>Nymphaea odorata</i> Bloodroot <i>Sanguinaria canadensis</i>	Blue Flag Iris <i>Iris versicolour</i> Pickerelweed <i>Pontederia cordata</i>	Harebell <i>Campanula rotundifolia</i> Wild Bergamot <i>Monarda fistulosa</i> Blue-eyed Grass <i>Sisyrinchium montanum</i> Blue Vervain <i>Verbena hastata</i> Running Strawberry Bush <i>Euonymus obovata</i> Common Milkweed <i>(Asclepias syriaca)</i>	Longleaf Bluets <i>Hedyotis longifolia</i> Swamp Milkweed <i>Asclepias incarnate</i>	Black-eyed Susan <i>Rudbeckia hirta</i> Sweet Flag <i>Acorus americanus</i> Yellow Pond Lily <i>Nuphar advena</i>
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# FLOWERING TIMES AND BLOOM COLOUR

RED	WHITE	BLUE	PURPLE	PINK	YELLOW	
<b>Butterfly Milkweed</b> <i>Asclepias tuberosa</i> <b>Michigan Lily</b> <i>Lilium michiganense</i> <b>Cardinal Flower</b> <i>Lobelia cardinalis</i>	<b>Pearly Everlasting</b> <i>Anaphalis margaritacea</i> <b>Virginia Mountain Mint</b> <i>Pycnanthemum virginianum</i> <b>White Turtlehead</b> <i>Chelone glabra</i> <b>Boneset</b> <i>Eupatorium perfoliatum</i>	<b>Great Lobelia</b> <i>Lobelia siphilitica</i>	<b>Pale Purple Coneflower</b> <i>Echinacea pallida</i> <b>Hoary Vervain</b> <i>Verbena stricta</i>		<b>Green-headed Coneflower</b> <i>Rudbeckia laciniata</i> <b>Spotted St. Johnswart</b> <i>Hypericum punctatum</i>	JULY
	<b>White Snakeroot</b> <i>Eupatorium rugosum</i>	<b>Smooth Aster</b> <i>Aster laevis</i> <b>Sky Blue Aster</b> <i>Aster oolentangiensis</i>	<b>Dense Blazing Star</b> <i>Liatris spicata</i> <b>Tall Ironweed</b> <i>Vernonia altissima</i>	<b>Spotted Joe-Pye-Weed</b> <i>Eupatorium maculatum</i>	<b>Woodland Sunflower</b> <i>Helianthus divaricatus</i> <b>Sweet Ox-eye</b> <i>Heliopsis helianthoides</i> <b>Evening Primrose</b> <i>Oenothera biennis</i> <b>Ohio Goldenrod</b> <i>Solidago ohioensis</i> <b>Rough-leaved Goldenrod</b> <i>Solidago patula</i>	AUGUST
	<b>Heath Aster</b> <i>Aster ericoides</i>	<b>Smooth Aster</b> <i>Aster laevis</i> <b>Sky Blue Aster</b> <i>Aster oolentangiensis</i>	<b>New England Aster</b> <i>Aster novae-angliae</i> <b>Large-leaved Aster</b> <i>Aster macrophyllus</i> <b>Heart-leaved Aster</b> <i>Aster cordifolius</i>		<b>Sneezeweed</b> <i>Helenium autumnale</i>	SEPTEMBER TO OCTOBER



## Plants for Butterflies

**Blue Flag Iris**  
*Iris versicolor*

**Great Lobelia**  
*Lobelia siphilitica*

**Poke Milkweed**  
*Asclepias exaltata*

**White Water Lily**  
*Nymphaea odorata*

**Sweet Ox-eye**  
*Heliopsis helianthoides*

**Foxglove Beardtongue**  
*Penstemon digitalis*

**Swamp Milkweed**  
*Asclepias incarnate*

**Heath Aster**  
*Aster ericoides*

**Common Milkweed**  
*Asclepias syriaca*

**White Turtlehead**  
*Chelone glabra*

**Sky Blue Aster**  
*Aster oolentangiensis*

**Black-eyed Susan**  
*Rudbeckia hirta*

**Green-headed Coneflower**  
*Rudbeckia laciniata*

**Smooth Aster**  
*Aster laevis*

**Rough-leaved Goldenrod**  
*Solidago patula*

**Butterfly Milkweed**  
*Asclepias tuberosa*

**Wild Bergamot**  
*Monarda fistulosa*

**Pawpaw**  
*Asimina triloba*

**Spicebush**  
*Lindera benzoin*

**Longleaf Bluets**  
*Hedyotis longifolia*

**Tall Meadow Rue**  
*Thalictrum pubescens*

**Pearly Everlasting**  
*Anaphalis margaritacea*

**Pale Purple Coneflower**  
*Echinacea pallida*

**New England Aster**  
*Aster novae-angliae*

**Bee Balm**  
*Monarda didyma*

**Tulip Tree**  
*Liriodendron tulipifera*

**White Baneberry**  
*Actaea pachypoda*

**Spotted Joe-Pye-Weed**  
*Eupatorium maculatum*

**Sneezeweed**  
*Helenium autumnale*

**Ohio Goldenrod**  
*Solidago ohioensis*

**Blue Vervain**  
*Verbena hastata*

**Tall Ironweed**  
*Vernonia altissima*

**Boneset**  
*Eupatorium perfoliatum*

**Michigan Lily**  
*Lilium michiganense*

**Porcupine Sedge**  
*Carex hystericina*

**Cardinal Flower**  
*Lobelia cardinalis*

**White Snakeroot**  
*Eupatorium rugosum*

**Large-leaved Aster**  
*Aster macrophyllus*

**Heart-leaved Aster**  
*Aster cordifolius*

**Wild Columbine**  
*Aquilegia canadensis*

**Star-flowered Solomon's Seal**  
*Maianthemum stellatum*

**Woodland Sunflower**  
*Helianthus divaricatus*

**Evening Primrose**  
*Oenothera biennis*



## Plants for Dry, Sunny Conditions

Pearly Everlasting  
*Anaphalis margaritacea*

Wild Bergamot  
*Monarda fistulosa*

Big Bluestem  
*Andropogon gerardii*

Butterfly Milkweed  
*Asclepias tuberosa*

Evening Primrose  
*Oenothera biennis*

Sideoats Grama  
*Bouteloua curtipendula*

Hairy Beardtongue  
*Penstemon hirsutus*

Sky Blue Aster  
*Aster oolentangiensis*

Virginia Mountain Mint  
*Pycnanthemum virginianum*

Red Oak  
*Quercus rubra*

Harebell  
*Campanula rotundifolia*

Black-eyed Susan  
*Rudbeckia hirta*

Sassafras  
*Sassafras albidum*

Pale Purple Coneflower  
*Echinacea pallida*

Heath Aster  
*Aster ericoides*

Hoary Vervain  
*Verbena stricta*

Longleaf Bluets  
*Hedyotis longifolia*

Smooth Aster  
*Aster laevis*



Eddie Jones, photographer



## Plants for Moist to Wet, Sunny Conditions

Swamp Milkweed  
*Asclepias incarnata*

Bebb's Sedge  
*Carex bebbii*

Red Osier Dogwood  
*Cornus stolonifera*

White Turtlehead  
*Chelone glabra*

Porcupine Sedge  
*Carex hystericina*

Highbush Cranberry  
*Viburnum trilobum*

Spotted Joe-Pye-Weed  
*Eupatorium maculatum*

Butternut Walnut  
*Juglans cinerea*

Black Walnut  
*Juglans nigra*

Sneezeweed  
*Helenium autumnale*

Fox Sedge  
*Carex vulpinoidea*

Eastern Cottonwood  
*Populus deltoides*

Blue-eyed Grass  
*Sisyrinchium montanum*

Riverbank Wild Rye  
*Elymus riparius*

Large-tooth Aspen  
*Populus grandidentata*

Ohio Goldenrod  
*Solidago ohioensis*

Hard-stem Bulrush  
*Scirpus acutus*

Swamp White Oak  
*Quercus bicolor*

Blue Vervain  
*Verbena hastata*

Soft-stem Bulrush  
*Scirpus cyperinus*

Bur Oak  
*Quercus macrocarpa*

Tall Ironweed  
*Vernonia altissima*

Prairie Cordgrass  
*Spartina pectinata*

Pin Oak  
*Quercus palustris*

Meadowsweet  
*Spiraea alba*

Buttonbush  
*Cephalanthus occidentalis*

Canada Bluejoint  
*Calamagrostis canadensis*



Robert Ritchie, Niagara Parks Commission

## Plants for Moist to Wet, Part-Shade Conditions

**Boneset**  
*Eupatorium perfoliatum*

**Rough-leaved Goldenrod**  
*Solidago patula*

**Pawpaw**  
*Asimina triloba*

**Spotted St. Johnswort**  
*Hypericum punctatum*

**Tall Meadow Rue**  
*Thalictrum pubescens*

**Dutchman's Breeches**  
*Dicentra cucullaria*

**Bitternut Hickory**  
*Carya cordiformis*

**Michigan Lily**  
*Lilium michiganense*

**Green-headed Coneflower**  
*Rudbeckia laciniata*

**Silver Maple**  
*Acer saccharinum*

**Cardinal Flower**  
*Lobelia cardinalis*

**Nannyberry**  
*Viburnum lentago*

**Hop Sedge**  
*Carex lupulina*

**Red Maple**  
*Acer rubrum*

**Great Lobelia**  
*Lobelia siphilitica*

**Bee Balm**  
*Monarda didyma*

**Common Elderberry**  
*Sambucus canadensis*

**Silky Dogwood**  
*Cornus amomum*



Eddie Jones, photographer



Walter Muma, photographer



Colleen Crank, photographer



Plants for Moist to Wet, Shade Conditions

- Spicebush  
*Lindera benzoin*
- Black Maple  
*Acer nigrum*
- Eastern Hemlock  
*Tsuga canadensis*
- Green Ash  
*Fraxinus pennsylvanica*

Plants for Normal or Moist, Sunny Conditions

- Common Milkweed  
*Asclepias syriaca*
- Kalm's Brome  
*Bromus kalmii*
- Foxglove Beardtongue  
*Penstemon digitalis*
- New England Aster  
*Aster novae-angliae*
- Staghorn Sumac  
*Rhus typhina*
- Switch Grass  
*Panicum virgatum*
- Indian Grass  
*Sorghastrum nutans*
- Dense Blazing Star  
*Liatris spicata*
- Hawthorns  
*Crataegus spp.*
- Wild Strawberry  
*Fragaria virginiana*
- Virginia Wild Rye  
*Elymus virginicus*
- White Ash  
*Fraxinus americana*
- Little Bluestem  
*Schizachyrium scoparium*
- White Birch  
*Betula papyrifera*
- Eastern White Pine  
*Pinus strobus*
- Sweet Ox-eye  
*Heliopsis helianthoides*
- Bottlebrush Grass  
*Elymus hystrix*

Plants for Normal or Moist, Part-Shade Conditions

- Fringed Brome  
*Bromus ciliatus*
- Tulip Tree  
*Liriodendron tulipifera*
- Running Strawberry Bush  
*Evonymus obovata*
- Wild Red Raspberry  
*Rubus idaeus*
- American Bittersweet  
*Celastrus scandens*
- Witch-hazel  
*Hamamelis virginiana*
- Canada Wild Rye  
*Elymus canadensis*
- White Spruce  
*Picea glauca*



Walter Muma, photographer

## Plants for Normal or Moist, Shade Conditions

White Baneberry

*Actaea pachypoda*

Hairy Solomon's Seal

*Polygonatum pubescens*

Maple-leaved Viburnum

*Viburnum acerifolium*

Jack-in-the-Pulpit

*Arisaema triphyllum*

Bloodroot

*Sanguinaria canadensis*

Twinleaf

*Jeffersonia diphylla*

Sugar Maple

*Acer saccharum*

Poke Milkweed

*Asclepias exaltata*

Heart-leaved Aster

*Aster cordifolius*

Serviceberry

*Amelanchier spp.*

White Snakeroot

*Eupatorium rugosum*

Blue-beech

*Carpinus caroliniana*

Large-leaved Aster

*Aster macrophyllus*

Purple Flowering Raspberry

*Rubus odoratus*

Ironwood

*Ostrya virginiana*

Canada Mayflower

*Maianthemum canadense*

Bladdernut

*Staphylea trifolia*

Photo Courtesy of Indiana University



Walter Muma, photographer



Walter Muma, photographer

## Plants for Almost All Conditions

Wild Columbine  
*Aquilegia canadensis*

Grey Dogwood  
*Cornus racemosa*

American Plum  
*Prunus americana*

Woodland Sunflower  
*Helianthus divaricatus*

Ninebark  
*Physocarpus opulifolius*

White Oak  
*Quercus alba*

Star-flowered Solomon's Seal  
*Maianthemum stellatum*

Shagbark Hickory  
*Carya ovata*

Virgin's Bower  
*Clematis virginiana*

Poverty Oat Grass  
*Danthonia spicata*

Eastern White Cedar  
*Thuja occidentalis*

Virginia Creeper  
*Parthenocissus quinquefolia*

Chokeberry  
*Aronia melanocarpa*

Trembling Aspen  
*Populus tremuloides*

## Aquatic

Sweet Flag  
*Acorus americanus*

Blue Flag Iris  
*Iris versicolour*

White Water Lily  
*Nymphaea odorata*

Water Arum  
*Calla pallustris*

Yellow Pond Lily  
*Nuphar advena*

Large-fruited Burreed  
*Sparganium eurycarpum*

Arrowhead (Wapato)  
*Sagittaria latifolia*

Pickerelweed  
*Pontederia cordata*



Chris Evans, Photographer

## Plants that can tolerate Juglone, the chemical emitted by Black Walnut

Tall Ironweed  
*Vernonia altissima*

Jack-in-the-Pulpit  
*Arisaema triphyllum*

Red Maple  
*Acer rubrum*

Pawpaw  
*Asimina triloba*

Blue Vervain  
*Verbena hastata*

White Oak  
*Quercus alba*

Eastern Hemlock  
*Tsuga canadensis*

White Ash  
*Fraxinus americana*

Red Oak  
*Quercus rubrum*

Witch-hazel  
*Hamamelis virginiana*

Hawthorn  
*Crataegus spp.*

Bee Balm  
*Monarda didyma*

Tulip Tree  
*Liriodendron tulipifera*

Ninebark  
*Physocarpus opulifolius*

Great Lobelia  
*Lobelia siphilitica*

Sassafras  
*Sassafras albidum*

Sugar Maple  
*Acer saccharum*



Robert Ritchie, Niagara Parks Commission

## PEARLY EVERLASTING

*Anaphalis margaritacea*

### Habitat

Pearly Everlasting is found in dry meadows, roadsides, open thickets and forest openings. Pearly Everlasting should be planted in full sun where there is good to excessive drainage.



Walter Muma, photographer

### Description

Pearly Everlasting is a perennial plant reaching up to 90 cm tall. Flowers are small and white consisting of many rows of papery petals enclosing a yellow centre. The clustered white flowers of Pearly Everlasting are found in flat-topped clumps and emerge from July to September. Leaves are alternate, stalkless and are much longer than wide. Leaves have a hairy surface, are woolly underneath and the margins are rolled under.

### Wildlife value

High – attracts butterflies and other pollinators. Host plant of the American Lady Butterfly.

## BUTTERFLY MILKWEED

*Asclepias tuberosa*

### Habitat

Butterfly Milkweed is found in dry tallgrass prairies and savannas as well as, on roadsides where prairie previously existed. It should be planted in full sun where there is good to excessive drainage.



Walter Muma, photographer

### Description

Butterfly Milkweed is a beautiful perennial plant that has clusters of vivid orange flowers. Stems are hairy and branched reaching up to 75 cm tall. This species generally forms bushy clumps. Flowers are in flat-topped clusters that emerge from June to August. Leaves are usually alternate but may become opposite near the flower clusters. The leaves are stalkless and are much longer than wide, linear to lance-shaped and have smooth margins.

### Wildlife value

High – attracts butterflies, bees and other pollinators. This plant is one of the host plants for the Monarch Butterfly larvae.



## SMOOTH ASTER

*Aster laevis*

### Habitat

Smooth Aster is found in dry sites, including open fields and open woods. It should be planted in full sun where there is good drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Smooth Aster is a perennial plant that has a smooth stem, reaching 1.2 m tall. It is similar to the New England Aster (*Aster nova-angliae*) but is distinct because of its smooth, waxy and thick leaves which are very unique. The leaves are dark green, almost blueish, have smooth margins and are slightly clasping to the stem. Flowers occur from August to September and consist of approximately 17 blue or pale purple rays with yellow centres; the rays are wider than some other asters and are sometimes almost white.

### Wildlife value

Medium – attracts butterflies.

## SKY BLUE ASTER

*Aster oolentangiensis (azureus)*

### Habitat

Sky Blue Aster is found in drier meadows and open areas and also at the edge of woodlots. It should be planted in open areas with good drainage.



Photo Courtesy of Lyon College

### Description

Also called Azure Aster, Sky Blue Aster is a perennial plant that has a loose and open growth form, reaching up to 1 m tall. Flowers are sparser than some of the other Asters, pale purple in colour with yellow centres and the rays are wider than most Asters. The bloom time is from August through September. Leaves are hairy on the upper and lower surfaces and are generally toothless but sometimes have a few teeth. It is uncommon but not rare.

### Wildlife value

Medium – attracts small bees, skippers, wasps and butterflies, such as the Silvery Checkerspot Butterfly.

## HAREBELL

*Campanula rotundifolia*

### Habitat

Harebells are found in open woodlands, dry tallgrass prairies, dunes and open rocky sites. This species should be planted in full sun where there is very good to excessive drainage.



Walter Muma, photographer

### Description

Harebell is a relatively small perennial wildflower that reaches up to 45 cm tall. It can have either a single or branched hairless stem. Flowers are light blue or light purple and resemble small bells hanging on very thin stems. Harebell flowers have 5 lobes and emerge from June to August. The basal leaves are round and usually die-off when flowering occurs. The stem leaves are short-stalked, much longer than they are wide and have smooth margins.

### Wildlife value

Medium – bees and hummingbirds seek nectar.

## PALE PURPLE CONEFLOWER

*Echinacea pallida*

### Habitat

Pale Purple Coneflower grows best on moist to dry soils in full sun, but can tolerate partial shade. It is well suited for sandy and clay soils.



### Description

Pale Purple Coneflower is a tall flower with lavender pink petals that are slender and droop down from a purple-brown, dome-shaped centre. Pale Purple Coneflowers have a fuzzy stem and the leaves are longer than wide with smooth margins. This species flowers from June to July and reaches up to 1.5 m tall.

### Wildlife value

High – attracts bees, butterflies, hummingbirds and other pollinators. The seeds are consumed by finches.

## LONGLEAF BLUETS

*Hedyotis/Houstonia longifolia*

### Habitat

Longleaf Bluets are found in rocky open woods and in prairies. They should be planted in full to partial sun in areas with good to excessive drainage.



Walter Muma, photographer

### Description

Longleaf Bluets are a perennial plant with branching stems that reach 25 cm tall. It blooms spring through fall. Flowers are pinkish to white in colour, trumpet shaped with 4 lobes with a few flowers on each stem. Leaves are opposite, spatula or lance-shaped and are much longer than wide. Opposing leaves are joined at the base to the stem.

### Wildlife value

Low – used by butterflies.

## WILD BERGAMOT

*Monarda fistulosa*

### Habitat

Wild Bergamot is found in old fields, savannas, prairies, woodlands and alvars. This species should be planted in full sun to partial shade where there is good to excessive drainage.



Alison Thomson, photographer

### Description

Wild Bergamot is a perennial plant with a square branched stem, reaching up to 1.2 m tall. Emerging from June to September, the aromatic flowers are pale purple with a distinctive form and shape. Leaves are opposite, on short stalks, narrowly to broadly lance-shaped with toothed margins. Leaves are also aromatic.

### Wildlife value

Medium – attracts butterflies and hummingbirds.

## EVENING PRIMROSE

*Oenothera biennis*

### Habitat

Evening Primrose is common and found on dry open sites. Evening Primrose should be planted in full sun where there is good to excessive drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Evening Primrose is biennial and can reach up to 2 m tall. The stem is reddish-green and has many leaves. The flowers are lemon yellow with 4 petals and are usually slightly closed during the day but are wide open at twilight. This wildflower blooms late summer to fall. Leaves are lance-shaped with toothed or wavy edges.

### Wildlife value

Medium – attracts hummingbirds and beneficial insects.

## HAIRY BEARDTONGUE

*Penstemon hirsutus*

### Habitat

Hairy Beardtongue is found in dry alvars, prairies, savannas and in old fields. This species should be planted in full sun where there is good drainage.



Walter Muma, photographer

### Description

Hairy Beardtongue is a perennial plant reaching up to 90 cm tall. Flowers are pink to purple with white lips, emerging in May through July. It has hairy stems and smooth, finely toothed leaves that are opposite on the stem.

### Wildlife value

Medium – visited by pollinating insects.

## VIRGINIA MOUNTAIN MINT

*Pycnanthemum virginianum*

### Habitat

Virginia Mountain Mint is found in dry woods, thickets and upland fields. It should be planted in full sun where there is good to excessive drainage.



Walter Muma, photographer

### Description

Virginia Mountain Mint is a perennial plant in a family of aromatic plants reaching 50-90 cm high. The stems are square and have opposite leaves. Flowers bloom from July to September and are white with two lips; the lower lip has 3 lobes. Leaves are small (under 10 cm) very narrow and stalkless, growing up the length of the stem.

### Wildlife value

Medium – attracts beneficial insects such as tiny parasitic wasps.

## BLACK-EYED SUSAN

*Rudbeckia hirta*

### Habitat

Black-eyed Susan is found in dry open areas, roadsides and tallgrass prairies. It should be planted in full sun where there is good to excessive drainage.



Alison Thomson, photographer

### Description

Black-eyed Susan is a showy perennial plant. Flowers are relatively large ranging from 50-75 cm, with 8-20 yellowish-orange rays and a dark purplish-brown, dome-shaped centre. Flowers emerge in June through October. Stem is bristly-haired and is usually purplish-green. This plant can reach up to 75 cm tall. Leaves are alternate, oval or lance-shaped and relatively large. Upper leaves clasp the stem, lower leaves may have a short winged stalk.

### Wildlife value

High – attracts butterflies, hummingbirds and small mammals. Beneficial to insects and songbirds.



## HEATH ASTER

*Symphyotrichum ericoides* (*Aster ericoides*)

### Habitat

Heath Aster is found in dry open roadsides, old fields, tallgrass prairies and savannas. It should be planted in an open area with full sun and good to excessive drainage.



Walter Muma, photographer

### Description

Heath Aster is a perennial plant with hairy stems, reaching up to 1 m tall. Flowers are white with yellow centre and found in panicle or pyramid-shaped clusters of many crowded flowering heads. Flower heads have many petals, called rays. It blooms from August to October. Leaves are alternate, stalkless, have smooth margins, are longer than they are wide and are crowded together like the flower heads. Leaves generally die-off during flowering time.

### Wildlife value

Low – attracts butterflies.

## HOARY VERVAIN

*Verbena stricta*

### Habitat

Hoary Vervain is found on drier sites such as prairies and roadsides. This species should be planted in full to partial sun where there is good to excessive drainage.



Walter Muma, photographer

### Description

Hoary Vervain is a perennial plant that is very similar to Blue Vervain, reaching almost 1.5 m tall. The flowers of Hoary Vervain are larger and more purplish than those of Blue Vervain, sometimes even pinkish and occur from late summer to fall. Leaves are thick, almost stalkless, coarsely toothed and ovate. The stems and leaves of this plant are said to be “hoary” describing the whitish hairs found on them.

### Wildlife value

Medium – attracts small mammals and upland birds.

## BIG BLUESTEM

*Andropogon gerardii*

### Habitat

Big Bluestem is found in deep, fertile soils of prairies and open woods that dry out in summer. Big Bluestem should be planted in full sun where there is good drainage. It thrives in sandy or clay soils.



Photo courtesy of Wind Cave National Park

### Description

Big Bluestem is an attractive grass, which reaches 2.4 m tall. The seed heads, which resemble a turkey's foot, are 5-10 cm long and are produced in late August. After the first frost, the stems and leaves change from green to reddish-copper. Big Bluestem will remain standing throughout the winter season.

### Wildlife value

Very High – attracts butterflies and other pollinators and is used by some songbirds. Big Bluestem is one of the highest quality forage grasses in the tallgrass prairies.

## SIDEOATS GRAMA

*Bouteloua curtipendula*

### Habitat

Sideoats Grama is found in dry, open grasslands. Although it is extremely drought tolerant, this species will require good watering for the first season when it is planted until a proper root system is developed. Sideoats Grama should be planted in full sun to light shade where there is excessive drainage.



### Description

Sideoats Grama is one of the most drought tolerant native grasses. It can reach up to 1 m tall, growing in clumps and spreading slowly. The leaves are narrow, and generally blueish-green in the spring and summer, becoming reddish-brown in the fall and are mostly basal. This species flowers from June to September, producing its distinctive red or purplish spikelets. The name of "sideoats" refers to the flower spikelets which tend to fall or droop to one side of the stem. This species is known for having good fall colour.

### Wildlife value

Medium – attracts birds.

## RED OAK

*Quercus rubra*

### Habitat

Red Oak grows best in full sun because it is intolerant of shade. It prefers well-drained loams and slightly acidic soils.



Alison Thomson, photographer

### Description

Red Oak is a large tree reaching 22–30 m tall. Flowers are drooping clusters of catkins, yellow-green in colour. Red Oak leaves are simple and alternate with 7–9 lobes and shallow to moderately deep bristle tipped sinuses. Acorns are almost as wide as they are long and have a saucer-shaped cup which encloses about 1/4 of the nut; scales are thin, hairless and reddish-brown in colour. This tree is typically faster growing than other oak species.

### Wildlife value

Very High — attracts songbirds, upland ground birds and small mammals.

## SASSAFRAS

*Sassafras albidum*

### Habitat

Sassafras typically grows on upland dry areas with good to excessive drainage and moist to dry soils. Moderately coarse soils such as sandy loams and sands are best, but it will also tolerate loamy and heavy clays.



Alison Thomson, photographer

### Description

Sassafras is a medium-sized tree reaching 10–15 m tall and is about 2/3 as wide as it is tall. This tree is rare in Canada, occurring only in the Carolinian zones of southern Ontario. Bright yellow flowers occur in small clusters on loose drooping open spikes. The flowers emerge in late April through early May and have a sweet smell. Fruit of Sassafras are small clusters of dark blue berries on bright red stems. Sassafras leaves can occur in three different shapes on the same tree and have a lemon-spicy odor when bruised. Leaves are alternate, simple and blunt tipped. They may be unlobed, or have 2–3 lobes. This tree is known to form colonies in open areas because it shoots out root sprouts which are difficult to transplant. It has a medium growth rate and is known to be relatively short lived, typically living only 50–75 years.

### Wildlife value

Low — attracts songbirds.

## SWAMP MILKWEED

*Asclepias incarnata*

### Habitat

Swamp Milkweed is found in swamps, wet meadows, marshes and along streambanks. This species should be planted in full to partial sun where there is poor to moderate drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Swamp Milkweed is a perennial plant with branching stems reaching up to 1.5 m tall. If the stems or leaves are broken, a milky white sap will leak from the wound. Flowers are pinkish-purple flat-topped clusters that emerge in June through August. Leaves are opposite with short stalks, much longer than wide and are typically oblong or lance-shaped, and have smooth margins.

### Wildlife value

High — butterflies, bees, small mammals and other beneficial pollinators. Host plant for Monarch Butterfly larvae.

## WHITE TURTLEHEAD

*Chelone glabra*

### Habitat

White Turtlehead is found on moist sites, including swamps, thickets and marshes or bogs. It should be planted in full to partial sun where there is poor to moderate drainage.



### Description

White Turtlehead is a perennial plant named for the turtle-head shape of its flower heads which range in height from 40 to 90 cm. The stem is hairless and single. Clusters of white flowers with 2 lips emerge in July to September; the upper lip arches over the lower lip. The dark green leaves are opposite and lance-shaped, with toothed margins and has either a short stalk or no stalk at all. This is a very tidy clump-forming plant which revives the garden in late summer with its unusually shaped blooms.

### Wildlife value

High — attracts hummingbirds and provides nectar for butterflies. It is the specific larval host for the Baltimore Checkerspot Butterfly.

## SPOTTED JOE-PYE-WEED

*Eupatorium maculatum*

### Habitat

Spotted Joe-Pye-Weed is found in moist open areas, marshes, thickets, shorelines and swamps. It should be planted in full sun where there is poor drainage or along a shoreline.



Robert Ritchie, Niagara Parks Commission

### Description

Spotted Joe-Pye-Weed is a showy perennial wildflower reaching up to 2 m tall. The stem is hairy and often has purple spots. Flowering occurs from August to September, producing flat-topped clusters of small pinkish-purple florets. Leaves are in whorls of 3–6 around the stem. Leaves are short-stalked, lance-shaped with sharply toothed margins and hairy undersides.

### Wildlife value

Medium — attracts butterflies, songbirds and beneficial insects.

## SNEEZEWEED

*Helenium autumnale*

### Habitat

Sneezeweed is found in rich open woods and meadows, and along streams and shorelines. It should be planted in full sun where there is fair to moderate drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Sneezeweed is also called Swamp Sunflower. It is a perennial plant that grows from 60–150 cm tall. Sneezeweed blooms from August to October, producing a yellow flower composed of 10–20 rays surrounding a yellowish-green dome-shaped centre. Each ray of the flower has 3 notches on the outer margin. Leaves are alternate, much longer than wide, stalkless and have toothed margins. The stem is either slightly hairy or hairless but is always winged.

### Wildlife value

Medium – attracts pollinators, moths and butterflies.

## BLUE-EYED GRASS

*Sisyrinchium montanum*

### Habitat

Blue-eyed Grass is usually found in moist prairies and wet meadows. It should be planted in full to partial sun where there is poor to moderately poor drainage.



Terry Spivey, photographer

### Description

Blue-eyed Grass is a perennial, herbaceous plant with one or many stems reaching only 10–30 cm tall. Despite its common name, it is not a true grass, but is in fact a member of the Iris family. Leaves are basal, linear and much longer than wide. This species produces a beautiful purple flower with a yellow “eye” centre from May to July. There may be as many as 5 flowers on a given stem and the blooms generally last for only one day, opening in the early morning and closing by early afternoon. It grows readily from seed.

### Wildlife value

Medium — it is visited by various bee species. The seeds may be eaten by wild turkey.

## OHIO GOLDENROD

*Solidago ohioensis*

### Habitat

Ohio Goldenrod is found in moist prairies, bogs and sandy beaches. This species should be planted in full sun where there is moderate drainage.



### Description

Ohio Goldenrod is one of many species of perennial goldenrods native to Ontario. This species can grow up to 1 m tall. The small, bright yellow flowers of Ohio Goldenrod are found in a flat-topped cluster and they emerge from August to September. The leaves are smooth, much longer than wide and are found all the way up the smooth stem with smaller leaves pointing upwards.

### Wildlife value

Medium — attracts butterflies, songbirds and small mammals.



## BLUE VERVAIN

*Verbena hastata*

### Habitat

Blue Vervain is found in moist open sites, including marshes, meadowmarshes and swamps. It should be planted in full sun where there is poor to moderate drainage.



### Description

Blue Vervain is a perennial plant reaching up to 2 m tall with a rough-haired square stem. It blooms in June through to October, producing numerous, terminal, densely clustered purple or blue flowers. Flowers are funnel-shaped and have 5 lobes. Leaves are opposite, stalked, lance-shaped and can be narrow or broad and have toothed margins.

### Wildlife value

Medium — attracts butterflies, waterfowl and small mammals. Seeds are eaten by sparrows and finches.

## TALL IRONWEED

*Vernonia altissima*

### Habitat

Tall Ironweed is found on rich, wet soil and especially wet meadows. It should be planted in full to partial sun in areas with good to moderate drainage.



### Description

Tall Ironweed is a perennial plant that reaches over 1.5 m tall and has small pinkish-purple flowers. Flower heads have 13–30 flowers. Leaves are lance-shaped and have finely toothed margins. Bloom time is August to October. Tall Ironweed is tolerant of Juglone, the chemical emitted by Black Walnut.

### Wildlife value

Medium — attracts butterflies and bees. Unpalatable to mammals so it will not be grazed.

Alison Thomson, photographer

## CANADA BLUEJOINT

*Calamagrostis canadensis*

### Habitat

Canada Bluejoint is found in marshes and other wet places, including woods and meadows. This species should be planted in full to partial sun where there is poor to moderately poor drainage.



Photo Courtesy of Tarleton State University

### Description

Canada Bluejoint is a medium-sized grass that reaches up to 1.5 m tall. Flowers consist of purplish panicles, typically 10–25 cm long, and are slightly drooping or nodding. The flowers range from being fairly dense, to fairly open and are made up of short, hairy bristles. This species blooms from July to September. The numerous leaves of Canada Bluejoint are much longer than wide and are usually flat.

### Wildlife value

Medium — may be used by birds and small mammals as food and shelter in the winter.

## BEBB'S SEDGE

*Carex bebbii*

### Habitat

Bebb's Sedge is found in wet meadows, riparian edges and along ponds and ditches. This sedge should be planted in full sun where there is poor drainage.



Photo Courtesy of University of Minnesota

### Description

Bebb's Sedge is a medium-sized sedge that grows in bunches and can reach up to 61 cm tall. There are generally 3–12 globular or oval-shaped spikes on each stem. The spikes are made up of short spikelets, and are generally brown to yellowish-green. Leaves are much longer than wide.

### Wildlife value

Medium — seeds eaten by waterfowl and songbirds.

## PORCUPINE SEDGE

*Carex hystericina*

### Habitat

Porcupine Sedge occurs in marshes and wet meadows on sand, clay or loam. This sedge should be planted in full sun where there is moderately good drainage.



Photo Courtesy of Oklahoma Biological Survey

### Description

Porcupine Sedge is a tall perennial sedge reaching up to 1 m tall. Its bloom time is from May to June. Leaves are green, much longer than wide with smooth margins. Flowers are also green to yellowish, resembling those of Hop Sedge, and they are made up of beaked seeds.

### Wildlife value

Medium — used by waterfowl and seeds eaten by the Black Duck.

## FOX SEDGE

*Carex vulpinoidea*

### Habitat

Fox Sedge is found in marshes and wet meadows and is very tolerant of flooding. It can be used as a border along ponds and stream banks. It should be planted in full sun to partial shade where there is poor drainage.



### Description

Fox Sedge grows in clumps and can reach up to 30–60 cm tall. The stems are slender and stiff and have a triangular shape. Leaves are 3 to several blades, usually clustered near the base of the plant. The blades are green and smooth, but have rough margins. Flowers are spikes, usually 15 or more per stem and they are found clustered closely together. Fox Sedge produces green to yellowish flowers from May to June. Once the flowers start to mature, they become more yellowish-brown and begin to spread, making the stem and flowers look like the tail of a fox.

### Wildlife value

Medium — used by waterfowl and aquatic mammals.

## RIVERBANK WILD RYE

*Elymus riparius*

### Habitat

Riverbank Wild Rye is common along streambanks and in moist meadows. This species should be planted in full sun to partial shade where there is good to poor drainage.



### Description

Riverbank Wild Rye is a mid-sized grass, reaching up to 1.5 m tall. It has green flowers which become brown later in the season. Flowers bloom in late summer, producing slightly nodding bristly flowers. Easily grown from seed. Riverbank Wild Rye can be effectively used in riparian buffer planting to reduce soil erosion.

### Wildlife value

Low — used by White-tailed Deer and birds.

## HARD-STEM BULRUSH

*Scirpus acutus*

### Habitat

Hard-stem Bulrush is found in marshes and along shorelines up to 1.5 m deep. This sedge can tolerate long periods of flooding in deep water. Hard-stem Bulrush should be planted in full sun along the edges of streams, ponds, marshes and other water bodies.



### Description

Hard-stem Bulrush is a tall perennial sedge growing 1–3 m tall. The flowers typically consist of 1–8 brownish-grey spikelets per cluster. There are few leaves on this plant, usually short and found at or near the base of the plant. Hard-stem Bulrush is commonly used for bank stabilization and to treat contaminated water.

### Wildlife value

Medium — important food for aquatic mammals. Provides food, cover and nesting habitat for waterfowl and other birds.

## SOFT-STEM BULRUSH

*Scirpus cyperinum*

### Habitat

Soft-stem Bulrush is found in low grounds, usually near swamps or along shorelines. This species should be planted in full sun along the edges of streams, marshes or ponds.



### Description

Soft-stem Bulrush is a tall perennial sedge growing 1–3 m tall. Flowers are tiny and lack petals, forming terminal drooping clusters of 1–3 reddish-brown spikelets. The flowers are woolly-looking as they mature. Blooms from August to September. Stems are olive green, round and taper towards the tip. This species has few leaves, and most are basal or near the base.

### Wildlife value

Medium — important food for aquatic mammals. Provides food, cover and nesting habitat for waterfowl and other birds.

## PRAIRIE CORDGRASS

*Spartina pectinata*

### Habitat

Prairie Cordgrass is found in damp open areas. This species should be planted in full to partial sun where there is poor to good drainage.



### Description

Prairie Cordgrass is almost as tall as Big Bluestem, reaching up to 2 m tall, but its overall texture is more robust. The scientific name “pectinata” refers to the unusual arrangement of flowers on the branches in a comb-like fashion. The flowers appear like small bristles. This species has long thin leaves that are green and sometimes with yellow margins. It often grows along streambanks and withstands mid-summer flooding, regaining its shape within a few days. It is useful for erosion protection and for grassed waterways.

### Wildlife value

High — provides protective cover and nesting habitat for many wetland birds. Seedheads eaten by many ducks.

Alison Thomson, photographer

## MEADOWSWEET OR WILD SPIRAEA

*Spiraea alba*

### Habitat

Meadowsweet is found in bogs, savannas, dunes, old fields, streambanks, wet thickets and roadside ditches. This species should be planted in full sun, as it is intolerant of shade. It can be planted where there is very poor to moderately poor drainage. Meadowsweet is resistant to drought and tolerant of flooding, but it is sensitive to salt.



Robert Ritchie, Niagara Parks Commission

### Description

Meadowsweet is a small branching shrub, reaching only 2 m tall. Flowers are white, broad, conical, erect, terminal spikes. The flowers emerge in late June through mid August and are slightly fragrant. Fruit are small dry capsules, arranged in clusters of 5, and are pale brown to red brown.

### Wildlife value

Medium — important to upland gamebirds and White-tailed Deer.

## BUTTONBUSH

*Cephalanthus occidentalis*

### Habitat

Buttonbush is a lowland shrub found on river and streamside margins, in floodplains and areas of very poor to moderate drainage. Buttonbush does well in sand, gravel, silty clay, stiff clay, peat and muck. It is sensitive to drought and heat and is intolerant of shade.



Alison Thomson, photographer

### Description

Buttonbush is a globular shaped shrub 2–4 m high and spreading. Leaves are simple, opposite and whorled in groups of 3 or 4. Leaves are glossy and smooth. Creamy white flowers are dense, small, ball-like clusters resembling pins in a pin cushion and emerge in late July through August. Fruit are dry, hard, globular and ball-like, they are found in loose upright long stemmed clusters.

### Wildlife value

High — the flowers are visited by pollinating insects. Waterfowl, marsh and shore birds consume the seeds.



## RED OSIER DOGWOOD

*Cornus stolonifera* / *sericea*

### Habitat

Red Osier Dogwood is a lowland shrub found on river and streamside margins, in floodplain depressions or any area with very poor to moderate drainage. It does well on coarse sands, gravels and peats underlain by calcareous clays, silts and sands. It is tolerant of flooding, but requires full sun. It is sensitive to salt therefore should not be planted on roadsides.



Walter Muma, photographer

### Description

Red Osier Dogwood is a medium-sized, fast growing shrub reaching 2–4 m tall. This shrub has bright red to purple twigs and bark. Leaves are opposite, simple and have smooth margins. This shrub is very colourful in fall, generally orange or red, darkening to bronze purple. Flowers are dense flat-topped clusters, creamy white in colour emerging in late May through mid June. Fruit are clusters of white pea-sized berries. Excellent for soil stabilization.

### Wildlife value

Very High — attracts waterfowl, marshbirds, shorebirds and White-tailed Deer.

## HIGHBUSH CRANBERRY

*Viburnum trilobum*

### Habitat

Highbush Cranberry is found in marshes, bogs, swampy woods, along lakes and stream banks, and wet thickets. It is very tolerant of shade, flooding, soil compaction and is resistant to drought and excessive heat but is sensitive to salt. This species should be planted in full to partial sun where there is very poor to moderate drainage.



Mary Hopson, photographer

### Description

Highbush Cranberry is a mid-sized shrub with multiple stems, reaching up to 4 m high. Flowers are white, and emerge from late May through early June. Fruit are firm, glossy, round berries that are scarlet red or orange. Fruit are found in heavy, drooping clusters from early September through to late February. Leaves are opposite, simple and have 3 seldom toothed lobes, similar to maple leaves.

### Wildlife value

High — berries are consumed in winter by songbirds, gamebirds and small mammals. They are especially loved by Cedar Waxwings.

## BUTTERNUT WALNUT

*Juglans cinerea*

### Habitat

Butternut Walnut is found in lowland areas where the land is wet during the winter and dry in late summer. Butternut Walnut is not as tolerant of drought and heat as Black Walnut but can tolerate partial shade. It prefers moderately coarse loamy sands and medium loams to moderately fine silt loam soils. This tree is sensitive to salt.



Photo Courtesy of Indiana University

### Description

Butternut Walnut is a medium-sized tree reaching 15–22 m tall. Flowers are yellowish-green in colour and emerge in late May through early June in clusters of short pencil-like drooping catkins. Leaves are alternate and compound having 11–17 leaflets. The terminal leaflet is commonly absent. Listed as Endangered Species in 2003.

### Wildlife value

High — attracts butterfly larvae, especially Hickory Hairstreak Butterfly. Its nuts are eaten by small mammals.

## BLACK WALNUT

*Juglans nigra*

### Habitat

Black Walnut is intolerant of shade and resistant to drought and heat. It is found in lowland areas, prefers wet winter and dry summer conditions. Ideal to plant where drainage is good and where intermittent flooding occurs. Prefers moderately coarse sandy loams and moderately fine silt loam soils, but it will grow on clay. Black walnut is sensitive to salt.



Photo Courtesy of Indiana University

### Description

Black Walnut is a large, fast growing tree reaching 22–30 m tall. Flowers are yellowish-green and appear in pencil-like catkins, which emerge in late May through early June. Fruits are globular nuts with fleshy green husks. The leaves are alternate and compound, having 15–23 leaflets. The roots and nuts of this tree release a chemical called Juglone that inhibits the growth of many species such as White Pine, tomatoes, apples and blueberries.

### Wildlife value

Low — nuts eaten by small mammals.

## EASTERN COTTONWOOD

*Populus deltoides*

### Habitat

Eastern Cottonwood grows well in open lowland areas with wet to porous dry soils. It prefers wet sites that have poor to moderate drainage with fine, sandy loams or silts. It is tolerant of flooding and resistant to drought but intolerant of shade. Eastern Cottonwood is an excellent “pioneer” species for reforesting old fields because of its rapid development. Its roots are capable of holding together shorelines of lakes and rivers.



Photo Courtesy of Indiana University

### Description

Eastern Cottonwood is a large, very fast growing tree reaching 22–30 m. The flowers resemble miniature corn cobs and are bright red in colour and emerge in mid through late April. Fruit are small cone-shaped clusters that release cottony seeds. Leaves are simple, alternate and triangular-shaped with coarse toothed edges and have a glossy surface.

### Wildlife value

High — attracts songbirds, small mammals and waterfowl.

## LARGETOOTH ASPEN

*Populus grandidentata*

### Habitat

Largetooth Aspen is very intolerant of shade. It requires wet to moist soils and is intolerant of flooding. Preferred habitats include moist but well-drained slopes, upland mesic areas and wet ravines with coarse sandy or loamy soils.



### Description

Largetooth Aspen is a short-lived, fast growing tree which reaches 15–22 m. Flowers are clusters of slender drooping catkins that emerge in mid to late April. Fruit are small and release cottony seeds. Leaves are alternate, simple and have large uneven teeth along their margins.

### Wildlife value

High — attracts songbirds, upland ground birds and small mammals.

Walter Muma, photographer

## SWAMP WHITE OAK

*Quercus bicolor*

### Habitat

Swamp White Oak is usually found in lowland wet areas with poor drainage. It is tolerant of flooding and prefers wet soils especially heavy clay or sandy clays. It can tolerate small amounts of shade and can readily be transplanted. A great species for floodplain and streambank planting.



Walter Muma, photographer

### Description

Swamp White Oak is a large, fairly fast growing tree reaching 22–30 m tall. Yellowish-green flowers are clusters of drooping catkins that emerge in May. Acorns are 19–38 mm long and the cap encloses 1/2 of the nut. Leaves are alternate and simple. It is uncommon in Canada, and occurs only in southern Ontario.

### Wildlife value

Very High — attracts water birds, upland ground birds, songbirds and small mammals.

## BUR OAK

*Quercus macrocarpa*

### Habitat

Bur Oak is found in lower, wet areas including those that dry out in the summer. It is resistant to drought and heat and is intolerant of shade. Once Bur Oak is established, it is difficult to transplant. This tree can grow on a variety of soils, including sandy or silty loams and heavy clay.



Walter Muma, photographer

### Description

Bur Oak is a large, slow growing tree reaching 22–30 m tall. Leaves are alternate, simple and lobed but the pattern of the lobes can vary, though 7–9 deep rounded lobes are typical. Yellowish-green flowers are borne on catkins which emerge in May. Acorns are distinct from other oaks because the cup encloses more than 1/2 the acorn and has burly-fringed edging.

### Wildlife value

Very High — attracts songbirds, upland ground birds, water-birds and small mammals.

## PIN OAK

*Quercus palustris*

### Habitat

Pin Oak prefers wet conditions but can tolerate summer drought. Poorly drained soils such as compact clay or silty clay loams are best for this species. It should be planted in full sun where there is poor drainage.



Walter Muma, photographer

### Description

Pin Oak is a medium-sized tree reaching 15–22 m tall and usually spreading to about 2/3 the height. Flowers are drooping catkins yellowish-green in colour, emerging in May. Leaves are alternate, simple and lobed with deep open sinuses and bristle tips. The leaves of this tree become deep scarlet red in late autumn. This tree is one of the faster growing oaks and is easily transplanted.

### Wildlife value

Very High — attracts waterbirds, songbirds, upland ground birds and small mammals. Larval host for Gray Hairstreak Butterfly.



## BONESET

*Eupatorium perfoliatum*

### Habitat

Boneset is found in swamps, wet meadows and moist thickets. It should be planted in full to partial sun where there is poor to moderate drainage.



Photo Courtesy of Indiana University

### Description

Boneset is a perennial plant with a hairy stem reaching 1.5 m tall. Boneset has flat-topped clusters composed of smaller white flowers that emerge in July through to October. Leaves are opposite and “perfoliate” meaning that opposing leaves are united at their bases to surround the stem, which gives the appearance that the stem is piercing the leaf. Leaves are much longer than they are wide, tapering to a fine tip, sparsely hairy below with toothed margins.

### Wildlife value

Very High — used by waterfowl, turkey and some ducks. It is valuable cover for small mammals, reptiles and amphibians. It attracts butterflies.

## SPOTTED ST. JOHNSWORT

*Hypericum punctatum*

### Habitat

Spotted St. Johnswort is found in moist prairies, gravel prairies, open woodlands, savannas, thickets and along rivers, lakes or roadsides. It should be planted in moist to medium wet soils in open sun or in partial shade.



Walter Muma, photographer

### Description

Spotted St. Johnswort is a perennial that grows up to 60 cm tall, flowering in mid summer. The oval leaves are 6 cm long and 2.5 cm across and run opposite along the hairless red or green stem. Smaller leaves are found on the upper axis of the larger leaves of the major stems, which have small translucent dots on their underside. The terminal cluster of yellow flowers appears in mid-summer and lasts about a month. They consist of 5 petals surrounding a flask-shaped pistil and numerous yellow anthers.

### Wildlife value

Medium — attracts bees and seed capsules are eaten by caterpillars of butterflies.



## MICHIGAN LILY

*Lilium michiganense*

### Habitat

Michigan Lily is found in tallgrass prairies and wet meadows, along moist riverbanks, bottomlands and in swamps. It can be used successfully in the garden, as it is adapted to floodplains that dry out in summer.



Walter Muma, photographer

### Description

Michigan Lily is a beautiful perennial lily reaching about 60–100 cm tall and flowers in late June. It is distinguished from other lilies because of the nodding flowers with petals that curve backward, almost touching the flower stalk. Flowers are dark orange to reddish, becoming paler towards the centre with black or brown spots. Usually 3–7 leaves are found in whorls around the smooth, round stem. Leaves are much longer than wide and have smooth margins.

### Wildlife value

High — attracts butterflies, hummingbirds and other larger pollinators.

## CARDINAL FLOWER

*Lobelia cardinalis*

### Habitat

Cardinal Flower is usually found in moist meadows, swamps and along streambanks. It should be planted in full to partial sun where there is poor to moderate drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Cardinal Flower is a beautiful perennial plant with an unbranched stem, growing 60–120 cm tall. Flowers are scarlet red; the lower lips have 3 broad lobes at the tip and the upper lips are completely split into 2 narrower, widespread lobes. This species blooms from July to September. Leaves are short-stalked, alternate, lance-shaped and are much longer than wide, with irregular toothed margins.

### Wildlife value

High — attracts hummingbirds, butterflies, songbirds and beneficial insects.

## GREAT LOBELIA

*Lobelia siphilitica*

### Habitat

Great Lobelia is found in moist woodlands, swamps and marshes. It should be planted in partial sun on poorly to moderately well-drained soils.



Robert Ritchie, Niagara Parks Commission

### Description

Great Lobelia is a perennial plant that can reach up to 1.5 m tall. It has a slightly hairy stem with alternate, stalkless, lance-shaped leaves which are about half as wide as they are long and have toothed margins. Flowers are bright blue or purplish, blooming from July to September. The upper lip has 2 lobes and the lower lip has 3 lobes with white at the throat.

### Wildlife value

Medium — nectars enjoyed by bees and small butterflies.

## BEE BALM OR OSWEGO TEA

*Monarda didyma*

### Habitat

Bee Balm is found in moist, open woods and clearings of southern Ontario. It should be planted in full to partial sun on sites with moderately drained organic soil.



Walter Muma, photographer

### Description

Bee Balm is a beautiful perennial plant which may grow over 1 m tall. The unusually shaped flowers are scarlet red, terminal, and relatively large (3–4.5 cm), emerging in June to September. Leaves are opposite, narrow to broad lance-shaped with toothed margins and are slightly longer than wide.

### Wildlife value

High — frequently visited by hummingbirds, butterflies and other pollinators.

## GREEN-HEADED CONEFLOWER

*Rudbeckia laciniata*

### Habitat

Green-headed Coneflower is found in moist, open areas. It should be planted in full to partial sun with moderate to poor drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Also called Tall Coneflower, the Green-headed Coneflower is similar to Black-eyed Susan but is distinguished from it by its hairless stems as well as growing much taller; sometimes reaching 3 m. The lower leaves are deeply divided into 3–7 lobes, while the upper leaves have 3 lobes, or are simple. The flowers have greenish-yellow, dome-shaped centres surrounded by yellow downward-pointing rays. Bloom time is late July to September.

### Wildlife value

Medium — attracts butterflies and songbirds.

## ROUGH-LEAVED GOLDENROD

*Solidago patula*

### Habitat

Rough-leaved Goldenrod is found in bogs, swamps and wet meadows. It should be planted in full to partial sun where there is poor to moderate drainage.



Photo Courtesy of Indiana University

### Description

Rough-leaved Goldenrod is a perennial plant reaching over 3 m tall. Flowers are small, yellow and star-shaped found in curved, one-sided clusters along the stem. Rough-leaved Goldenrod blooms between August and October. Basal leaves are much larger than stem leaves, decreasing in size upwards and are elliptical shaped. Leaves are distinctly rough on the upper surface and smooth beneath.

### Wildlife value

Medium — attracts butterflies, songbirds and small mammals.

## TALL MEADOW RUE

*Thalictrum pubescens*

### Habitat

Tall Meadow Rue is found in moist meadows, open woods and along streambanks. It should be planted in partial shade where there is moderate to good drainage.



### Description

Tall Meadow Rue is a perennial plant that can reach up to 3 m tall. The leaves are stalkless, twice compound and hairy on the underside although the leaves sometimes appear as 3-stalked and compound. Flowers emerge from June to August. The flowers are typically white and lack petals. They have numerous slender white filaments instead that are found in small panicle-shaped clusters.

### Wildlife value

Medium — attracts butterflies and other pollinators.

## DUTCHMAN'S BREECHES

*Dicentra cucullaria*

### Habitat

Dutchman's Breeches is found in open woods, rocky woods, slopes, ledges, valleys, ravines and along streams. It should be planted in moist to medium wet, well-drained soils in part to full shade.



Albert Garofalo, photographer

### Description

Dutchman's Breeches is a perennial plant with fern-like foliage that reaches about 10–20 cm in height. The drooping flower stalk produces 2–6 pairs of white flowers about 2 cm in length in the early spring. The irregular flowers of four petals are distinguished by the two large outer petals forming at the base with small upward curling wings. After developing an oblong seed capsule, this species goes dormant in early summer. The foliage consists of a basal rosette with greyish-green, hairless leaves. The compound leaves are divided into 3 primary leaflets that are further divided into linear, oblong secondary leaflets.

### Wildlife value

Medium — attracts bees and butterflies. Deer resistant and poisonous to livestock.

## HOP SEDGE

*Carex lupulina*

### Habitat

Hop Sedge is found in swamps and in wet woods. It should be planted in partial shade where there is poor to moderately good drainage.



Alison Thomson, photographer

### Description

Hop Sedge has a triangular stem and grows up to 1.2 m tall. This sedge blooms from June to August producing 2.5–5 cm long clusters of beaked seeds. Very long flat leaves, tapering to narrow tip with rough margins.

### Wildlife value

Medium — potential food and cover for a variety of wildlife species.



## SILKY DOGWOOD

*Cornus amomum/oblique*

### Habitat

Silky Dogwood is found in bogs, springs, meadows, forests, dunes and old fields. It is tolerant of shade and very tolerant of flooding. It should be planted in full to partial shade where there is very poor to good drainage. It should also be noted that this species is sensitive to salt.



Walter Muma, photographer

### Description

Silky Dogwood is a medium-sized, fast-growing shrub with multiple stems, reaching up to 4 m tall. Flowers are yellowish-white, found in dense clusters that emerge in June. Fruit are small, round, pale blue berries often with white blotches. Leaves are opposite, simple, elliptic ovate and have smooth edges. Where stems are in contact with the ground, roots will form. This growth habit allows this plant to form thickets.

### Wildlife value

Very High — attracts waterfowl, marshbirds, shorebirds, songbirds, large and small mammals.

## COMMON ELDERBERRY

*Sambucus canadensis*

### Habitat

Common Elderberry is found in forests, old fields, bogs, springs and meadows. Common Elderberry should be planted in partial shade where there is good drainage.



Walter Muma, photographer

### Description

Common Elderberry is a medium-sized, fast-growing shrub reaching up to 4 m and spreading typically to 2/3 or equal to its height. Flowers are small, white and star-shaped, found in dense, large, flat-topped clusters. Flowers are slightly to heavily aromatic and emerge in late June through mid July. Fruit are small, round, deep purple to almost black berries on red to purple stems emerging in early August through late September. Leaves are opposite, pinnately compound, with 5 to 11 leaflets, but usually 7, having sharply toothed margins.

### Wildlife value

Very High — this bush is a favourite of more than 48 species of birds as well as large and small mammals. White-tailed Deer will eat the twigs and leaves.



Niagara Peninsula Conservation Authority Watershed

Lake O





## NANNYBERRY

*Viburnum lentago*

### Habitat

Nannyberry is found along banks of streams, lakeshores and sheltered coves, wooded slopes, margins of woods, fencerows and open rocky pastureland. It is intolerant of flooding and is sensitive to salt and soil compaction. It should be planted in full to partial sun where there is moderately poor to good drainage.



Walter Muma, photographer

### Description

Nannyberry is a large, fast-growing shrub, reaching up to 10 m that typically has multiple trunks. Creamy white flowers are broad, flattopped clusters that emerge in May. The yellow and red fruit are small football-shaped berries found in open, loose drooping terminal clusters on bright red stems. Leaves are opposite, simple and ovate to oblong shaped with finely toothed margins.

### Wildlife value

High — attracts songbirds, upland ground birds and small mammals.



## RED MAPLE

*Acer rubrum*

### Habitat

Red Maple grows on a variety of soil types including sandy loams and clay. It is commonly found on poorly aerated soils and is tolerant of both shade and flooding. This tree does well on very poor to well-drained soils with a wet to average moisture regime.



### Description

Like most maple trees, Red Maple can grow to be very tall, reaching 22–30 m and spreading out to 3/4 its mature height. This moderate to fast growing tree flowers in late March to early April before the leaves emerge. Leaves are opposite, simple with slightly toothed margins and usually have 3–5 lobes. Fruit are paired samaras, usually bright red and maturing to reddish-brown.

### Wildlife value

Very High — attracts songbirds, waterbirds and small mammals.

## SILVER MAPLE

*Acer saccharinum*

### Habitat

Silver Maple prefers very wet areas but also tolerates dry areas. It is intermediately shade tolerant and can withstand short periods of flooding but not prolonged inundation. It grows best on sandy loams or silty clay soils.



### Description

Silver Maple is an irregularly shaped tree and is very fast growing, becoming 22-30 m tall in 50-75 years, often spreading wider than it is tall. Silver Maple is characterized by massive ascending limbs. It produces small clusters of short spider-like filaments in March, well before leaf emergence occurs. Leaves are simple and opposite with deep, narrow sinuses creating 5 lobes. Fruit are paired samaras in terminal clusters.

### Wildlife value

Very High – providing food or shelter for songbirds, waterbirds, waterfowl and small mammals.

Steven J. Baskauf, photographer

## PAWPAW

*Asimina triloba*

### Habitat

Pawpaw occurs on rich moist soils of floodplains and in wet woods. It is tolerant of Juglone, the chemical given off by Black Walnut trees.



Robert Ritchie, Niagara Parks Commission

### Description

Pawpaw is a small, deciduous tree that reaches 3–10 m in height. In the forest under-storey, it forms clumps and colonies, while in sunny locations it assumes a straight trunk with pyramidal habit. Leaves are alternate, simple, 15–30 cm long appearing lush and attractive throughout the summer, and turning gold and brown in the fall. Single reddish-purple flowers emerge before leaves in May on the previous year's wood and may reach up to 5 cm in diameter. Fruits are oblong berries that are typically 3–15 cm long, 3–10 cm wide and weigh from 200–400 g borne singly or in clusters. This highly aromatic fruit resembles a creamy mixture of banana, mango and pineapple.

### Wildlife value

Very High — larval host for Zebra Swallowtail Butterfly. Fruit is eaten by squirrels and opossum.

## BITTERNUT HICKORY

*Carya cordiformis*

### Habitat

Bitternut Hickory prefers moderately poor to well-drained loam and sand or silty clay. Intermediate tolerance to flood, drought and shade. It grows best on moist lowland sites where soil retains moisture. Should be planted in partial shade where it is sheltered from north winds.



### Description

Bitternut Hickory is a medium-sized, slow growing tree reaching 20–25 m tall and spreading as wide as it is tall, but commonly much narrower. Leaves are alternate and compound with 7–11 leaflets. The terminal leaflet is the largest. Appearing in May, flowers are catkins found in groups of 3 at the base of new growth. Fruit are globular with ridged green husks, covered in matted yellowish hairs. Fruit can grow separately or in pairs. Buds are distinctively yellow in winter.

### Wildlife value

Medium — fruit are eaten by birds and small mammals. Larval host for Hickory Hairstreak Butterfly.

Photo Courtesy of Indiana University

## SPICEBUSH

*Lindera benzoin*

### Habitat

Spicebush is found mostly in moist, rich woodlands, shaded footslopes and woodland seepage zones. It should be planted in full shade to partial sun where there is good drainage.



Walter Muma, photographer

### Description

Spicebush is a medium-sized shrub with either one solitary stem or a few zigzag stems, reaching up to 4 m tall and spreading to 4 m wide. Flowers are greenish-yellow to pale yellow, found in delicate small clusters along twigs emerging in early through late April. Fruit are small, football-shaped, glossy scarlet red berries in small dense clusters. Leaves are alternate, simple, oblong with smooth margins and have a short taper-pointed tip. The leaves and flowers have a citrus or spicy scent when bruised.

### Wildlife value

Very High — this species is a host plant to the Spicebush Swallowtail Butterfly. In addition, it is used by songbirds, upland gamebirds as well as White-tailed Deer.





## BLACK MAPLE

*Acer nigrum*

### Habitat

Black Maple grows on moist, fertile floodplains and tolerates wetter habitat than the Sugar Maple. Very tolerant of shade and short-term flooding. Sensitive to salt; therefore roadside plantings should be avoided. Also sensitive to drought, heat and soil compaction.



Walter Muma, photographer

### Description

Black Maple is closely related to Sugar Maple and is also used to make maple syrup. Shade tolerant tree, flowering in late April to early May and can reach 22–30 m tall. Grows most commonly on moist soils in mixed hardwood forests. It exhibits rapid early growth, then slows as matures, living up to 200 years. Small clusters of bell-shaped blooms on slender, drooping and stringy filaments emerge in late April or early May. Seeds are two-winged, horseshoe-shaped samaras about 2.5 cm long, that mature in the fall. Leaves are opposite and simple, the underside covered with velvety hairs. They have 3–5 lobes with shallow, smooth edges and a characteristic “droopy” appearance. Mature bark is deeply furrowed.

### Wildlife value

High — used by songbirds, upland ground birds and large mammals.

## RED (GREEN) ASH

*Fraxinus pennsylvanica*

### Habitat

Red Ash is good for planting in floodplains and along streams. It grows best on moderately poor to well-drained soils. It is tolerant of shade and tolerant of flooding. Most tolerant of all ashes to drought and heat and it is resistant to soil compaction.



### Description

Red Ash is a fast growing tree with an irregular shape, reaching 15–22 m high and spreading to two-thirds of tree height. Clusters of many deep purple flowers bloom in late April through early May, before leaf emergence. Leaves are opposite and compound having 7–9 short-stalked leaflets. It consistently produces a large seed crop of winged samaras, borne in dense drooping clusters.

### Wildlife value

Very High — seeds may be eaten by small mammals, wood ducks and songbirds. Larval host for Eastern Tiger Swallowtail Butterfly.

## EASTERN HEMLOCK

*Tsuga canadensis*

### Habitat

Eastern Hemlock can grow on a variety of soils but requires a cool, moist site with good to poor drainage. Moderately coarse sandy and gravelly loams to moderately fine silt loams are preferred by this species. It is very sensitive to drought, heat, salt and soil compaction and can suffer from sunscorch in very open sites. Because Hemlock is tolerant of deep shade it can be a useful under-planting in a forested garden to add winter greenery.



Alison Thomson, photographer

### Description

Eastern Hemlock is very dense, reaching 22–30 m and spreading 10–15 m. The evergreen leaves turn darker during the winter, making a wonderful contrast to snow. Flowers are terminal, singular cones borne throughout the crown, light yellow or pale green in colour emerging in late May through early June. Fruit are small, attractive, elliptical cones, 2.5 cm long, smooth with rounded scale margin and tan brown in colour. Leaves are slightly tapered, flat and finely toothed with blunt tips. This tree is very long lived, surviving up to 400 years. Hemlock is tolerant of Juglone, the chemical emitted by Black Walnut.

### Wildlife value

Medium — attracts songbirds, small mammals and White-tailed Deer. Larval host for Columbia Silkmoth.



## WILD STRAWBERRY

*Fragaria virginiana*

### Habitat

Wild Strawberry is found in fields and meadows. This species should be planted in full sun where there is good drainage.



### Description

Wild Strawberry is a small, low growing perennial plant, reaching only 15 cm tall. Flowering time is April to October, producing small, white flowers with 5 petals and bright yellow bushy centres. Leaves are basal with long, hairy stalks, compound and 3-lobed with sharply toothed margins. Fruit are very small strawberries.

### Wildlife value

Medium — fruit eaten by songbirds and small mammals.

## SWEET OX-EYE

*Heliopsis helianthoides*

### Habitat

Sweet Ox-eye is found in open woodlands, thickets and along riverbanks. Sweet Ox-eye should be planted in full to partial sun where there is good to moderate drainage.



### Description

Sweet Ox-eye resembles a sunflower and reaches over 1.5 m tall. This perennial blooms from July to September, producing bright yellow flowers with wide rays around an orange, dome-shaped centre. Leaves are relatively short, arrow-shaped, opposite and margins are sharply toothed.

### Wildlife value

Medium — attracts butterflies and hummingbirds. Goldfinches feed on the seeds.

Alison Thomson, photographer

## DENSE BLAZING STAR

*Liatris spicata*

### Habitat

Dense Blazing Star is found in rich moist soils. It should be planted in full sun with moderate to good drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Also called Spiked Blazing Star, Dense Blazing Star has dense heads of purple flowers arranged along the spike-like stems, twice as long as they are wide. This species blooms in August, ranges from 60–150 cm tall and is often grown commercially for cut flowers. Leaves are narrow or lance-shaped, much longer than wide.

### Wildlife value

High — attracts butterflies, hummingbirds, songbirds, beneficial insects and pollinators.

## FOXGLOVE BEARDTONGUE

*Penstemon digitalis*

### Habitat

Foxglove Beardtongue is found in old fields, wet meadows, open woodlands or along the edges of woods. It should be planted in full to partial sun where there is moderate drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Foxglove Beardtongue grows 30–100 cm tall. Flowering occurs in May through to July, producing white, trumpet-shaped blooms with 5 lobes. This species can be distinguished from Hairy Beardtongue, which has white flowers with fine purple lines. Leaves are ovate, toothed and opposite.

### Wildlife value

Medium — attracts hummingbirds.

## NEW ENGLAND ASTER

*Symphotrichum novae-angliae* (*Aster novae-angliae*)

### Habitat

New England Aster is found in moist rich fields and wet meadows, swamps and along shorelines. It prefers areas that are more often moist than dry, therefore this flower should be planted in relatively open areas with moderate to poor drainage.



Robert Ritchie, Niagara Parks Commission

### Description

New England Aster is a perennial plant with several leafy stems reaching up to 1.2 m tall. Flowers are purple (or sometimes white) with yellow centres, found in terminal flat-topped or panicle-shaped clusters. Flowers are composed of many rays (50–75), blooming from August through to November. The leaves are alternate and “clasp” the stem with the lower spatula-shaped ones generally dying off at flowering time. Upper leaves are lance-shaped, much longer than wide, slightly hairy on both sides with smooth margins. Stem is stout and has bristly hairs throughout.

### Wildlife value

Medium — attracts butterflies and small mammals. Larval host for Pearly Crescent Butterfly.

## COMMON MILKWEED

*Asclepias syriaca*

### Habitat

Common Milkweed is found in old fields, disturbed sites and forest clearings. It will do well on almost any soil, in full sun to partial shade with moderate to excessive drainage.



### Description

Common Milkweed is the most common of the milkweeds and grows 50–150 cm high with fragrant purple flowers blooming from June to August. The thick leaves are opposite on the stem, hairy underneath, with oblong, round bases, 10–20 cm. Fruits are paired, woolly pods, 6–12 cm, releasing silky-fluffy seeds. All parts of the plant contain a bitter sap that is unpalatable to most animals and poisonous to insects. However, the Monarch Butterfly evolved to tolerate the sap and consuming the leaves makes them taste terrible to birds that would otherwise prey upon them. They need this species to complete their life cycle.

### Wildlife Value

High — provides nectar for a wide variety of butterflies such as the Pipe-vine Swallowtail, Black Swallowtail and Eastern Tiger Swallowtail. Host plant for the Monarch Butterfly.

## LITTLE BLUESTEM

*Schizachyrium scoparium*

### Habitat

Little Bluestem is found in low prairies, near creeks and lakes or on moist alkaline or saline soils. It should be planted in full to partial sun where there is moderate to good drainage.



### Description

Little Bluestem is a native perennial grass that can grow up to 60–100 cm tall. The stems are slightly flattened and are greenish-blue to purplish, branching above a leafy base. The green blades (leaves) are usually folded and are much longer than wide. Flowers are terminal, spike-like racemes, approximately 5 cm long.

### Wildlife value

Medium — attracts small mammals and waterfowl. Songbirds eat the seeds. Larval host for numerous butterfly species who feed on the foliage.

## KALM'S BROME

*Bromus kalmii*

### Habitat

Kalm's Brome is generally found in mesic to dry prairies or their remnants. This grass should be planted where there is full or partial sun and moderately good drainage.



### Description

Kalm's Brome is a medium-height grass, reaching up to 60 cm tall. Stems are unbranched, green, slender, round and may be slightly hairy. Each stem usually has 3–5 leaves at flowering time. Leaves are much longer than wide and have a greyish-blue colour. Margins of leaf blades appear smooth but are actually rough to touch. In early summer, Kalm's Brome produces terminal, open, panicle-shaped spikes up to 15 cm long. These panicles are made up of oat-like spikelets and generally droop under their own weight.

### Wildlife value

Medium — attracts insects, moths, upland gamebirds, sparrows, small rodents, rabbits and White-tailed Deer.



## VIRGINIA WILD RYE

*Elymus virginicus*

### Habitat

Virginia Wild Rye is found on the edge of salt marshes, in thickets, floodplains and sometimes in prairies. It should be planted in full sun to partial shade where there is moderately good drainage.



John E. Maunder, photographer

### Description

Virginia Wild Rye reaches between 60–120 cm tall and between July and August produces attractive blooms that appear like feathery plumes. Unlike the other wild ryes, this flower head is a stiff, upright cluster made up of stiff straight bristles starting out green and quickly turning yellow. The stems and leaves are green to straw coloured. The margins of the blades, as well as the upper and lower surfaces are scabrous.

### Wildlife value

Medium — used by small mammals, birds and White-tailed Deer.

## SWITCH GRASS

*Panicum virgatum*

### Habitat

Switch Grass is found in prairies and open woods, brackish marshes and other open areas. The grass should be planted in full sun where there is good drainage. This species prefers moist, fertile soils.



### Description

Switch Grass is a tall, slow spreading grass reaching 90–215 cm tall. From August to September, this species produces many delicate open panicles with spikelets on the ends of long stems. The flowers are green becoming reddish-bronze in the fall. Because of its extensive root system, Switch Grass is excellent for stabilizing slopes and streambanks prone to erosion. It also filters sediments and consumes nutrients in overland runoff.

### Wildlife value

Very High — used by many species of songbirds, gamebirds and ducks for food and shelter. Also used by some small mammals.

## INDIAN GRASS

*Sorghastrum nutans*

### Habitat

Indian Grass is found in open prairies, bottomlands and open woods. It thrives in deep, moist soils. It is intermediately tolerant of drought conditions. This grass should be planted in full sun where there is good drainage.



### Description

Indian Grass is a perennial grass that can reach up to 2 m tall. Stems are erect, hollow and have fuzzy nodes. Blades are flat, much longer than wide, have a very rough texture and typically taper to a narrow base. This species flowers in July through to September producing narrow oblong panicles 15–30 cm long that are bronze-yellow. The spikelets which make-up the flowers are drooping, yellowish to reddish-brown and covered in reddish-brown hairs, offering spectacular fall colour. The flower heads are very soft to touch.

### Wildlife value

Medium — seeds consumed by birds and small mammals.

## BOTTLEBRUSH GRASS

*Elymus hystrix / Hystix patula*

### Habitat

Bottlebrush Grass is found in moist or rocky woods. It should be planted in full sun to partial shade where there is good to moderate drainage.



### Description

Bottlebrush Grass is an attractive perennial grass reaching up to 1 m tall. Stems are tall, slender and simple. The blades have a rough texture but are smooth beneath. As the common name suggests, the flowers resemble a bottle brush. Flower heads are green becoming brown later in the season.

### Wildlife value

Medium — attracts birds.

Walter Muma, photographer

## STAGHORN SUMAC

*Rhus typhina*

### Habitat

Staghorn Sumac is found in open woods, on rocky hillsides, in open pastures, along margins of woods, creek banks and is very common in limestone areas. It is very intolerant of shade and flooding. It demands full sun and should be planted where there is good drainage. It is resistant to drought and salt.



### Description

Staghorn Sumac is a large, fast-growing shrub that reaches up to 15 m tall. It has multiple trunks, which spread. Twigs are covered in dense velvety hairs. Yellowish-green flowers are found on pyramidal spikes that emerge in late June and early July. Round, bright, red fruit are small, have a velvety texture and are clustered together on pyramidal spikes. Leaves are alternate, compound and have 11 to 31 leaflets with sharply toothed margins. Leaves are green and turn scarlet red in the fall.

### Wildlife value

High — attracts songbirds, upland ground birds, small and large mammals including White-tailed Deer.



Paul Philp, photographer

## WHITE BIRCH

*Betula papyrifera*

### Habitat

White Birch prefers open areas as it is very intolerant of shade. It grows best on sites with moderate moisture and good drainage. It is seldom found on wet, poorly drained soils.



### Description

Also called Paper Birch, White Birch has a small canopy and intermediate spread, reaching 15–22 m tall and 10–15 m wide. Flowers are slender, drooping, pencil-like catkins that are light yellowish-green in colour emerging in late April through early May. Leaves are alternate, simple, sharp-pointed with toothed edges.

### Wildlife value

Very High — used by songbirds, upland ground birds and small mammals.

## HAWTHORNS

*Crataegus spp.*

### Habitat

Hawthorns typically occur on abandoned farmlands, along streams and in forest openings. They can grow in partial shade but prefer full sun and can withstand short-term flooding.



Haruta Ovida, photographer

### Description

Hawthorns comprise a large group of small trees and shrubs up to 12 m high and 30 cm in diameter which have smooth, shiny and sharp thorns. Hawthorns often have a distinct, crooked trunk and are sometimes multi-stemmed and shrubby. The showy flowers are usually white, sometimes pink, flat-topped clusters emerging from dwarf shoots similar to apple blossoms. Fruit are typically red, some types are orange, yellow or even blueish. Known as Haws, the fruit often remains on the tree into the winter, providing food for birds and small mammals. Leaves are simple, alternate and have toothed margins.

### Wildlife value

Medium — attracts birds, small mammals and large mammals.

## WHITE ASH

*Fraxinus americana*

### Habitat

White Ash prefers loamy, well-drained soil. It is tolerant of shade and somewhat tolerant of flooding or drought. This tree should be planted in moist, deep, fertile soils where there is full sun. White Ash is useful as a “pioneer” species for reforestation, as it will do well in exposed situations but adapt as the shade increases.



Steven J. Baskauf, photographer

### Description

White Ash reaches 22–30 m tall. It has compact clusters of many deep-purple flowers that emerge in late April or early May. Leaves are opposite and compound, having 5–9 (but usually 7) leaflets. Fruit are winged samaras borne in dense, drooping, terminal clusters that ripen in the fall.

### Wildlife value

High — the seeds may be eaten by small mammals, wood ducks and songbirds. Larval host for Eastern Tiger Swallowtail, Hickory Hairstreak and Morning Cloak butterflies.

## EASTERN WHITE PINE

*Pinus strobus*

### Habitat

Eastern White Pine prefers moist but well drained upland sites with coarse to fine loam, though it will grow on clay. This species is sensitive to salt, drought, heat, flooding and soil compaction. Seedlings are more tolerant of shade but larger trees demand mostly full sunlight.



Walter Muma, photographer

### Description

Eastern White Pine is a large coniferous tree reaching 22–30 m tall and 15–22 m wide, bearing clusters of cones either red to purplish or yellow which emerge late May through mid July. The pendulous, cylindrical cones become light brown when mature. Eastern White Pine can be very long lived, having an extreme age potential of over 400 years. Leaves are evergreen needles in bundles of 5. They are slender, straight, glossy and aromatic. It is the provincial tree of Ontario.

### Wildlife value

Very High — songbirds, upland ground birds, small mammals and White-tailed Deer.

## FRINGED BROME

*Bromus ciliatus*

### Habitat

Fringed Brome is found in woods and on wood edges, in thickets and along rocky slopes. It can be planted in full to partial sun where there is good drainage.



John E. Maunder, photographer

### Description

Fringed Brome is a perennial, clump-forming grass, with drooping florets giving it an oat-like appearance. It is one of the few native grasses classed as “cool-season”, meaning its main growth occurs in spring (rather than summer). This adds to its value as a quality forage grass. It grows 30–80 cm, with flat, dark green blades 8–20 cm long and 10 mm wide. The pale green flower-heads emerge in July and have overlapping scales, each with a short bristle at the end. By the fall these turn an attractive purplish-brown. Fringed Brome not to be confused with Smooth Brome (*Bromus inermis*) which is non-native and invasive.

### Wildlife value

High — the rather large seeds of Brome grasses are eaten by various upland gamebirds, sparrows and small mammals such as ground squirrels and mice. The foliage is grazed by rabbits and deer.

## CANADA WILD RYE

*Elymus canadensis*

### Habitat

Canada Wild Rye is found in moist areas or in dry, sandy or gravelly soils of prairies and disturbed areas. This species can tolerate drought conditions. It should be planted in full sun to partial shade, on well drained soils.



Walter Muma, photographer

### Description

Canada Wild Rye is a perennial grass reaching up to 1 m tall. Green, slender, stout and hallow leaves have 10–30 cm blades, narrowing toward the base and tapering to a fine tip. The upper surface of the blade is rough, the lower surface has a prominent midrib and the margins are rough. This species flowers from July to August, producing 2–12 long, dense terminal spikes. If sown in the spring, Canada Wild Rye will develop flowering spikes the same year.

### Wildlife value

Medium — used by various leaf hopper species, birds, small mammals and White-tailed Deer.



## WITCH-HAZEL

*Hamamelis virginiana*

### Habitat

Witch-hazel is found mostly in moist woods, ravine slopes and bottom lands, but is sometimes found in drier sites. It is very tolerant of shade but intolerant of flooding. It is sensitive to salt, drought and soil compaction. It should be planted in full to partial shade where there is good to moderate drainage.



### Description

Witch-hazel is a large shrub reaching up to 10 m tall. It has multiple trunks that often have a crooked appearance. It is very distinctive because of its late blooming time. Bright yellow, fragrant flowers are small clusters of linear petals found in groups of 3. The fruit are fuzzy, tan brown, two-beaked woody capsules that contain black, beady seeds. It has alternate, simple, oblong-shaped leaves with wavy margins. Witch-hazel is Juglone (walnut) tolerant.

### Wildlife value

Low — attracts songbirds and small mammals.

## WILD RED RASPBERRY

*Rubus idaeus/strigosus*

### Habitat

Wild Red Raspberry is found in swampy woods, peaty or boggy sites, along river banks, open or wooded hillsides and clearings or rocky slopes. It is tolerant of shade and drought and has a moderate tolerance for flooding. It should be planted in partial shade where there is poor to moderate drainage.



### Description

Wild Red Raspberry is a small, fast-growing, biennial shrub reaching up to 2 m tall. Flowers are open, scattered, flat-topped clusters of white, 5-petaled blossoms that emerge from May through to mid July. Twigs and branches are armed with stiff prickles. Fruit are bright red raspberries ripening from July through to late August. Leaves are alternate and compound, with 3 to 5 leaflets and have sharp, double-toothed edges.

### Wildlife value

Very High — berries are quickly eaten by songbirds, upland gamebirds, large and small mammals and the shrub is grazed by browsers.

Walter Muma, photographer

## TULIP TREE

*Liriodendron tulipifera*

### Habitat

The Tulip Tree grows on dry slopes and upland flats with loose, moderately fine sandy soils. They also grow on sandy to medium loams that are well to moderately well-drained. They are very intolerant of flooding and are also sensitive to drought and heat. Once in the sunlight, they grow very quickly. Tulip Trees should be planted in deep, moist, fertile soils and in sun or partial shade.



Robert Ritchie, Niagara Parks Commission

### Description

The Tulip Tree is a large, fast growing tree reaching 22–30 m tall that is uncommon in Canada. It is found only in the Carolinian zone of southern Ontario. Tulip-shaped flowers have 6 yellow and orange petals, up to 8 cm in diameter, borne upright and found at the ends of twigs. Fruits of Tulip Trees are winged, woody samaras that often persist on the tree after the seed has been spread. The Tulip Tree is tolerant of Juglone, the chemical emitted by Black Walnut.

### Wildlife value

Medium — attracts songbirds and small mammals. Larval host for Eastern Tiger Swallowtail Butterfly.

## WHITE SPRUCE

*Picea glauca*

### Habitat

The White Spruce grows best on moist, well-drained slopes and uplands. It is tolerant of both shade and flooding, but sensitive to salt. Soil types range from clayey to sandy and occasionally organic.



Walter Muma, photographer

### Description

The White Spruce is a medium-sized tree with a dense canopy, reaching 15–22 m tall. The roots are shallow but widespread. The bark is light greyish-brown, thin and scaly. Flowers are red-purple cones which emerge through May and June. Fruit are small cylindrical cones that are 2–4 cm long. Leaves are green to blueish-green in colour, straight, stiff and spirally arranged. The White Spruce is relatively slow growing but generally lives to be over 200 years old.

### Wildlife value

High — buds, leaves, seeds, bark and twigs are used by birds, small mammals and White-tailed Deer.

## AMERICAN BITTERSWEET

*Celastrus scandens*

### Habitat

American Bittersweet is found in both dry and moist areas such as roadsides, swampy thickets and sandy or rocky woods. It should be planted in full to partial sun where there is good drainage. American Bittersweet is drought and Juglone tolerant (Walnut).



### Description

American Bittersweet is a dense, woody vine found climbing fences, shrubs or trees reaching up to 7 m tall. Small, greenish-yellow flowers emerge in June. Bright red berries with a 3-sectioned, orange-yellow capsule can be seen throughout the fall. Leaves are alternate, simple, oval to oblong coming to a pointed tip and have sharply toothed margins. All parts of this plant are poisonous to man and should not be consumed.

### Wildlife value

High — songbirds, gamebirds and small mammals use to limited extent it provides important cover.

## RUNNING STRAWBERRY BUSH

*Eonymus obovata*

### Habitat

Running Strawberry Bush is found in both dry and moist shaded places, usually in deciduous forests, on ravine slopes, rocky woods and river banks. It should be planted in partial sun to full shade where there is good drainage.



### Description

Running Strawberry Bush is an attractive shade-loving, ground-cover vine that offers a native alternative to various non-native invasive species such as Periwinkle and English Ivy. Oblong leaves are bright green, opposite, sprouting from the stem just above where root buds occur. This species roots down into the forest floor at intervals as it spreads, and is wonderful for reducing erosion in ravine forests. Flowers are greenish-purple, 6 mm across having 5 round petals and 5 bright orange stamens, emerging May and June. These mature into a 3-lobed, spiny fruit, whose strawberry colour accounts for the rather misleading common name. Often forms extensive patches in woodlands, but does not exclude other plants such as trilliums and ferns.

### Wildlife value

High — fruit eaten by birds.

## WHITE BANEBERRY

*Actaea pachypoda*

### Habitat

White Baneberry is found in moist forests. It should be planted in shady areas with moderate drainage.



Walter Muma, photographer

### Description

White Baneberry is a perennial plant reaching 80 cm tall with alternate, compound leaves. Leaves are 2 or 3 times divided into leaflets in groups of 3 with toothed margins. Flowers are small, white and found on a long stalk in a dense raceme. Flowers emerge in May through to July. This species is also called Doll's Eye because of its white berries with black dots resembling plastic eyes. Berries are poisonous if they are consumed, but they taste terrible so it is unlikely that anyone would consume more than one.

### Wildlife value

Medium — attracts a variety of butterflies.

## JACK-IN-THE-PULPIT

*Arisaema triphyllum*

### Habitat

Jack-in-the-Pulpit is found in moist to wet forests and woodlands. It should be planted in shaded areas where there is poor to moderate drainage.



Photo Courtesy of Indiana University

### Description

Jack-in-the-Pulpit is a perennial plant that grows no more than 1 m tall, but usually less. It is very distinct from other wildflowers. The flowers are solitary, grow beneath the leaves and consist of purple and green striped spathes (the "pulpit") that flop over the club-shaped spadix (the "jack"). Flowers emerge from May to July. There are usually 2 compound leaves per plant, each with 3 lobes and they have long stalks. The leaves are dull green with wavy margins. Fruit are dense clusters of bright red berries.

### Wildlife value

High — fruit eaten by songbirds and wild turkey.

## BLOODROOT

*Sanguinaria canadensis*

### Habitat

Bloodroot is found in deciduous woodlands, and is an appropriate plant for sloping areas such as ravines, bluffs and valleys. It should be planted in moist to medium wet soils in partial to full shade.



Albert Garafalo, photographer

### Description

Bloodroot is a perennial forest floor plant growing to 15 cm tall. It has only one basal leaf that protectively wraps the single flower from beneath. The leaf is rounded, with 5–9 lobes and attractive, undulating margins, whose palmate venation provides a slightly crinkled appearance. The upper surface is light green, while the lower is whitish. Each fragrant white flower is 3–5 cm across, with 8–16 petals and a pretty yellow centre, and lasts for 1 or 2 days. However, as Bloodroot forms colonies, the bloom time is about 2 weeks. The common name derives from the red juice found in the leaves and rhizomes.

### Wildlife value

Medium — the nectar and pollen of the flowers attract various kinds of bees, including honeybees.

## TWINLEAF

*Jeffersonia diphylla*

### Habitat

Twinleaf can be found in rich woods, often in limestone soils or near rivers. It should be planted in moist, well-drained soils with full to partial shade. It is highly ornamental and well suited for woodland gardens.



Walter Muma, photographer

### Description

Twinleaf reaches about 20 cm in height. In the early spring its leafless stalk gives rise to a solitary white flower of about 2.5–5 cm in width. The flowers are composed of eight petals and four sepals and are followed by a leathery pear-shaped seed capsule. Twinleaf receives its name from its single leaf divided into 2 semicircles at the end of the basal leaf stalk.

### Wildlife value

Medium — attracts pollinating bees and butterflies.

## POKE MILKWEED

*Asclepias exaltata*

### Habitat

Poke Milkweed is found in dry, open forests. Poke Milkweed is at the northern limit of its range in southern Ontario. It should be planted in partial sun to shade where there is good drainage.



Walter Muma, photographer

### Description

Poke Milkweed is a perennial plant with branching stems, reaching up to 1.5 m tall. Stems and foliage exude a milky white sap when bruised or broken. Poke Milkweed is similar to Swamp Milkweed, but is distinguished by its pale flowers which are white to slightly purple. The flowers are borne in drooping clusters on a reddish or pink stem.

### Wildlife value

High — attracts butterflies and other pollinators.

## WHITE SNAKEROOT

*Eupatorium rugosum*

### Habitat

White Snakeroot is usually found in rich woods and thickets. It should be planted in partial shade where there is good drainage.



Walter Muma, photographer

### Description

White Snakeroot is a perennial plant reaching up to 1.5 m tall with either single or multiple stems. Flower heads are small and white appearing as terminal clusters from August to September. Leaves are stalked, opposite and have sharply toothed margins, tapering to a pointed tip.

### Wildlife value

High — attracts songbirds, butterflies and beneficial insects.



## LARGE-LEAVED ASTER

*Eurybia macrophylla* (*Aster macrophyllus*)

### Habitat

Large-leaved Aster is typically found in woodlands and forests. This species should be planted in slightly shaded areas with good drainage.



Walter Muma, photographer

### Description

Large-leaved Aster is a perennial plant with several leafy, reddish-green stems that grow in a zig-zag, reaching up to 1.2 m tall. Leaves are alternate with toothed, hairy margins and a smooth to rough surface texture. Lower leaves can be slightly heart shaped, are longer than wide and generally have a longer stalk. Upper leaves are smaller and more lance-shaped than lower leaves and are generally tighter clasped to the stem than lower leaves. Flowers are pale purple to almost white with yellow centre found in terminal flat-topped clusters blooming from September to November.

### Wildlife value

Medium — attracts butterflies.

## CANADA MAYFLOWER

*Maianthemum canadense*

### Habitat

Canada Mayflower is found mostly in dry to moist woodlands and forests but can also be found on rock barrens. Canada Mayflower should be planted in the shade to partial sun where there is good to excessive drainage.



Barry Porter, photographer

### Description

Canada Mayflower is a small, perennial plant reaching only 20 cm tall. It has small, white, star-shaped flowers found at the top of a zig-zag, solitary stem. This species blooms in the spring between May and June. The fruit are round berries which start out light green with some mottling and become translucent and bright red when ripe.

### Wildlife value

Medium — fruit are a food source for songbirds.

## HAIRY SOLOMON'S SEAL

*Polygonatum pubescens*

### Habitat

Hairy Solomon's Seal is typically found in moist to dry rich forests. It should be planted in full to partial shade where there is good to moderate drainage.



Alison Thomson, photographer

### Description

Hairy Solomon's Seal is a perennial plant with an arching stem reaching about 30–90 cm tall. The greenish-yellow flowers droop down from the stem and are cylindrical in shape, emerging from May to June. Each flower is replaced by a spheroid berry that is initially green, but gradually turns a deep blue. The attractive leaves are alternate, stalkless and elliptical or oval with smooth margins and fine hairs on the underside. Hairy Solomon's Seal's root system produces stout rhizomes (the upper surface of which bears circular scars) which allow it to form clumps or colonies. Not to be confused with the European species sometimes available.

### Wildlife value

High — the nectar and pollen of the flowers attract various long-tongued bees, including bumblebees. White-tailed Deer eat the foliage.

## HEART-LEAVED ASTER

*Symphyotrichum cordifolium* (*Aster cordifolius*)

### Habitat

Heart-leaved Aster is found in open forests and in thickets as well as on swamp edges. It should be planted in full to partial shade where there is moderate to poor drainage.



### Description

Heart-leaved Aster is a perennial flower with several leafy stems growing over 1 m tall. Heart-leaved Aster has large, open, panicle-like flower clusters with pale blue or purple flowers. Leaves are heart-shaped and have long stalks. This species blooms from August to November.

### Wildlife value

Medium — attracts butterflies.

## PURPLE FLOWERING RASPBERRY

*Rubus odoratus*

### Habitat

Purple Flowering Raspberry is found in cool, shaded ravines, rocky woodlands, deep coves, along the woods edge and the banks of quick flowing streams. It is very tolerant of shade but intolerant of flooding. It should be planted in full to partial shade with moderately good drainage.



Walter Muma, photographer

### Description

Purple Flowering Raspberry is a very fast growing shrub which reaches about 2 m high. Fragrant, showy, mauve flowers have 5 petals and emerge through July and August. Fruit are broad, flat berries, pale red to purplish in colour and are not palatable. Leaves are alternate, simple and palmately 5-lobed, somewhat resembling maple leaves with irregular toothed margins.

### Wildlife value

Very High — berries are popular with songbirds, upland gamebirds as well as small and large mammals.

## BLADDERNUT

*Staphylea trifolia*

### Habitat

Bladdernut is typically found in deep rich woods, floodplain forests, moist ravines, shores of lakes and ponds or rocky wooded streambanks. It is very tolerant of shade and has an intermediate tolerance for flooding. However, Bladdernut is sensitive to drought and excessive heat. This species should be planted in full to partial shade where there is moderate drainage.



Troy Evans, photographer

### Description

Bladdernut is a mid-sized, multi-stemmed shrub or small tree reaching up to 4 m tall and typically spreads to 2/3 its height. Flowers are small, greenish-white and bell-shaped, emerging from mid through late May, formed in loose, drooping clusters. Fruit are intriguing, smooth, 3-lobed, papery and bladder-like capsules. The seeds are deep red to brown. The smooth, mid-green leaves are compound with 3 leaflets, opposite, with finely toothed margins. Bladdernut is an under-storey shrub and can be useful in a shady garden to provide an interesting mid-height infill.

### Wildlife value

Low — under-story for cover and nesting sites.

## MAPLE-LEAVED VIBURNUM

*Viburnum acerifolium*

### Habitat

Maple-leaved Viburnum is found in floodplain forests, dry wooded slopes, mixed deciduous forests and wooded ravines. It is very tolerant of shade but intolerant of flooding. It should be planted in full to partial shade where there is moderately poor to good drainage. Maple-leaved Viburnum is sensitive to salt.



Walter Muma, photographer

### Description

Maple-leaved Viburnum is a small shrub, reaching only 2 m tall and is typically taller than it is wide. Flowers are small, creamy white and found in long-stalked, flat-topped clusters emerging from mid through late June. Fruit are oval berries, starting out red and becoming dark blue or black with a bloomy surface. Leaves are opposite, simple and have 3 shallow lobes with coarse toothed margins. Leaves are similar to maple leaves, giving this Viburnum its common name.

### Wildlife value

High — attracts upland gamebirds, songbirds as well as small and large mammals.



Paul Philp, photographer

## SUGAR MAPLE

*Acer saccharum*

### Habitat

The Sugar Maple is sensitive to extreme heat, drought and flooding but is very tolerant of shade. It requires moderately well to well-drained soils with average to moderate moisture and grows on a range of soils from clayey to sandy.



Alison Thomson, photographer

### Description

The Sugar Maple is a slow growing tree becoming 22–30 m tall. Small clusters of bell-shaped blossoms appear in late April or early May. Twigs are reddish-brown, with sharp-pointed buds. The Sugar Maple is the chief source of maple syrup, and is Canada's national tree.

### Wildlife value

Very High — provides food or shelter for several types of birds and small mammals.

## SERVICEBERRY

*Amelanchier* spp.

### Habitat

The Serviceberry is shade tolerant and is found naturally in forest under-story and along wood edges in a variety of locations, ranging from rocky shores to sandy or clayey upland sites. Generally it is intolerant of flooding and prefers moist to average soils with good to moderately good drainage.



Chris Evans, photographer

### Description

The Serviceberry varies in size from a small shrub to a medium-sized tree reaching 10 m tall. The white flowers have 5 petals, found in elongated clusters at the tips of new shoots and are some of the earliest blooms in the spring. Sweet and juicy clusters of edible berry-like fruit appear in the summer. Leaves are alternate, simple, oval to round-shaped and usually measure less than 8 cm. The smooth bark has attractive figuring.

### Wildlife value

High — attracts birds, pollinating insects, small mammals including red fox and flying squirrels.

## BLUE-BEECH

*Carpinus caroliniana*

### Habitat

Blue-beech grows best in moist to average soils, on clay to loam or sand. It is sensitive to drought, long-term flooding and excessive heat but is very tolerant of shade.



Chris Evans, photographer

### Description

Blue-beech has a slow growth rate and is an intermediate-sized tree, reaching 10–15 m tall. It is also called American Hornbeam, Musclewood and Ironwood. Reddish-green catkins appear in late April through early May. Leaves are alternate, simple and have toothed edges. The name Hornbeam alludes to the extreme hardness of the wood; “Horn” for toughness and “Beam” for tree. Its attractive bark and good fall colour make it a desirable tree to plant.

### Wildlife value

High — commonly used by Vireos for nesting. The seeds are eaten by some bird species. It is a larval host for the Eastern Tiger Swallowtail Butterfly. It is generally unappetizing to White-tailed Deer.

## IRONWOOD

*Ostrya virginiana*

### Habitat

Ironwood grows best in wet ravines and sheltered woods on moist, well-drained slopes on virtually any type of soil. It is very tolerant of shade but intolerant of flooding. It prefers moist soils but can tolerate dry as well.



Steven J. Baskauf, photographer

### Description

Also called Hop-Hornbeam, Ironwood is slow growing and a relatively small tree reaching 10–15m. It has a distinctive greyish-brown bark that is broken into short, narrow, longitudinal strips. The flowers of Ironwood are short, slender catkins forming groups of 3 at the end of twigs which emerge in May. The small, elliptical leaves are alternate and have toothed margins. It is named Ironwood because it provides one of the hardest and toughest woods.

### Wildlife value

Low — fruit may be eaten by songbirds and small mammals.



## WILD COLUMBINE

*Aquilegia canadensis*

### Habitat

Wild Columbine is found in dry to moist forests, rock barrens and on cliffs. It should be planted in full sun where there is good to excessive drainage.



Walter Muma, photographer

### Description

Wild Columbine is a perennial plant that reaches up to 1 m tall. The flowers are very distinctive and colourful, emerging in May to July, mostly red, some yellow with 5 downward facing petals. The pretty, rounded leaves are compound and long-stalked. Wild Columbine self-seeds readily, it is not long-lived and therefore not invasive.

### Wildlife value

High — attracts hummingbirds, butterflies and other pollinators.

## WOODLAND SUNFLOWER

*Helianthus divaricatus*

### Habitat

Woodland Sunflower is found in dry open forests, thickets, tallgrass woodlands and rock barrens. It should be planted in full to partial sun where there is good to excessive drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Also called Rough Woodland Sunflower, Woodland Sunflower is a perennial plant that ranges in height from 60–150 cm tall depending on conditions. Flowers are relatively large, composed of 8–15 yellow rays, surrounding a brownish-yellow centre. Flowers emerge from July to September. Leaves are much longer than wide, opposite and stalkless (or have very short stalks). Leaves taper to a fine tip, have toothed margins and a rough bristly texture.

### Wildlife value

Medium — attracts butterflies and other pollinators.

## STAR-FLOWERED SOLOMON'S SEAL

*Maianthemum stellatum* (*Smilacina stellata*)

### Habitat

Star-flowered Solomon's Seal is found in moist rich forests and swamps, but it is also found in very dry forests and open habitats, even along roadsides and dunes. This species can be planted in full sun or shade where there is poor to excessive drainage.



Walter Muma, photographer

### Description

Also called Starry False Solomon's Seal and Little False Solomon's Seal, Star-flowered Solomon's Seal is a perennial plant with large showy leaves, reaching up to 60 cm tall. Flowers are small, white and star-shaped, found in clusters at the top of the plant. This species blooms from April to July. Leaves are alternate, stalkless and clasping to the stem. The leaves are wide and long and the underside is covered in fine hairs. Fruit are small, red, black or green berries with dark stripes.

### Wildlife value

High — attracts butterflies and songbirds.



## POVERTY OAT GRASS

*Danthonia spicata*

### Habitat

Poverty Oat Grass is found in dry, upland woods and forests, upland prairies, old fields, eroded pastures and occasionally on roadsides. This grass can be planted anywhere, doing well in full sun to full shade. It performs well on dry to moist soils and tolerates low soil fertility.



Photo Courtesy of Tarleton State University

### Description

Poverty Oat Grass is a medium-sized grass, reaching up to 60 cm tall. Flowers are made up of thin spikelets, forming a contracted or open panicle, 2–5 cm long. Flowers are green, becoming light brown or beige as they mature, blooming from May to July. Leaves are short, flat or convolute, tapering to a sharp point. Basal leaves become twisted and curled with rough margins.

### Wildlife value

Medium — attracts butterflies and is a larval host for the Indian Skipper Butterfly.



## CHOKEBERRY

*Aronia melanocarpa*

### Habitat

Chokeberry is typically found in wet thickets, on creek banks, swampy lands, dry thickets, cliffs, clearings and in wet acid sands. It is very tolerant of flooding and resistant to drought and excessive heat as well as soil compaction. It is intermediately tolerant of shade. Chokeberry should be planted in full to partial sun where there is very poor to moderate drainage.



Photo Courtesy of Indiana University

### Description

Chokeberry is a small, multi-stemmed shrub that reaches 2 m tall and spreads into broad thickets. Flowers are white with pink anthers emerging in early to mid May. Blossoms are found in terminal, flat-topped clusters, with 5–6 flowers. Fruit are glossy, round berries, black or blackish-purple, found in loose clusters from early September to late November. Leaves are alternate, simple and elliptic to obovate with finely toothed margins and a glossy, smooth surface.

### Wildlife value

Medium — attracts upland gamebirds, songbirds as well as small and large mammals.

## GREY DOGWOOD

*Cornus racemosa*

### Habitat

Grey Dogwood is found in meadows, savannas, forests, old fields and on dry cliffs. Grey Dogwood is tolerant of shade and drought and has an intermediate tolerance of flooding. It should be planted in full sun to full shade where there is good to excessive drainage.



Alison Thomson, photographer

### Description

Grey Dogwood is a medium-sized, multi-stemmed, strongly spreading shrub reaching up to 4 m tall and spreads to typically 2/3 its height. Flowers are found in loose, upright, cone-shaped spikes. Flowers emerge in late May through to early or mid June, producing many creamy white clusters. Fruit are glossy, round, milky white berries found on bright red stems emerging in early August through late September. Leaves are opposite, simple and ovate to narrow elliptic, with smooth margins.

### Wildlife value

Very High — attracts waterfowl, upland gamebirds, songbirds as well as small and large mammals.

## NINEBARK

*Physocarpus opulifolius*

### Habitat

Ninebark is found on rocky or sandy creek banks, along lakeshores, ponds and seepage areas, and in bogs. Ninebark is intolerant of shade and very tolerant of flooding and drought. It should be planted where there is full sun and very poor to good drainage.



Robert Ritchie, Niagara Parks Commission

### Description

Ninebark is a medium-sized shrub, reaching up to 4 m tall and typically spreading broader than it is high. This shrub is very dense with multiple stems usually upright or arching. The bark of Ninebark is papery, exfoliating in thin shreds giving it a shaggy appearance. Flowers are white or slightly pinkish and are found in many flat-topped clusters. Individual blossoms have 5 petals and flowers emerge from late May through early June. Fruit are bright red or pinkish, becoming brown. They are inflated, 4-parted capsules, with a papery texture found in dense umbrella-like clusters. Leaves are alternate, simple with 3 to 5 palmate lobes and toothed margins. Ninebark is excellent for erosion areas.

### Wildlife value

Medium — attracts waterfowl, marshbirds, shorebirds, upland gamebirds and small mammals.



Alison Thomson, photographer

## SHAGBARK HICKORY

*Carya ovata*

### Habitat

Shagbark Hickory grows best on dry slopes and upland flats with moderately poor to good drainage. It can be grown on loams, sandy or silty clays and clay. It is intolerant of flooding and is somewhat tolerant of shade.



Alison Thomson, photographer

### Description

Shagbark Hickory is a large, irregular-shaped tree that reaches 22–30 m tall. It is characterized by the shaggy appearance of the bark. Leaves are alternate and compound with 5 leaflets. The terminal leaflet is the largest. Yellow-green flowers emerge in mid May. The nut of this tree is edible to humans when it is removed from its husk. Like most hickories, this is a slow growing but long-lived tree.

### Wildlife value

Medium — fruit may be eaten by songbirds and small mammals.

## EASTERN WHITE CEDAR

*Thuja occidentalis*

### Habitat

The Eastern White Cedar is a lowland wet species found in swampy areas, bogs, along lake edges and on open rocky hillsides where there is poor to good drainage. It prefers soils over limestone, calcareous fine clay and moderately coarse sandy loams. Cedars are tolerant of flooding and are intermediately shade tolerant.



Walter Muma, photographer

### Description

The Eastern White Cedar is a moderately fast growing, medium-sized tree reaching 15–22 m tall and can live longer than 400 years. The canopy is typically very dense. Flowers are small, reddish-brown cones about 3 mm long which appear in May. Fruit are egg-shaped cones that are 10 mm long. Leaves are scale-like in broad, flat fan-shaped sprays.

### Wildlife value

Medium — attracts songbirds, waterfowl and small mammals.



## TREMBLING ASPEN

*Populus tremuloides*

### Habitat

Trembling Aspen will thrive in most soils. This species is very intolerant of shade yet prefers sites sheltered from wind. It is also intolerant of flooding and sensitive to soil compaction.



Walter Muma, photographer

### Description

Trembling Aspen is a medium-sized, fast growing tree reaching 10–15 m tall. Flowers are found in slender, drooping, hairy catkins which emerge in mid March through early April. Fruit are small conical capsules in linear catkin-like clusters, releasing cottony tufted seeds throughout May. Leaves are alternate, simple and are broadly oval to kidney-shaped. Margins are finely toothed and the flattened stalk of the leaf is usually long which causes the leaves to “tremble” in the slightest breeze.

### Wildlife value

High — attracts songbirds, upland ground birds and small mammals.

## AMERICAN PLUM

*Prunus americana*

### Habitat

American Plum will thrive in partial shade to full sun in average to moist soil. Since it will tolerate considerable neglect, it is suitable for drought-prone areas that are unsuitable for other fruits.



Photo Courtesy of Indiana University

### Description

American Plum, also known as Wild Plum, is a small multi-stemmed, shrubby tree with a spreading crown, reaching 9 m tall with numerous spiny branches. The white flowers are found in rounded, flat-topped clusters and have a strong sweet and spicy fragrance blooming from early May before leaves emerge. Fruit are 2.5 cm fleshy drupes, dull red to purplish, ripening in late summer. Leaves are alternate, simple and oval-shaped with toothed margins.

### Wildlife value

High — songbirds, upland ground birds and small mammals eat the fruit. When American Plum forms thickets, it provides a valuable nesting habitat for birds.

## WHITE OAK

*Quercus alba*

### Habitat

White Oak grows on dry slopes and upland flats. It tolerates dry but prefers moist sites and is intolerant of flooding. This tree grows in moderately well to excessively drained sites. White Oak can grow in heavy clay, sandy or loamy soils and is tolerant of moderate shade.



Alison Thomson, photographer

### Description

White Oak is a large, slow growing tree that reaches 22-30 m tall and up to 40 m wide. It is commonly wider than tall and is often very long-lived. Flowers are drooping clusters of catkins, yellowish-green in colour emerging in mid through late May. Acorns are approximately 19 mm long with the cup enclosing about 1/4 of the acorn. The cup of the acorn has a warty scale. Leaves are alternate, simple and have moderate to deep sinuses and rounded lobes, although the exact shape of the leaf varies.

### Wildlife value

Very High — songbirds, upland ground birds and small mammals eat the acorns. Deer browse the twigs.



## VIRGIN'S BOWER

*Clematis virginiana*

### Habitat

Virgin's Bower is found in swamps, on cliffs, in forests, roadside swales, thickets, woods edge, etc. It is tolerant of shade, flood and drought. It can be planted in full sun to full shade where there is poor to excessive drainage.



Walter Muma, photographer

### Description

Virgin's Bower is a very fast growing vine that is found on trees, shrubs and fences climbing to a height of 5 m or more. Sweet-smelling, white or cream flowers with green-yellow centres emerge in July and early August. Fruits emerge in September and October. Deep lobed leaves are opposite, compound, slightly heart-shaped tapering to a pointed tip. This vine typically climbs any available support in its path.

### Wildlife value

Low — sometimes used by songbirds.

## VIRGINIA CREEPER

*Parthenocissus quinquefolia*

### Habitat

Virginia Creeper is very tolerant of shade and flooding. It also has a wide tolerance for any type of habitat, from wet to dry. It can be planted in full sun or full shade where there is poor to excessive drainage.



Walter Muma, photographer

### Description

Virginia Creeper is a fast-growing, climbing vine that can climb up to 10 m high or more. Whitish-green or purplish-green flowers are small, flat-topped, loose clusters and emerge from June through early July. Fruit are small, blueish-black, round berries borne in clusters of 1-5. Leaves are alternate and palmately compound with 5 leaflets and are coarsely toothed. Leaves become a beautiful crimson red in the fall. Fruit are poisonous and should not be consumed.

### Wildlife value

High — consumed by songbirds, occasionally by upland game birds and small mammals.

## SWEET FLAG

*Acorus americanus*

### Habitat

Sweet Flag is found in swamps, marshes, and on banks of slow-moving rivers. This species should be planted in full sun to partial shade where there is fresh water.



### Description

Sweet Flag is a tall, hardy perennial reaching up to 2 m with stiff, sword-shaped leaves, bright yellow-green for most of their length and white with red at the roots. When crushed, the fresh leaves and rhizomes are sweet, spicy-scented which makes identification straight-forward. It flowers from May to August producing tiny, green and yellow flowers that are clustered on a 5–10 cm spadix that occurs about midway on a sympodial leaf; a form not seen on any other North American plant. Fruits are tiny berries covering the fleshy spike. Roots are creeping with brownish-red bark with a white, fleshy interior about 2–4 cm thick which can spread several feet in mature plants.

### Wildlife value

Medium — muskrats eat the rhizomes. The leaves and seeds provide food and cover for a variety of animals.

## WATER ARUM

*Calla pallustris*

### Habitat

Water Arum is found in swamps, marshes and along banks of streams and ditches.



### Description

Water Arum is a perennial aquatic herb, 10–30 cm tall arising from long creeping rhizomes. The basal leaves are heart-shaped with long stalks. In June and July, tiny flowers (lacking petals) occur in a dense cluster on a fleshy spike or spadix, which is hooded by a white 1.5 to 2.5 cm oval spathe which resembles a Calla Lily.

### Wildlife value

Medium — muskrats eat the rhizomes.

Walter Muma, photographer

## BLUE FLAG IRIS

*Iris versicolour*

### Habitat

Blue Flag Iris is found in wet to moist black soil prairies, sunny floodplains along rivers, edges of ponds and lakes, swamps, fens, bogs and ditches. Blue Flag Iris is surprisingly drought tolerant.



Photo Courtesy of Indiana University

### Description

Blue Flag Iris is a perennial herb, 20–80 cm tall with narrow, grass-like leaves. Violet-blue flowers bloom from May to July and are up to 9 cm across consisting of 3 sepals and 3 petals. Seeds are in an oblong capsule with 3 blunt angles and contain rows of tightly stacked seeds. The root system consists of fleshy rhizomes with abundant coarse roots. This plant often forms colonies by vegetative reproduction.

### Wildlife value

Medium — nectar seeking bumblebees are the most important pollinators of the flowers. Butterflies and skippers are less common nectar-seeking visitors but they are not effective at cross-pollination. Mammalian herbivores rarely bother this plant because the foliage and rootstocks are somewhat toxic, causing irritation of the gastrointestinal tract (useful in deer-prone areas).

## YELLOW POND LILY

*Nuphar advena*

### Habitat

Yellow Pond Lily is found in lakes, ponds and slow-moving streams.



### Description

Yellow Pond Lily is a perennial plant that grows from a rhizome that remains buried in the mud of lakes, ponds and slow-moving streams. The yellow flowers are 2–5 cm across and bloom from June to September. Thick, round or heart-shaped leaves grow to about 30 cm across. As the rhizomes multiply, large colonies of Yellow Pond Lily form. Fruit are shaped like pods and contain many seeds.

### Wildlife value

Very High — waterfowl and marsh birds eat the seed. Beavers, muskrats, porcupines and deer eat the rhizomes and leaves. The leaves and stems also provide cover for fish, aquatic insects, snakes, turtles, frogs, crayfish, salamanders and other water creatures. Frogs, salamanders and aquatic insects use Yellow Pond Lily to secure their egg masses.

## WHITE WATER LILY

*Nymphaea odorata*

### Habitat

White Water Lily is found in lakes, ponds, slow-moving rivers and marshes. Unlike imported species, the native White Water Lily is able to survive cold winters.



Pam Lancaster, photographer

### Description

White Water Lily is a perennial aquatic herb, growing from rhizomes set in muddy pond bottoms, etc. The leathery leaves are medium green above and purplish below. White flowers bloom from June to September and consist of 20–30 white petals measuring about 8–16 cm in diameter. A multi-celled, round fruit forms where it releases into the water and the seeds float away and disperse.

### Wildlife value

High — turtles feed on the leaves, petioles, fruits and seeds. Foliage and rootstocks are favorite sources of food for muskrats and beavers.

## PICKERELWEED

*Pontederia cordata*

### Habitat

Pickerelweed is found in shallow water and along shorelines of lakes and rivers. It can be planted in full to partial sun where there is typically a good amount of water.



Chris Evans, photographer

### Description

Pickerelweed is a perennial aquatic plant that reaches up to 30–70 cm tall. The heart-shaped leaves have a glossy surface and smooth margins. A purple-blue spike of flowers emerges from June to September. Pickerelweed produces rhizomes and coarse, fibrous roots and is able to form large colonies if left undisturbed.

### Wildlife value

High — the large, edible seeds are eaten by waterfowl. When this plant forms dense colonies, it provides cover for fish and other aquatic wildlife. The flowers attract native bumblebees and other insects seeking nectar.



## ARROWHEAD (WAPATO)

*Sagittaria latifolia*

### Habitat

Arrowhead is a fairly adaptable species reportedly tolerant of polluted water. It is common in swamps, marshes, bogs, seeps, low-gradient edges of ponds and low-gradient edges of slow-moving streams.



Photo Courtesy of Indiana University

### Description

Arrowhead is a perennial, aquatic herb that is 20–80 cm tall. The emergent (above water) leaves are arrowhead-shaped with smooth margins. Flowers are about 2.5 cm across with 3 white petals and 3 green sepals, occurring in clusters of 3 from July to September. The root system consists of a tuft of coarse roots which often develop starchy tubers. Long rhizomes are also produced. Reproduction is by seeds or rhizomes.

### Wildlife value

High — ducks and other waterfowl eat the seeds or tubers. Muskrats also feed on the tubers, rhizomes and foliage. Bees, small butterflies, wasps, flies and beetles suck the nectar or collect the pollen.

## LARGE-FRUITED BURREED

*Sparganium eurycarpum*

### Habitat

Large-fruited Burreed is found in ponds, marshes and along shorelines of slow-moving water, up to 1 m deep, in full to partial sun.



### Description

Large-fruited Burreed is an emergent, perennial herb, that is 20–80 cm tall and has smooth, stiff leaves that are sword-like, keeled and are about 1.5 cm wide. From late July into September, tiny, white flowers emerge from spiny spheres which are 1–4 cm in diameter. Fruits are nut-like achenes borne in spherical clusters up to 4 cm in diameter.

### Wildlife value

High — provides excellent food and habitat for waterfowl. Muskrats and deer eat the entire plant.

Plant Species	Page Number
American Bittersweet, <i>Celastrus scandens</i> .....	66
American Plum, <i>Prunus americana</i> .....	82
Arrowhead (Wapato), <i>Sagittaria latifolia</i> .....	88
Bebb's Sedge, <i>Carex bebbii</i> .....	29
Bee Balm, <i>Monarda didyma</i> .....	41
Big Bluestem, <i>Andropogon gerardii</i> .....	23
Bitternut Hickory, <i>Carya cordiformis</i> .....	50
Black Maple, <i>Acer nigrum</i> .....	52
Black Walnut, <i>Juglans nigra</i> .....	35
Black-eyed Susan, <i>Rudbeckia hirta</i> .....	21
Bladdernut, <i>Staphylea trifolia</i> .....	72
Bloodroot, <i>Sanguinaria canadensis</i> .....	68
Blue Flag Iris, <i>Iris versicolor</i> .....	86
Blue Vervain, <i>Verbena hastata</i> .....	28
Blue-beech, <i>Carpinus caroliniana</i> .....	75
Blue-eyed Grass, <i>Sisyrinchium montanum</i> .....	27
Boneset, <i>Eupatorium perfoliatum</i> .....	39
Bottlebrush Grass, <i>Elymus hystrix</i> .....	59
Bur Oak, <i>Quercus macrocarpa</i> .....	37
Butterfly Milkweed, <i>Asclepias tuberosa</i> .....	16
Butternut Walnut, <i>Juglans cinerea</i> .....	35
Buttonbush, <i>Cephalanthus occidentalis</i> .....	33
Canada Bluejoint, <i>Calamagrostis canadensis</i> .....	29
Canada Mayflower, <i>Maianthemum canadense</i> .....	70
Canada Wild Rye, <i>Elymus canadensis</i> .....	63
Cardinal Flower, <i>Lobelia cardinalis</i> .....	40
Chokeberry, <i>Aronia melanocarpa</i> .....	79
Common Elderberry, <i>Sambucus canadensis</i> .....	45
Common Milkweed, <i>Asclepias syriaca</i> .....	56
Dense Blazing Star, <i>Liatris spicata</i> .....	55
Dutchman's Breeches, <i>Dicentra cucullaria</i> .....	43
Eastern Cottonwood, <i>Populus deltoides</i> .....	36
Eastern Hemlock, <i>Tsuga canadensis</i> .....	53
Eastern White Cedar, <i>Thuja occidentalis</i> .....	81
Eastern White Pine, <i>Pinus strobus</i> .....	62
Evening Primrose, <i>Oenothera biennis</i> .....	20
Fox Sedge, <i>Carex vulpinoidea</i> .....	30
Foxglove Beardtongue, <i>Pentstemon digitalis</i> .....	55
Fringed Brome, <i>Bromus ciliatus</i> .....	63
Great Lobelia, <i>Lobelia siphilitica</i> .....	41
Green-headed Coneflower, <i>Rudbeckia laciniata</i> .....	42
Grey Dogwood, <i>Cornus racemosa</i> .....	79
Hairy Beardtongue, <i>Pentstemon hirsutus</i> .....	20
Hairy Solomon's Seal, <i>Polygonatum pubescens</i> .....	71
Hard-stem Bulrush, <i>Scirpus acutus</i> .....	31

# Plant Species

# Page Number

Harebell, <i>Campanula rotundifolia</i> .....	18
Hawthorns, <i>Crataegus</i> spp. ....	61
Heart-leaved Aster, <i>Symphyotrichum cordifolium</i> .....	71
Heath Aster, <i>Symphyotrichum ericoides</i> .....	22
Highbush Cranberry, <i>Viburnum trilobum</i> .....	34
Hoary Vervain, <i>Verbena stricta</i> .....	22
Hop Sedge, <i>Carex lupulina</i> .....	44
Indian Grass, <i>Sorghastrum nutans</i> .....	59
Ironwood, <i>Ostrya virginiana</i> .....	75
Jack-in-the-Pulpit, <i>Arisaema triphyllum</i> .....	67
Kalm's Brome, <i>Bromus kalmii</i> .....	57
Large-fruited Burreed, <i>Sparganium eurycarpum</i> .....	88
Large-leaved Aster, <i>Eurybia macrophylla</i> .....	70
Largetooth Aspen, <i>Populus grandidentata</i> .....	36
Little Bluestem, <i>Schizachyrium scoparium</i> .....	57
Longleaf Bluets, <i>Hedyotis/Houstonia longifolia</i> .....	19
Maple-leaved Viburnum, <i>Viburnum acerifolium</i> .....	73
Meadowsweet, <i>Spiraea alba</i> .....	33
Michigan Lily, <i>Lilium michiganense</i> .....	40
Nannyberry, <i>Viburnum lentago</i> .....	48
New England Aster, <i>Symphyotrichum novae-angliae</i> .....	56
Ninebark, <i>Physocarpus opulifolius</i> .....	80
Ohio Goldenrod, <i>Solidago ohioensis</i> .....	27
Oswego Tea, <i>Monarda didyma</i> .....	41
Pale Purple Coneflower, <i>Echinacea palida</i> .....	18
Pawpaw, <i>Asimina triloba</i> .....	50
Pearly Everlasting, <i>Anaphalis margaritacea</i> .....	16
Pickernelweed, <i>Pontederia cordata</i> .....	87
Pin Oak, <i>Quercus palustris</i> .....	38
Poke Milkweed, <i>Asclepias exaltata</i> .....	69
Porcupine Sedge, <i>Carex hystericina</i> .....	30
Poverty Oat Grass, <i>Danthonia spicata</i> .....	78
Prairie Cordgrass, <i>Spartina pectinata</i> .....	32
Purple Flowering Raspberry, <i>Rubus odoratus</i> .....	72
Red (Green) Ash, <i>Fraxinus pennsylvanica</i> .....	52
Red Maple, <i>Acer rubrum</i> .....	49
Red Oak, <i>Quercus rubra</i> .....	24
Red Osier Dogwood, <i>Cornus stolonifera</i> .....	34
Riverbank Wild Rye, <i>Elymus riparius</i> .....	31
Rough-leaved Goldenrod, <i>Solidago patula</i> .....	42
Running Strawberry Bush, <i>Euonymus obovata</i> .....	66
Sassafras, <i>Sassafras albidum</i> .....	24
Serviceberry, <i>Amelanchier</i> spp. ....	74
Shagbark Hickory, <i>Carya ovata</i> .....	81

Plant Species	Page Number
Sideoats Grama, <i>Bouteloua curtipendula</i> .....	23
Silky Dogwood, <i>Cornus amomum</i> .....	45
Silver Maple, <i>Acer saccharinum</i> .....	49
Sky Blue Aster, <i>Aster oolentangiensis</i> .....	17
Smooth Aster, <i>Aster laevis</i> .....	17
Sneezeweed, <i>Helenium autumnale</i> .....	26
Soft-stem Bulrush, <i>Scirpus cyperinum</i> .....	32
Spicebush, <i>Lindera benzoin</i> .....	51
Spotted Joe-Pye-Weed, <i>Eupatorium maculatum</i> .....	26
Spotted St. Johnswort, <i>Hypericum punctatum</i> .....	39
Staghorn Sumac, <i>Rhus typhina</i> .....	60
Star-flowered Solomon's Seal, <i>Maianthemum stellatum</i> .....	77
Sugar Maple, <i>Acer saccharum</i> .....	74
Swamp Milkweed, <i>Asclepias incarnate</i> .....	25
Swamp White Oak, <i>Quercus bicolor</i> .....	37
Sweet Flag, <i>Acorus americanus</i> .....	85
Sweet Ox-eye, <i>Heliopsis helianthoides</i> .....	54
Switch Grass, <i>Panicum virgatum</i> .....	58
Tall Ironweed, <i>Vernonia altissima</i> .....	28
Tall Meadow Rue, <i>Thalictrum pubescens</i> .....	43
Trembling Aspen, <i>Populus tremuloides</i> .....	82
Tulip Tree, <i>Liriodendron tulipifera</i> .....	65
Twinleaf, <i>Jeffersonia diphylla</i> .....	68
Virgin's Bower, <i>Clematis virginiana</i> .....	84
Virginia Creeper, <i>Parthenocissus quinquefolia</i> .....	84
Virginia Mountain Mint, <i>Pycnanthemum virginianum</i> .....	21
Virginia Wild Rye, <i>Elymus virginicus</i> .....	58
Water Arum, <i>Calla pallustris</i> .....	85
White Ash, <i>Fraxinus americana</i> .....	62
White Baneberry, <i>Actaea pachypoda</i> .....	67
White Birch, <i>Betula papyrifera</i> .....	61
White Oak, <i>Quercus alba</i> .....	83
White Snakeroot, <i>Eupatorium rugosum</i> .....	69
White Spruce, <i>Picea glauca</i> .....	65
White Turtlehead, <i>Chelone glabra</i> .....	25
White Water Lily, <i>Nymphaea odorata</i> .....	87
Wild Bergamot, <i>Monarda fistulosa</i> .....	19
Wild Columbine, <i>Aquilegia canadensis</i> .....	76
Wild Red Raspberry, <i>Rubus idaeus</i> .....	64
Wild Spiraea, <i>Spiraea alba</i> .....	33
Wild Strawberry, <i>Fragaria virginiana</i> .....	54
Witch-hazel, <i>Hamamelis virginiana</i> .....	64
Woodland Sunflower, <i>Helianthus divaricatus</i> .....	76
Yellow Pond Lily, <i>Nuphar advena</i> .....	86

## Get Involved!

- Your own property is where caring for the environment can start. Manicured lawns and gardens provide few water quality and habitat improvement opportunities.
- An inexpensive and easy way to improve water quality and species diversity on your property is to establish naturalized areas.



- You can make a difference in protecting the environment and we would like to help you get started.



For more information on how to get started please contact:



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Information on Native Plant Suppliers can be obtained by contacting the  
Niagara Peninsula Conservation Authority or through the  
Society for Ecological Restoration – Ontario Chapter [www.serontario.org](http://www.serontario.org).

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