

A Guide for Northern Ontario



Beautiful Non-Invasive
Plants for your Garden

Spring 2014

Grow Me Instead

Beautiful, Non-Invasive Plants for Your Garden

A Guide for Southern Ontario



Beautiful Non-Invasive
Plants for your Garden

Spring 2011

2016 Best Management Practices Webinars

The complete 2016 Webinar series includes:

- Building Partnerships to Deal with Invasive *Phragmites australis* – a “Grass Roots Perspective”
- *Phragmites* Management in Municipal Drains in the City of Kingsville
- Invasive *Phragmites*: Best Management Practices
- Clean Equipment Protocol: Inspecting and Cleaning Equipment for the Purposes of Invasive Species Prevention
- **Grow Me Instead: Beautiful, Non-Invasive Plants for Your Garden**
- Wild Parsnip: Best Management Practices
- Aquatic Invasive Plant Watch List for Ontario
- Japanese Knotweed: Best Management Practices

Ontario Invasive Plant Council (OIPC)

- Formed in 2007
- Provides a coordinated, provincial response to the growing threat of invasive plants
- Created by, and consists of, representatives from:
 - All levels of government
 - Non-government organizations
 - Academia
 - First Nations
 - Industry
- Three staff members take direction from Board of Directors and members
- Projects delivered with help of partners, who sit on the 6 OIPC committees (Fundraising, Policy, Research and Control, Ontario *Phragmites* Working Group, Horticultural Outreach Collaborative, Communications)



Grow Me Instead Guide

Goals of the Webinar:

To help horticulture enthusiasts create sustainable gardens and landscapes by reducing the spread of invasive plants through horticulture.

Topics Covered:

- ✓ Introduction
- ✓ Definitions
- ✓ Impacts of Invasive Plants
- ✓ Invasive Species and Horticulture
- ✓ Gardening Best Management Practices
- ✓ Invasive Species and their Alternatives



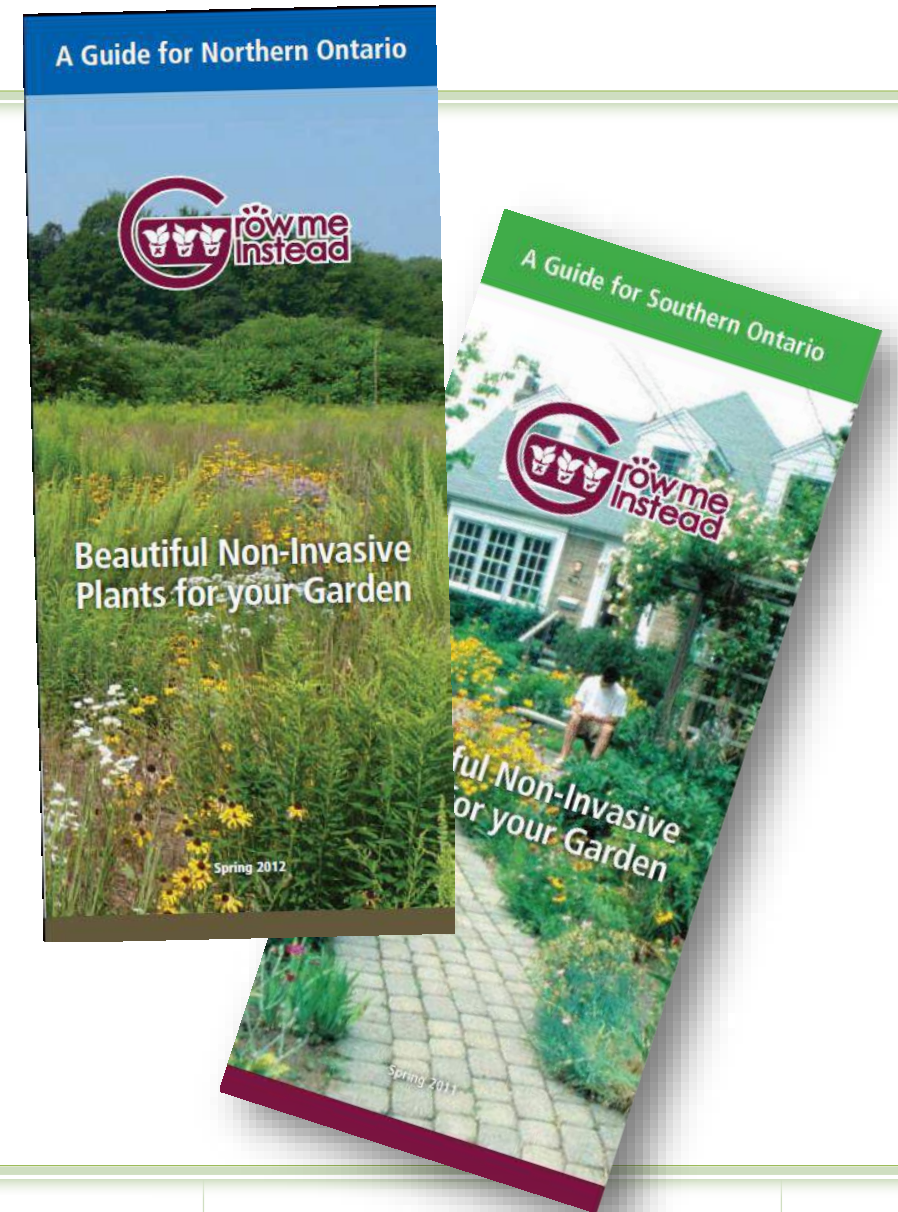
Giant hogweed

Photo by: Joe Perreira

Introduction

The Grow Me Instead Guides

- Inspired by The Australian Grown Me Instead document
- Adapted from the Invasive Council of British Columbia
- Guides show invasive horticultural plants and some non-invasive alternatives
- Northern and southern Ontario guides



Definitions

Native (indigenous):

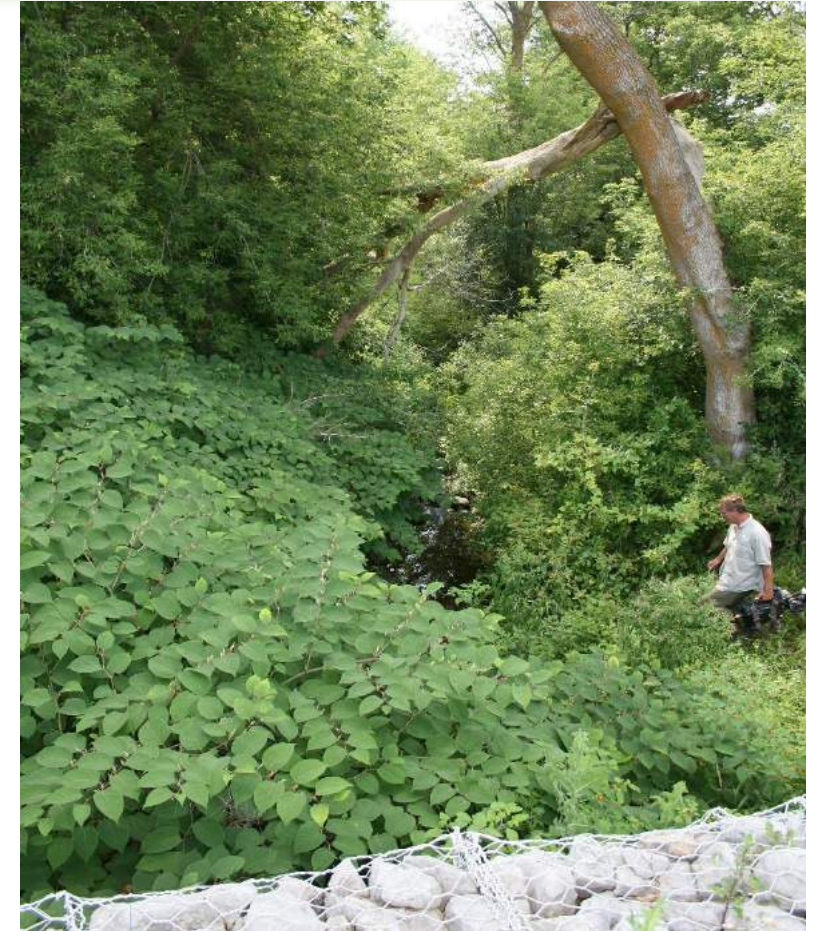
- A species that has existed in a given area prior to European settlement (native flora and fauna have evolved inter-dependently over eons = balance)

Non-native (alien):

- A species that has been introduced by human action from another geographic region to an area outside its natural past or present distribution

Invasive:

- Harmful alien species whose introduction or spread threatens the environment, the economy or society, including human health



Japanese knotweed

Photo by: Ally Brown

Impacts of Invasive Species

- Spread rapidly and easily when introduced to new or disturbed areas
- No predators, disease or climatic features to keep their populations in check
- Out-compete native species for space, nutrients and light
- A leading cause of biodiversity loss i.e. reduces habitat for native species
- Threatens endangered species and rare native plant communities
- Some can alter growing conditions (ex. garlic mustard) and hydrology
- Can damage infrastructure, effect human health, impact recreation
- Cost to tax payers and the economy are vast

The ecological effects of invasive species are nearly irreversible. Once established, they are extremely difficult and expensive to control and eradicate!!

Invasive Species and Horticulture

- Thousands of new plant species are introduced each year for horticulture
- Most are harmless garden additions, but some can “escape” cultivation (ex. through yard waste dumping) and become problematic
- About 245 species in Canada for which there is a known pathway of introduction: 30% as horticultural species, 35% unintentionally as ‘hitchhikers’ on plant products
- 85% of all non-native (alien) woody plants in N.A. were introduced via landscape trade



Dog-Strangling Vine (Noxious)

Photo by: Alison Kirkpatrick

Gardening Best Management Practices

- Learn how to identify and properly remove invasive plants
- Do not dump yard waste in nearby natural areas
- Place invasive plants in black garbage bags and cook them in the sun to ensure all viable parts (roots, seeds) are dead before disposal
- Do not remove vegetation from natural area
- Dispose of annuals properly
- Never plant or throw plant material into waterways
- Purchase non-invasive or native plants from reputable suppliers
- Share your knowledge




Groundcover Species



Foamflower

Photo by: Albert F.W. Vick, Wildflower.org

Invasive Groundcover Species

English Ivy <i>(Hedera helix)</i>	Periwinkle <i>(Vinca minor)</i>	Goutweed <i>(Aegopodium podagraria)</i>
<ul style="list-style-type: none"> ➤ No predators ➤ Extremely adaptable ➤ Spreads vegetatively via long vines that root at nodes ➤ Grows in almost any soil and light condition 	<ul style="list-style-type: none"> ➤ Dense growth ➤ Few pests or diseases ➤ Spreads via roots ➤ Can grow in a variety of soil & light conditions ex. dry shade ➤ Spreads via shallow root system 	<ul style="list-style-type: none"> ➤ Wide range of soil and light conditions ➤ Highly shade tolerant ➤ Very competitive reproduces via seeds and rhizomes
		

Photos by: Tom Forney, Oregon Department of Agriculture Richard Old., Bugwood.org , Hayley Anderson

Invasive Groundcover Species



Ox-Eye Daisy <i>(Chrysanthemum leucanthemum or L. vulgare)</i>	Creeping Bellflower <i>(Campanula rapunculoides)</i>
<ul style="list-style-type: none"> ➤ Forms dense infestations ➤ Decreases forage for wildlife ➤ Decreases biodiversity ➤ Reproduces via seed and rhizome ➤ Some cultivars sold as „Shasta Daisy are ox-eye daisy ➤ Its growth form that results in exposed soil 	<ul style="list-style-type: none"> ➤ Spreads via creeping root system, seed and rhizomes ➤ Favours sunny locations and habitat edges ➤ Can grow under sidewalks and concrete ➤ Resistant to herbicides ➤ Incredibly difficult to eradicate ➤ Found in wildflower seeds



Photos by: Mary Ellen Harte, Bugwood.org, Becca MacDonald, Sault College, Bugwood.org

Alternative Groundcover: Wild Strawberry

Fragaria virginiana

Garden use: Groundcover for sunny gardens

Growing conditions: Full sun; sand, loam or clay; dry to average soil

Size and shape: 15 cm tall; low-growing and spreading but without runners

Flower and fruit: Small white flowers late-spring; small, edible red berries early-summer

Leaves: Three-lobed; green; toothed

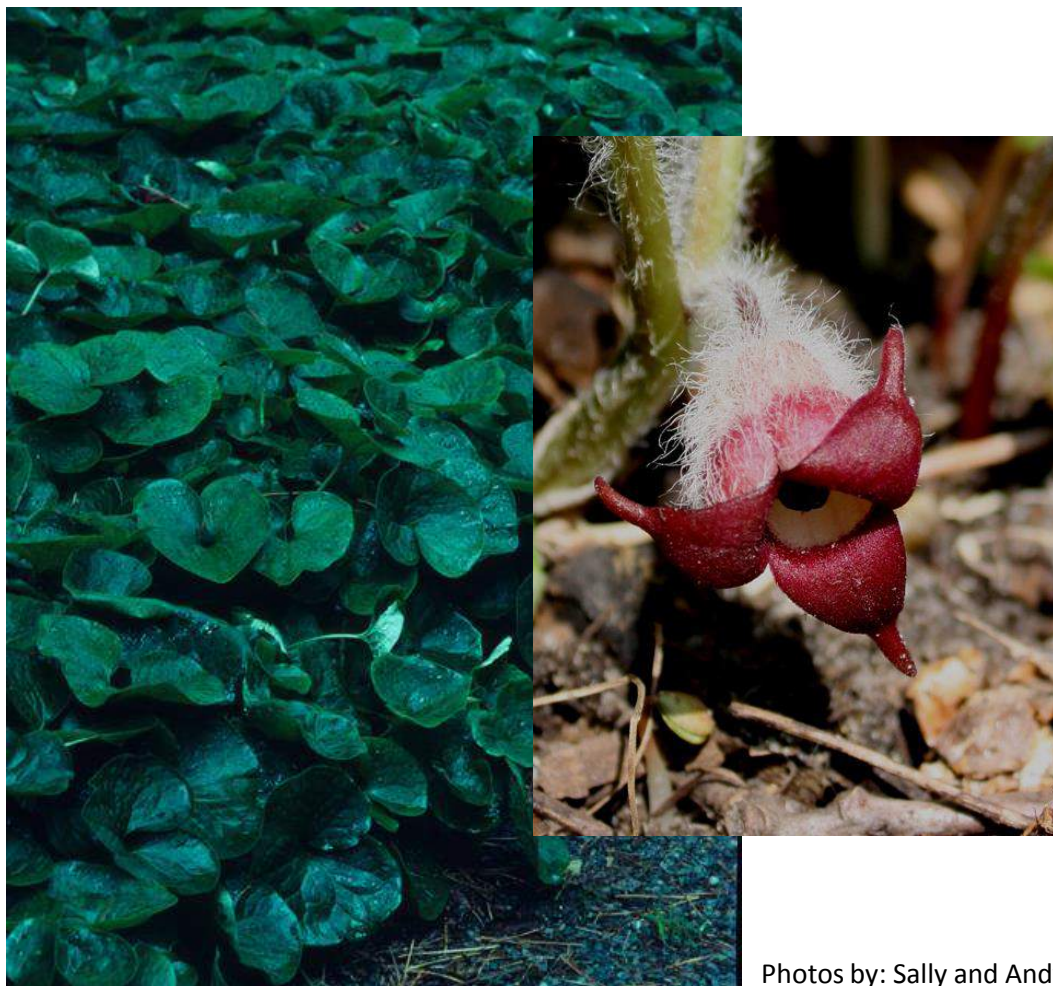
Benefits: Edible; spreads quickly with runners; easy to grow; food source and shelter for many species; flowers provide nectar and pollen for bees and butterflies



Photo by: Sally and Andy Wasowski, Wildflower.org

Alternative Groundcover: Wild Ginger

Asarum canadense



Garden use: Groundcover for shade/partial sun

Growing conditions: Partial sun to shade; average to moist, humus-rich soil

Size and shape: 15-20 cm tall; clump-forming

Flower and fruit: Single maroon flower under leaves in late-spring

Leaves: Soft; green; heart-shaped

Benefits: Forms attractive, slow spreading groundcover; drought-tolerant; deer-resistant; roots have a sweet ginger smell & taste (may contain toxins)

Photos by: Sally and Andy Wasowski and R.W. Smith, Wildflower.org

Alternative Groundcover: Bearberry

Arctostaphylos uva-ursi

Garden use: Sandy and rocky areas including shorelines, slopes, ridges, hilltops and in coniferous and mixed woods

Growing conditions: Sun to partial shade; dry to moist; sand and loam

Size and shape: 5-15 cm tall; shrub with multiple stems

Flower and fruit: Showy white-pink flowers in spring and summer; showy red fruit

Leaves: Shiny and leathery; bronze in fall

Benefits: Drought-tolerant*; attractive to bees, birds and butterflies; hardy; winter food source for wildlife



Photo by: Terry Glase, Wildflower.org

Alternative Groundcover: Wintergreen

Gaultheria procumbens



Photo by: Phil Patrie, Wildflower Center Slide Library

Garden use: Shady groundcover; woodland habitat gardens

Growing conditions: Partial shade; dry to moist; prefers acidic soils

Size: 10-15 cm tall

Flower and fruit: Fragrant white flowers in spring; bright red berries in fall

Leaves: Small, tough and fragrant

Benefits: Leaves can be chewed for appealing minty flavor; medicinal teas made from fruit and leaves; food source for wildlife

Additional Alternative Groundcovers:



Heart-leaved foamflower (*Tiarella cordifolia*)



Wild geranium (*Geranium maculatum*)



Mayapple (*Podophyllum peltatum*)



Bunchberry (*Cornus canadensis*)



Running euonymus (*Euonymus obovatus*)



Black-eyed Susan (*Rudbeckia hirta*)



Lance-leaved coreopsis (*Coreopsis lanceolata*)



Pale Purple coneflower (*Echinacea pallida*)



Grasses



Indian Grass

Photo by: Terri M. Siegenthaler, Wildflower.org

Invasive Grasses

Miscanthus <i>(Miscanthus sinensis and M. sacchariflorus)</i>	Reed Canary Grass <i>(Phalaris arundinacea)</i>
<ul style="list-style-type: none"> ➤ Fast growing and forms thick bunches, displacing native plant communities ➤ Fire hazards ➤ Reduce light availability to native plants ➤ Slowly decomposes on the ground, limiting the amount of nutrients returned to the soil 	<ul style="list-style-type: none"> ➤ Forms dense monocultures which out-compete native species ➤ Chokes streams, irrigation ditches, and wetland ➤ Planted as a forage species ➤ Major threat to natural wetlands
	

Photos by: Eric Snyder, Chris Evans, Illinois Wildlife Action Plan, Bugwood.org.

Alternative Grass: Big Bluestem

Andropogon gerardii

Garden use: Ornamental; prairie, meadow and rooftop gardens

Growing conditions: Full sun to partial shade; well-drained sand or loam

Size and shape: 1-2.5 m tall; clumps

Flower and fruit: Blue-red “turkey’s foot” flowers in summer

Leaves: Elegant blades turn bronze in fall

Benefits: Extremely drought-tolerant; useful for erosion control; attracts birds and butterflies



Picture by: S. James

Alternative Grass: Indian Grass

Sorghastrum nutans

Garden use: Ornamental; prairie, meadow and rooftop gardens

Growing conditions: Full sun to partial shade; dry to moist sand, loam and clay

Size: 1-2.5 m tall

Flower and fruit: Rich gold-purple sprays of flowers and seeds in fall

Leaves: Long, flat and narrow dull-dark green blades

Benefits: Drought and compaction-tolerant; consumed by wildlife and livestock



Photo by: E.Snyder

Alternative Grass: Feather Reed Grass (non-native)

Calamagrostis x acutifolia "Karl Foerster"

Garden use: Ornamental; screens; group planting; entranceways; perennial borders

Growing conditions: Full sun; moist to wet fertile soil; wide range of soils, dry sandy soil to clay

Size and shape: 1.5-2 m tall; clumps

Flower and fruit: Flowers from June-July and often stay erect under heavy snowfall

Leaves: Medium blade width; green foliage

Benefits: One of the first grasses to start growing in spring and early bloomer; few diseases or pests; seeds are sterile*



Photo by: Conservationgardenpark.org

Trees



Photo by: Wikimedia Commons

Invasive Trees

Norway Maple

(Acer platanoides)

- Withstands pollution and compacted soils
- Produces many seeds
- Can grow in dense shade
- Dense shade in monoculture stands prevent sunshine from reaching native undergrowth = no native plants, reduced wildlife habitat
- Bare soil becomes susceptible to erosion
- Can become a climax species, out-growing all native species



Photo by: S. James

Alternative Tree: Native maples & cultivars

Acer saccharum, *A. saccharinum*, *A. x freemanii*, *A. rubrum*

Garden use: Shade trees; specimen planting

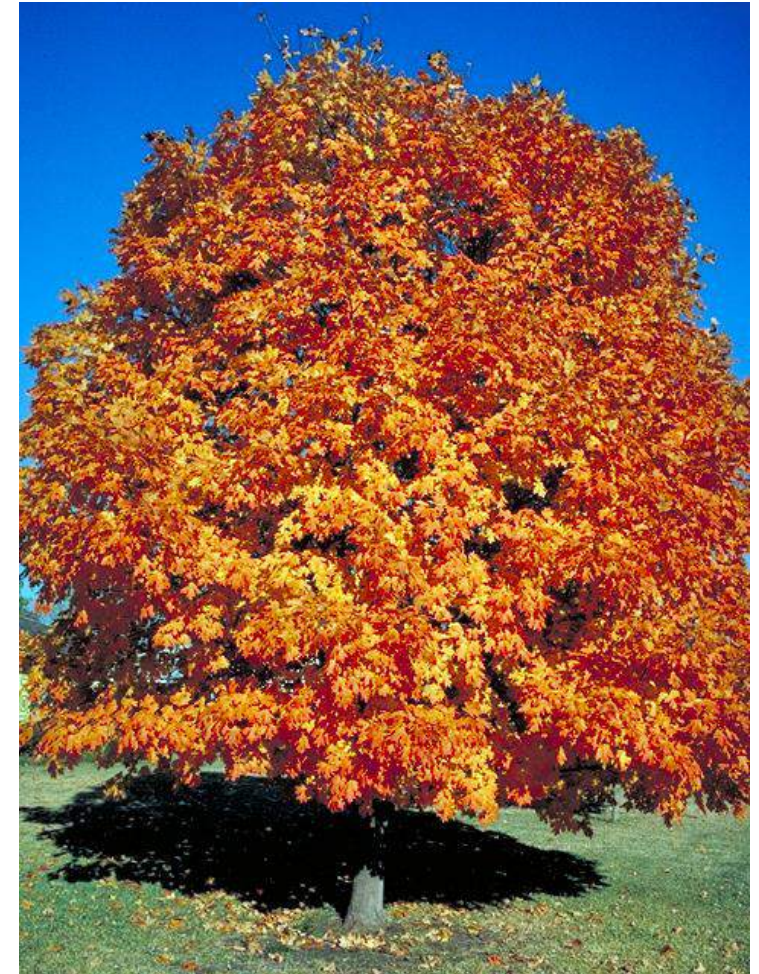
Growing conditions: Full sun to partial shade; moist soils (silver, Freeman) or deep, rich soils (sugar)

Size and shape: 30-35 m tall; upright to rounded crown

Flower and fruit: Small, yellow to red flowers in early spring, paired, winged maple “keys”

Leaves: Medium-light green, deeply lobed leaves; brilliant yellow to red in fall

Benefits: Silver and Freeman are well adapted to urban conditions; beautiful colours; produces maple sugar



Picture by: B. Simpson, Wildflower.org

Alternative Tree: Hackberry

Celtis occidentalis

Garden use: Shade trees; specimen planting

Growing conditions: Full sun to moderate shade; range of soils; drought resistant; tolerates urban conditions

Size and shape: Up to 15 m tall; broad, upright crown; elm-like form

Flower and fruit: Small green flowers; reddish-purple berry-like fruit in fall

Leaves: Green, elm-like leaves turn yellow in fall

Benefits: Hardy; interesting ridged bark, persistent fruits for over-wintering birds; drought resistant



Photo by: W.D. Bakowsky

Alternative Tree: Basswood

Tilia americana

Garden use: Shade trees; specimen planting; street tree

Growing conditions: Full sun to partial shade; dry to moist, well-drained soil

Size and shape: 18-22 m tall; rounded crown; wide-spreading

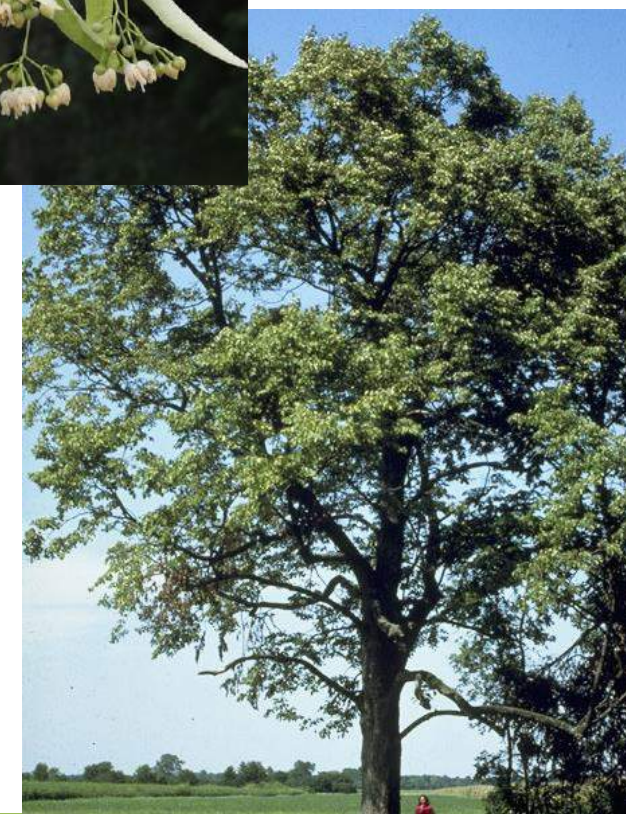
Flower and fruit: Fragrant, creamy-yellow flowers in late spring/early summer; round brown nut-like capsules

Leaves: Heart-shaped, dull green leaves; 15-20 cm long

Benefits: Values as soft and light hardwood; useful in woodcraft; great street tree



Photos by: Paul Cox,
Wildflower.org and R.W.
Smith, Lady Bird Johnson
Wildflower Center



Shrubs



Gray Dogwood

Photo by: Paul Cox, Wildflower.org




Invasive Shrubs

Japanese Knotweed <i>(Polygonum cuspidatum)</i>	Russian Olive <i>(Elaeagnus angustifolia)</i>	Autumn Olive <i>(Elaeagnus umbellata)</i>
<ul style="list-style-type: none"> ➤ Very aggressive ➤ Shoots and roots can grow through asphalt, concrete ➤ Dense thickets displace native species, threatens habitat 	<ul style="list-style-type: none"> ➤ Hardy and adaptable ➤ Highly drought and salt tolerant ➤ Also reproduces via root suckers 	<ul style="list-style-type: none"> ➤ Grows very dense, reducing space for native species, grows in nutrient-poor soil ➤ Spreads via root suckers and seeds



Photos by: Ally Brown, Catherine Poltz, W.D. Bakowsky

Invasive Shrubs

Siberian Pea-shrub <i>(Caragana arborescens)</i>	Common* and Japanese Barberry <i>(Berberis vulgaris and B. thunbergii)</i>	Multiflora Rose <i>(Rosa multiflora)</i>
<ul style="list-style-type: none"> ➤ Quickly establishes in poor soils ➤ Reproduces by seed and sprouting rootstocks ➤ Living fence 	<ul style="list-style-type: none"> ➤ Adapted to all soil types ➤ Can survive in full sun or partial shade ➤ Can acidify soil ➤ Prolific seed producers ➤ Up to 90% germination rates ➤ Host plant for black rust 	<ul style="list-style-type: none"> ➤ Adaptable and salt tolerant ➤ Thrives in different soil conditions ➤ Prolific seed producer and can re-sprout roots from stems ➤ Forms dense thickets and replaces native vegetation
		

Photos by: Vanessa Richins Myers, About.com, Rachel Gagnon, Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

Alternative Shrub: Common Ninebark

Physocarpus opulifolius

Garden use: Stand alone shrub; screen or hedge

Growing conditions: Full sun to partial shade; adaptable to many soil types

Size and shape: 2-3 m tall and wide; dense and rounded with age

Flower and fruit: White to pink domed flower clusters in spring; dry red-brown pods in fall

Leaves: Green to yellow to burgundy (depends on cultivar)

Benefits: Many to choose from: very hardy and adaptable: offers winter appeal with exfoliating bark



Photo by: R.W. Smith, Wildflower Center Digital Library

Alternative Shrub: Shrubby Cinquefoil

Dasiphora fruticosa (syn. *Potentilla fruticosa*)

Garden use: Rock garden; border; ground cover; foundation planting; specimen planting

Growing conditions: Full sun; dry to normal soil; drought tolerant; salt tolerant

Size and shape: 30-130 cm tall rounded shrub; numerous upright branches

Flower and fruit: Pale to bright yellow, buttercup-shaped flowers produced in early to late summer

Leaves: dense: green, divided into 5 or 7 leaflets; covered in fine, silvery, silky hair

Benefits: Over 130 cultivars; attracts butterflies; erosion control

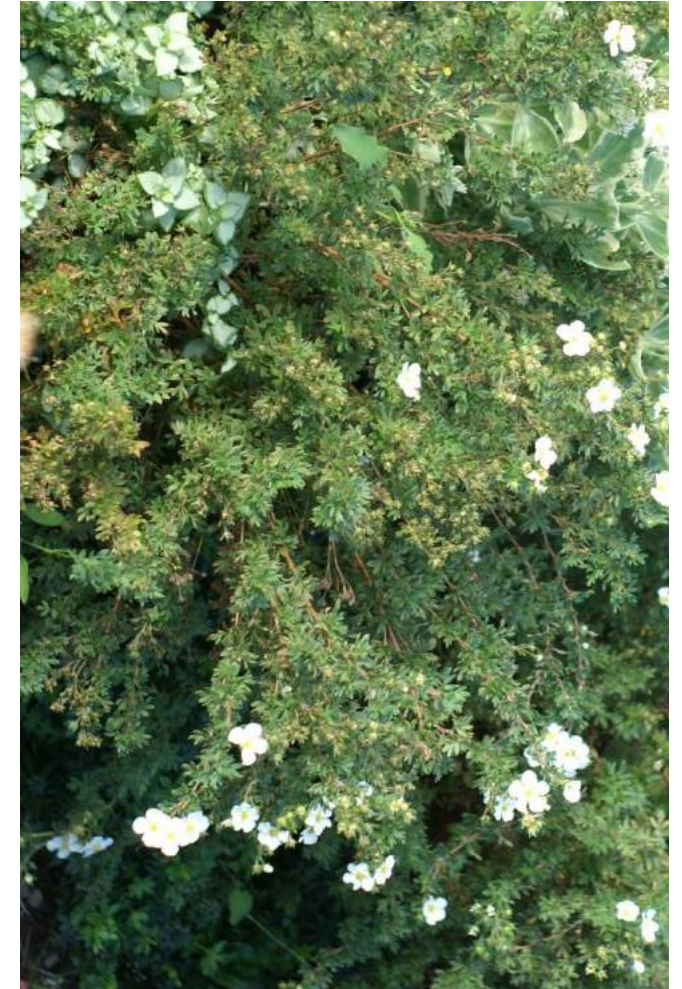


Photo by: S. James

Alternative Shrub: Gray Dogwood

Cornus foemina ssp. racemosa



Photo by: Paul Cox, Wildflower.org

Garden use: Naturalized area, or specimen planting

Growing conditions: Full sun to partial shade

Size: 2-3 m tall and wide

Flower and fruit: Cream-white flowers and prominent white berry clusters in late spring, with vibrant red stems persisting through winter

Leaves: Blue-green; deep crimson-purple in fall

Benefits: Excellent for varied conditions; responds well to pruning

Vines



Jackman Clematis

Photo by: S. James

Invasive Vines

Japanese Honeysuckle (<i>Lonicera japonica</i>)	Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	Bittersweet Nightshade (<i>Solanum dulcamara</i>)
<ul style="list-style-type: none"> ➤ Climbs over other vegetation ➤ Up to 24 m long ➤ Can cover kill trees by toppling them from weight or blocking sunlight ➤ Spreads via seeds and runners ➤ Out-competes native species 	<ul style="list-style-type: none"> ➤ Up to 18 m ➤ Climbs and smothers trees by Blocks sunlight ➤ Competes and potentially hybridizes with rare American bittersweet ➤ Seeds up to 95% viable 	<ul style="list-style-type: none"> ➤ All parts are toxic to people, pets and livestock ➤ Spreads via abundant seed production and from stem and root fragments



Photos by: Chuck Barger, University of Georgia, Bugwood.org, Collin Kennedy, Steve Dewey, Utah State University

Alternative Vine: Dutchman's Pipe

Aristolachia macrophylla



Photos by: Jim Gallion, www.nps.gov

Garden use: Climbing vine; screen

Growing conditions: Full sun to partial shade; moist, well-drained soil; tolerant of urban conditions

Size and shape: Perennial twining vine, growing 6-9 m in length

Flower and fruit: Unique pipe-shaped yellowish flowers; bloom late spring to early summer

Leaves: Dark heart-shaped leaves

Benefits: Rapid growth; fragrant flowers; attractive to bees, butterflies and birds; host species for pipevine swallowtail

Alternative Vine: Jackman Clematis

Clematis x jackmanii



Photo by: S. James

Garden use: Climbing vine; ground cover

Growing conditions: Full sun, roots require mulch or shaded area; light loam; moist soil

Size and shape: Twining vine; 3-4 m in length

Flower and fruit: Large velvety dark purple flowers; bloom late summer to early fall

Leaves: Dense foliage with bright to dark green leaves

Benefits: Lightly fragrant flowers




Ornamental Species



Fireweed

Photo by: Wasowski, Sally and Andy Wildflower.org

Invasive Ornamental Species

Giant Hogweed * <i>(Heracleum mantegazzianum)</i>	Dame's Rocket <i>(Hesperis matronalis)</i>	Himalayan Balsam <i>(Impatiens glandiflora)</i>
<ul style="list-style-type: none"> ➤ On the Noxious Weed List ➤ Sap causes burning and blistering of the skin ➤ large and requires a lot of resources 	<ul style="list-style-type: none"> ➤ Prolific seed producer ➤ Out-competes native vegetation in disturbed areas ➤ Plants re-bloom after deadheading 	<ul style="list-style-type: none"> ➤ Fast-growing ➤ Large size rapidly out-competes native plants, especially in riparian zones ➤ Seeds spread 6 m or more
		

Photos by: Thomas B. Denholm, Bugwood.org, Wikimedia Commons, Jan Samanek, Bugwood.org

Alternative Ornamental: Spotted Jewelweed

Impatiens capensis

Garden use: Woodland garden; riparian areas; native plant garden; flower bed/border

Growing conditions: Partial to full shade; consistently wet to moist soils; prefers high organic content

Size: 0.5-1.5 m tall

Flower and fruit: Orange-yellow pendant flowers with reddish spots; clusters; bloom July-September; seed capsules explode on touch

Leaves: Coarsely-toothed, oval, bluish-green

Benefits: Sap soothes skin irritation; beautiful silvery jewel-like sheen on leaves when submerged



Photo by: R.W. Smith, Wildflower.org

Alternative Ornamental: Wild Bergamot

Monarda fistulosa

Garden use: Butterfly, prairie gardens; border/bed planting; mass planting

Growing conditions: Full sun to partial shade; average to rich, well-drained soil

Size and shape: 60-90 cm tall; clumps

Flower and fruit: pink to lavender tubular flowers; clusters of 20-50 flowers; blooms June to September; dried seed heads are attractive

Leaves: grayish-green on square stems; 5-9 cm long

Benefits: Also known as Bee Balm; attractive to bees, butterflies and birds; fragrant foliage; often used in honey production; used for tea



Photo by: W.D. and Dolphia Bransford, WILDflower.org





Aquatic Species



Blue Vervain




Photo by: Eric Snyder

Invasive Aquatic Species

European Frog-Bit <i>(Hydrocharis morsus-ranae)</i>	Yellow Floating Heart <i>(Nymphoides peltata)</i>	Water Soldier <i>(Stratoides aloides)</i>	Fanwort <i>(Cabomba caroliniana)</i>
<ul style="list-style-type: none"> ➤ Forms rooted mats ➤ Outcompetes and shades native, submerged plants ➤ Impedes water flow 	<ul style="list-style-type: none"> ➤ Grows in thick floating mats ➤ Create stagnant water with low oxygen levels ➤ Degrades fish habitat ➤ Limits recreation 	<ul style="list-style-type: none"> ➤ Forms dense masses ➤ Outcompete native sp. ➤ Leaves are sharply serrated 	<ul style="list-style-type: none"> ➤ Extremely persistent ➤ Forms dense stands ➤ Displaces native vegetation ➤ Impedes drainage in canals and streams
			




Photos by: Dayna Laxton, G. Bales, F. MacDonald, D. Sutherland

Invasive Aquatic Species

Hydrilla <i>(Hydrilla verticillata)</i>	Purple Loosestrife <i>(Lythrum salicaria)</i>	Yellow Flag Iris <i>Iris pseudacorus)</i>
<ul style="list-style-type: none"> ➤ Significant threat to aquatic ecosystems and navigation ➤ Forms dense stand through water column ➤ Impedes water flow ➤ Clogs pipes and filters 	<ul style="list-style-type: none"> ➤ Quickly degrades wetlands ➤ Outcompetes native species ➤ Forms monocultures ➤ Neither beneficial nor utilized by native flora or fauna 	<ul style="list-style-type: none"> ➤ Forms dense stands, displacing native species ➤ Converts wet habitat to drier environment ➤ Sap causes skin blistering
		

Photos by: Leslie Mehrhoff, University of Connecticut, Matt Vardy, Dawn Sucee

Invasive Aquatic Species

Flowering Rush <i>(Butomus umbellatus)</i>	European Common Reed <i>(Phragmites australis australis)</i>	Eurasian Watermilfoil <i>(Myriophyllum spicatum)</i>
<ul style="list-style-type: none"> ➤ Can displace native shorelines vegetation ➤ Hinders recreational use 	<ul style="list-style-type: none"> ➤ Very aggressive ➤ Spreads via seeds and underground shoots ➤ Plant fragments can regenerate easily ➤ Displace native vegetation ➤ Threatens habitat or rare and at risk 	<ul style="list-style-type: none"> ➤ Quickly forms thick mats ➤ Interfere with swimming and entangles propellers ➤ Heavy infestations reduces property values ➤ Displace native plants
		

Photos by: Eric Snyder, John M. Randall, The Nature Conservancy, bugwood.org, John Hardy

Alternative Aquatic: Northern Blue Flag Iris

Iris versicolor

Garden use: Ornamental in ponds and water gardens; shoreline enhancement

Growing conditions: Shores, swamps, marshes, wet meadows, some fens; water up to 2 m

Size and shape: Stems 20-80 cm tall; small colonies

Flower and fruit: Showy blue-purple flowers with yellowish veins; fruit capsules 2-3 cm long

Leaves: Elongated, up to 3 cm wide

Benefits: Formerly used for various healing purposes; flowers benefit bees, birds and butterflies



Photo by: B. Bengston, Wildflower Venter Slide Library

Alternative Aquatic: Pickerelweed

Pontederia cordata

Garden use: Ornamental in ponds and water gardens; shoreline enhancement

Growing conditions: Shallow water (up to 1 m) along muddy or sandy shores

Size and shape: Stems erect 30-60 cm tall; forms dense colonies in still waters

Flower and fruit: Violet-blue flowers with 2 yellow dots on upper lip; 8 mm long; single-seeded bladder-like fruit

Leaves: Lance to egg shaped, heart shaped at base; 5-25 cm x 2-5 cm

Benefits: Young stems and seeds are edible; pollinated by bees and butterflies; shelter for muskrats



Photo by: Sally and Andy Wasowski, Wildflower.org

Alternative Aquatic: Common Cattail

Typha latifolia



Picture by: Norman G. Flaigg, Wildflower Center Slide Library

Garden use: Shoreline enhancement

Growing conditions: Marshes, ponds and ditches

Size: Over 1 m tall

Flower and fruit: Dense tiny flowers in spikes; minute fruit with brown hairs

Leaves: Flat, 10-25 mm wide; spongy but strong

Benefits: Quickly colonizes disturbed sites via prolific seed production; nesting material for birds; food and habitat for wildlife; roots are edible

Caution: Native but aggressive; there are also non-native cattail species

Alternative Aquatics: Coontail, Common Waterweed, White Lily

Ceratophyllum demersum, *Elodea canadensis*, *Nymphaea odorata*

Coontail (Hornwort)

- Submerged aquatic found in lakes, ponds, streams, marshes and quiet rivers
- Overwinters as an evergreen under ice; tolerant to low light and cool water

Common Waterweed

- Submerged aquatic found in lakes, ponds, marshes and rivers

Fragrant (White) Water Lily

- Used as an ornamental in ponds and water gardens; provides shade for fish
- Cultivars may also have pale pink flowers



Coontail

Photo by: Graves Lovell, Alabama Department of Conservation and Natural Resources, Bugwood.org

Preventing the Spread

✓ Report it!

If you think you see an invasive species, report it using the Invading Species Hotline 1-800-563-7711 or visit www.invadingspecies.com.

✓ Watch for it!

Monitor hedges, property lines, fence lines and trails. Early detection of invasive plants can increase the success of control and removal efforts.

✓ Use native species!

Try to use local native species in your garden. Never use invasive species in your garden or hedgerows. Encourage your local garden centre to sell non-invasive or native plants.

✓ Stay on trails!

Avoid travelling off-trail and in areas known to have invasive species.

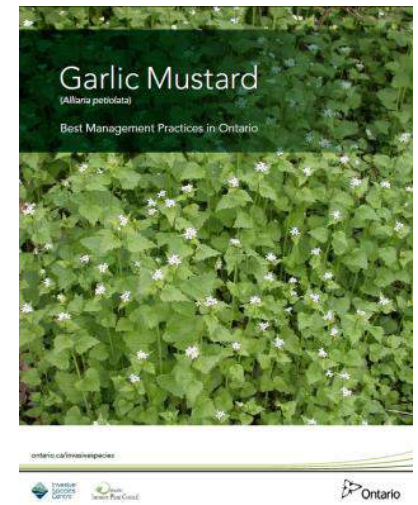
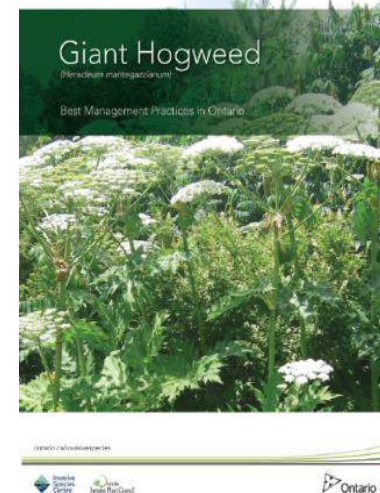
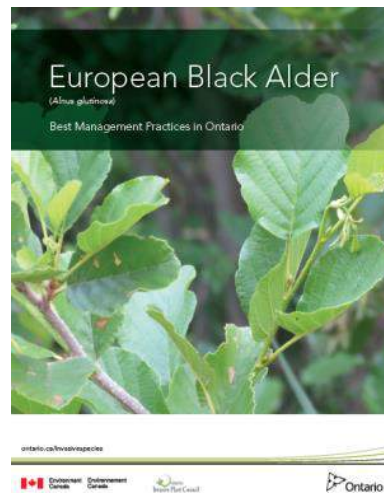
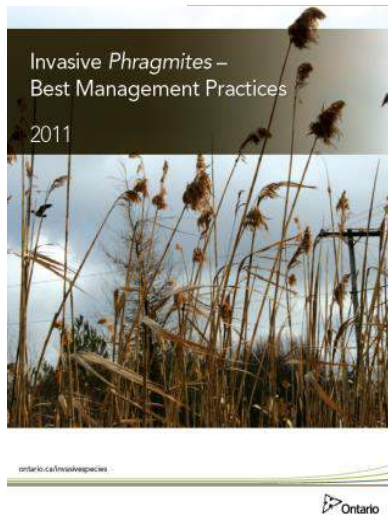
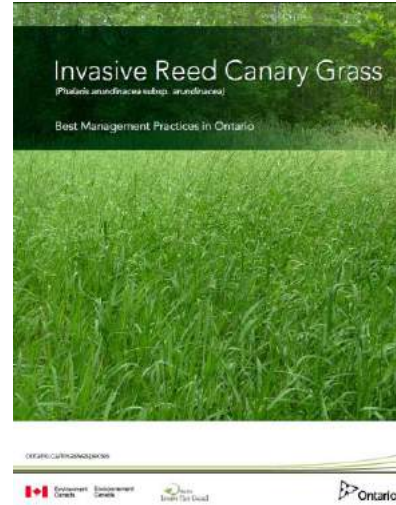
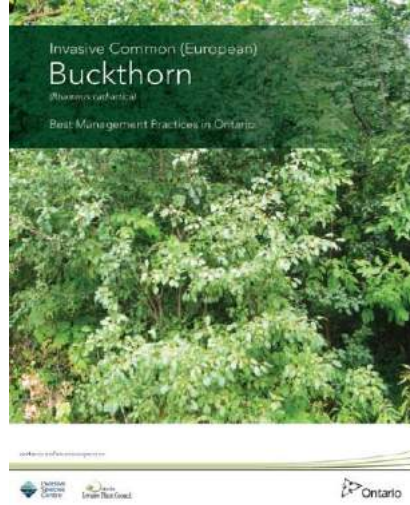
✓ Stop the spread!

Inspect, clean and remove mud, seeds and plant parts from clothing, pets (horses), vehicles (including bicycles), and equipment such as mowers and tools. Clean vehicles and equipment in an area where plant seeds or parts aren't likely to spread.

✓ Keep it natural!

Try to avoid disturbing soil and never remove native plants from natural areas. This leaves the soil bare and vulnerable to invasive species.

Best Management Practices



Help Track the Spread of Invasive Species

You can help track the spread of invasive species in a couple of ways:

You can call the Invading Species Hotline:
1-800-563-7711

Or report sightings online to Ontario's new mapping system (requires a photo & location)

www.eddmaps.org/ontario



We Gratefully Acknowledge the Contributions of:

- Invasive Plant Council of British Columbia for allowing the adaption and use of the artwork and test from their Grow me Instead booklet.
- Horticultural Outreach Collaborative and OIPC Communications Committee who contributed their time and expertise.
- Ontario Ministry of Natural Resources and Forestry
- Toronto and Region Conservation Authority
- Landscape Ontario
- Australian Grow Me Instead Program of the Nursery and Garden Industry, Australia
- Garden Wise booklet, produced by the Washington Invasive Species Coalition
- Garden Smart Oregon, produced by a coalition of organizations in Oregon

We also gratefully acknowledge the input and direction Sean James, Freyja Whitten, Mhairi McFarlane and Iola Price.

For More Information:

www.ontarioinvasiveplants.ca

www.ontario.ca/biodiversity

OIPC Coordinator:
(705)748-6324 ext. 281
info@oninvasives.ca



@OIPC1

