

A Guide to Gardening Wisely



Gardening Wisely

Many gardeners have an appreciation and a passion for nature and wildlife and know the challenge of maintaining a landscape that is weed-free. Invasive plants are very much like weeds – they may in fact be called ‘super weeds’. They can threaten not just gardens with their aggressively spreading habit, but natural areas and the environment in general. Invasive plants out-compete our native species for space and resources, lack natural predators, grow aggressively and reproduce rapidly. While these traits may be desirable in a garden plant, they can result in less desirable effects when spread to natural areas by humans, wildlife, wind and water.

After direct habitat loss, invasive plants are the greatest threat to our planet’s biodiversity. Biodiversity encompasses the abundance and diversity of life on our planet, as well as the processes that bind them together. Biodiversity is also a measure of the health of our environment. Invasive plants may:

- introduce disease and/or hybridize with native plants resulting in genetic contamination and reduced vigour;
- directly replace native species with their rapid growth and spread; and
- diminish wildlife habitat and remove resources (e.g. food) that wildlife depend on.

It is important to conserve our native biodiversity for the resources it provides. These include:

- medicinal resources of which over 50 per cent come from plants;
- a healthy network of natural areas to regulate and provide for clean air and water; and
- timber products supported by healthy forests that create thousands of jobs for Ontarians.

Invasive Plants and Gardening

Gardeners may be surprised to learn that many invasive plants have been introduced to our natural areas through the horticultural industry. Invasive plants have flourished in the trade and become very popular because of their desirable characteristics (such as low maintenance and aggressive spread). Not all non-native plants are invasive, but effective action needs to be taken to avoid planting ones that are invasive. Government policy and regulation has not caught up to face this new threat, however, progress is being made. In the interim, responsible gardeners can do their part by voluntarily changing their practices and contributing to a solution.

You can help by choosing suitable alternatives to invasive garden plants to prevent their spread and protect our native biodiversity. On the following pages you will find numerous plants suggested as alternatives to common invasive plants.

Remember, native plants are always the best choice. They are better adapted to local climate and soil conditions and have many more benefits for native wildlife. If your property is adjacent to or contains a natural feature such as a forest, wetland or valley, CVC strongly recommends the use of common native plants only. Common native plants are required when CVC issues a permit for approval (for a building permit or development application) within a regulated area. Plants that are non-native and non-invasive provide limited benefits to biodiversity but are included here as an alternative for home gardens.

Native plant: A plant that has existed within a given area/region prior to European settlement.

KEY

* These plants found primarily at specialized native plant nurseries. See last panel for more information.

ALTERNATIVE PLANT SELECTION SCORE

- ★★★★ **Plants that promote biodiversity**
- ★★★★ BEST choice - Common native plant within CVC watershed
- ★★★ GOOD choice - Plant is native to Ontario
- ★ **Plants that may or may not have benefits to biodiversity**
- ★ FAIR choice - Non-native plant that is non-invasive

SUN & MOISTURE REQUIREMENTS

- ☀ Full sun
- ☀/☁ Partial sun/shade
- ☁ Full shade
- 💧 Dry conditions (low water)
- 💧 Moderate conditions (moderate water)
- 💧 Moist conditions (high water)

AVOID

Norway maple
Acer platanoides

Difficult to distinguish from native sugar maple. Leaves are opposite and five-lobed, often with a slight purple tinge, and often affected by black spot fungus. Milky sap exudes from leaf stem if picked and squeezed. Spreads by seed. Creates dense, shaded conditions that eliminate other plants.

BEWARE: Many cultivars sold under names such as crimson king, emerald queen, columnar, etc.

TRY INSTEAD

★★★★ **Freeman’s maple**
Acer x freemanii

Fast-growing, deciduous tree with ascending branching and a dense, broad-oval crown. Excellent shade tree. Beautiful fall colour. Often sold as autumn blaze maple.

Ht. 16 m
Spr. 10 m

★★ **Hackberry**
Celtis occidentalis

Fast-growing deciduous tree with spreading round canopy. Leaves turn yellow in fall. Tolerates most soils. Used as a street tree, shade tree or windbreak. Berries are an excellent food source for wildlife.

Ht. 15 m
Spr. 10 - 13 m

★ **European beech**
Fagus sylvatica

Deciduous tree with a pyramidal shape. Shiny dark green foliage turning red-brown in October. Attractive tree often used in parks or on lawns.

Ht. 15 - 20 m
Spr. 5 m

ALSO CONSIDER

- ★★★★ Red maple *Acer rubrum*
- ★★★★ Silver maple *Acer saccharinum*
- ★★★★ Sugar maple *Acer saccharum*
- ★★★★ Ginkgo *Ginkgo biloba*
- ★★★★ Bur oak *Quercus macrocarpa*
- ★★★★ River birch *Betula nigra*

AVOID

Non-native honeysuckles
Lonicera japonica, L. maackii, L. morrowi, L. tatarica, L. x bella, L. xylosteum

Woody shrubs with brittle/weak branches. Bark is light, papery and scraped off easily. Opposite, lance-shaped leaves (hairy on some species). Spreads primarily through seed (birds), but also by roots. Flowers irregular, showy and come in a variety of colours. Produces fruit consisting of two small, red berries fused together. Native honeysuckles often confused with these species. Aggressive growth behaviour.

TRY INSTEAD

★★★★ **Red osier dogwood**
Cornus sericea (aka C. stolonifera)

Deciduous shrub with rounded, spreading shape. Green foliage and red branches. Clusters of small white flowers bloom in May/June. White berries provide food for wildlife. Beautiful year-round ornamental.

Ht. 3 m
Spr. 2.5 m

★★ **Saskatoon serviceberry**
Amelanchier alnifolia

Upright deciduous shrub. Foliage turns yellow in fall. Fragrant, white flowers bloom in May. Purple fruit in July is a food source for wildlife.

Ht. 3 - 3.5 m
Spr. 2 - 2.5 m

★ **Silver buffaloberry**
Shepherdia argentea

Large, multi-stemmed deciduous shrub with rounded shape. Silver foliage and contrasting red fruit that attracts wildlife. An effective contrast or hedge plant.

Ht. 4 m
Spr. 3 m

ALSO CONSIDER

- ★★★★ Witch-hazel *Hamamelis virginiana*
- ★★★★ Canada buffaloberry* *Shepherdia canadensis*
- ★★★★ Buttonbush *Cephalanthus occidentalis*
- ★★★★ Beautybush *Kolkwitzia amabilis*
- ★★★★ Running serviceberry* *Amelanchier stolonifera*
- ★★★★ Mount air *Fothergilla major*

AVOID

Japanese knotweed
Polygonum cuspidatum

Tall herbaceous plant with alternate, tear-drop shaped leaf that has a flattened bottom. Robust stems look like bamboo when mature. Spreads primarily by roots, but also by seed. Flowers are small, green-white and arranged on elongated clusters along the stem. Spreads very rapidly pushing out other species of plants. Difficult to control once established.

TRY INSTEAD

★★★★ **Joe-pye weed***
Eupatorium maculatum

Clumping herbaceous perennial. Whorled leaves, deep red stems, and panicles of pink flowers. Blooms in August/September. Great border plant for fall flowering.

Ht. 2 m
Spr. 1 m

★★ **Cup plant***
Silphium perfoliatum

Tall herbaceous perennial with coarse leaves that fuse together at the base to form a “cup” that holds water after a rain. Yellow flowers bloom in July. Beautiful addition to the garden.

Ht. 1.5 - 3 m
Spr. 1 m

★ **Green panda bamboo**
Fargesia rufa

Non-invasive clumping bamboo. Very vigorous and cold hardy. Makes an attractive evergreen specimen or hedge when grouped.

Ht. 2 - 3 m
Spr. 1.5 - 2 m

ALSO CONSIDER

- ★★★★ Blue vervain* *Verbena hastata*
- ★★★★ Black cohosh (often sold as bugbane) *Cimicifuga racemosa (aka Actaea racemosa)*
- ★★ False sunflower *Heliopsis helianthoides*
- ★★ False sunflower *Heliopsis helianthoides*
- ★ Yellow wax bells *Kirengeshoma palmata*

AVOID

Himalayan balsam
Impatiens glandulifera

Tall (1 to 2 m) herbaceous plant with fleshy pink-reddish stems and a lance-shaped alternating leaf with saw-tooth like edges. Spreads primarily by seed and has irregular cone-shaped pink flowers. Vigorous and dense growth that crowds out other plants. A major threat to wetlands.

TRY INSTEAD

★★★★ **New England aster**
Symphotrichum novae-angliae (aka Aster novae-angliae)

Upright herbaceous perennial. Produces numerous purple flowers with yellow centers. Blooms in August/September. Beautiful addition to the garden.

Ht. 90 cm
Spr. 60 cm

★★ **Butterfly weed**
Asclepius tuberosa

Herbaceous ascending perennial with bright orange flowers blooming in July/August. Drought tolerant. Essential component to any butterfly garden.

Ht. 80 cm
Spr. 60 cm

★ **Beardtongue**
Penstemon barbatus

Herbaceous perennial with clusters of scarlet, tubular flowers that bloom in late summer. Excellent for attracting hummingbirds and butterflies to your garden. Common names include golden-beard and scarlet bugler.

Ht. 30 - 60 cm
Spr. 45 cm

ALSO CONSIDER

- ★★★★ Blue vervain* *Verbena hastata*
- ★★★★ Carolina phlox *Phlox carolina*
- ★★ False sunflower *Heliopsis helianthoides*
- ★ Fall phlox *Phlox paniculata*

Is there more that you can do?

- Learn about invasive plants and report them
- Volunteer at events to help stop the spread of invasive plants
- Manage invasive plants on your property if they are at risk of spreading to natural areas
- Dispose of garden waste or plants properly (don't dump into natural areas)
- Encourage nurseries to label or remove invasive plants from sale
- Spread the word about invasive plants

The plants presented in this brochure are available at most commercial nurseries. When selecting these plants at your local nurseries, be sure to look for the scientific name, as many times common names can vary (e.g. Norway maple sometimes sold as Red maple). Also be aware of cultivars of native plants and avoid their use.

Additional Resources

CVC Invasive Species Website

Report an invasive species; view a larger list of invasive garden plants and alternatives; obtain a local native plant nursery list and other invasive species information: www.creditvalleyca.ca/invasives

CVC Volunteer events and workshops:
www.creditvalleyca.ca/bulletin/events.htm

Ontario Invasive Plant Council

Information on invasive plants:
www.ontarioinvasiveplants.ca

Ontario Federation of Anglers and Hunters (OFAH) / Ministry of Natural Resources (MNR) Provincial Invading Species Program

Invasive species information or to report:
www.invadingspecies.com

Evergreen

Native plant gardening and plant selection database:
www.evergreen.ca/en/resources/native-plants

This brochure is published for gardening purposes ONLY and is not meant as a tool for restoration projects. Thank you to the Alberta Invasive Plants Council for permission to use the layout and concept of their "WEED WISE: Gardening in Alberta" brochure as the inspiration for this CVC product.



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AVOID



Winged euonymus *Euonymus alatus*

Woody shrub with opposite, finely toothed, lance-shaped leaves turning bright red in fall. Young stems green in colour. Distinct ridges/wings on the stem. Spreads primarily by seed (birds). Seeds are distinct having a two-part red fruit. White/green flowers. Crowds out other plants and shrubs with its dense growth and rapid reproduction.

BEWARE: Often sold as 'burning bush'.

AVOID



Miscanthus, Eulalia *Miscanthus sinensis* and *M. sacchariflorus*

Tall clumping grass with feathery flower heads. In late summer, flower heads turn reddish, then pinkish, then mature to a silvery colour. Leaf blades are 2.5 cm wide with a distinct midrib. Leaves turn yellow/tan in fall. Often escapes into wetlands and crowds out native wetland plants.

BEWARE: Often sold as maiden grass or feather grass.

AVOID



Flowering rush *Butomus umbellatus*

Emergent aquatic plant with grass-like long leaves that are triangular in cross-section and corkscrew slightly at the tip. Spreads by root fragments, bulbils and seed. Small pink flowers are in a bowl-like cluster on separate stalks. Escapes into wetlands where it crowds out native plants. Extremely difficult to control.

GROUNDCOVER PLANTS TO AVOID



Goutweed *Aegopodium podagraria*

Herbaceous groundcover. Variegated white and green leaves that alternate along the stem. Established plants will often lose this variegation. Spreads primarily by roots, but also by seed. Small white flowers in a bowl-like cluster on a single stalk. Spreads rapidly and densely choking out all other plants. Extremely difficult to control.



Periwinkle *Vinca minor*

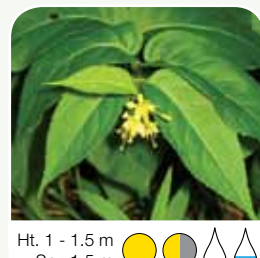
Distinctive herbaceous groundcover with opposite, bright green, shiny lance-shaped leaves. Spreads primarily by roots and has purple flowers with five petals. Grows in dense mats that choke out other plants. Difficult to control.



English ivy *Hedera helix*

Herbaceous groundcover vine. Alternating leaves are three-lobed with lighter coloured veins against a dark green, glossy leaf. Spreads primarily through creeping roots and branches. Will grow in dense mats choking out native plants as well as growing vertically smothering out native shrubs and saplings.

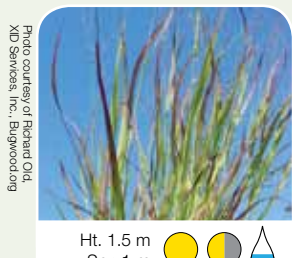
TRY INSTEAD



★★★★ Bush honeysuckle *Diervilla lonicera*

Compact deciduous shrub with green, lance-shaped leaves in whorls on reddish stems. Fragrant yellow flowers bloom in July/August. Great for dry or difficult sites.

Ht. 1 - 1.5 m
Spr. 1.5 m



★★ Switchgrass *Panicum virgatum*

Clumping perennial grass with narrow green leaves turning yellow and red in fall. Flowers give way to reddish seed heads. Drought resistant. Beautiful border or screen plant.

Ht. 1.5 m
Spr. 1 m



★★★★ Blue flag* *Iris versicolor*

Herbaceous perennial with slender green leaves and large blue flowers with yellow and white markings at the base of the petals. Flowers May to July. Does well in wet areas.

WARNING: Sap can cause dermatitis in sensitive individuals.

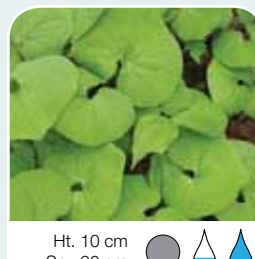


★★ Sweet flag grass *Acorus calamus* (aka *Acorus americanus*)

Herbaceous wetland perennial with green to yellow blades. Great for containers or edging, especially in wet areas or around ponds and streams.

Ht. 80 cm
Spr. 30 cm

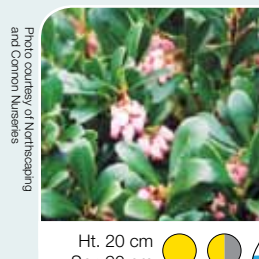
GROUNDCOVER PLANTS TO TRY INSTEAD



★★★★ Wild ginger *Asarum canadense*

Herbaceous perennial with fleshy, heart-shaped dark green leaves. Flowers dull green to purple-red. Easy to grow and spreads quickly to make an excellent ground cover in shady areas.

Ht. 10 cm
Spr. 30 cm



★★ Bearberry *Arctostaphylos uva-ursi*

Low, woody evergreen shrub with small, thick, shiny leaves that turn bronze-red in the fall. Produces crowded, drooping clusters of white-pink flowers in May/June.

Ht. 20 cm
Spr. 90 cm



★ Barrenwort/ Fairy wings *Epimedium species*

Hardy herbaceous perennials that come in a wide variety of colours and other characteristics to meet the needs of your garden. Heart or lance-shaped, reddish leaves that turn green as they mature. Some varieties have a spreading form, while others clump together in dense mounds. Flowers have four petals in colours ranging from white to purple.

Ht. 20 - 30 cm
Spr. 40 - 45 cm



★★★★ Witch-hazel *Hamamelis virginiana*

Large deciduous shrub with large oval-shaped leaves turning yellow in fall. Fragrant yellow flowers appear in late September. A sturdy plant, good for mass plantings.

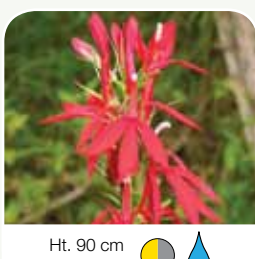
Ht. 5 - 6 m
Spr. 5 - 6 m



★★ Big blue-stem *Andropogon gerardii*

Perennial grass, green to silvery-blue (summer); red, orange and purple (fall). Red or blue flowers bloom in July/September. Drought-tolerant. Excellent screen plant.

Ht. 1 - 2 m
Spr. 60 - 90 cm

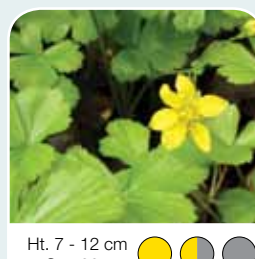


★★ Cardinal flower *Lobelia cardinalis*

Clumping herbaceous perennial with coarse, bright green foliage. Upright spikes of scarlet-red flowers bloom in late summer. Attracts butterflies and hummingbirds.

Ht. 90 cm
Spr. 60 cm

WARNING: Poisonous if ingested by humans or animals.



★★★★ Barren strawberry* *Waldsteinia fragarioides*

Low, spreading, herbaceous perennial with green, three-lobed leaves that turn bronze in the fall. Showy yellow flowers bloom in May/June. Easy to grow.

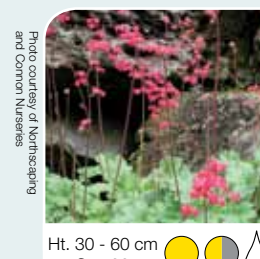
Ht. 7 - 12 cm
Spr. 30 cm



★★ Bunchberry *Cornus canadensis*

Low, erect herbaceous perennial with four to six whorled leaves at the top of stem. Single white flower above the leaf whorl appears in late spring, followed by scarlet berries in the fall, attracting birds. Beautiful bronze-red fall colour. Requires rich soils.

Ht. 15 - 20 cm
Spr. 30 - 60 cm



★ Coral bells *Heuchera micrantha*

Herbaceous perennial with lobed leaves that are quite variable in appearance due to a number of cultivated varieties. Leaves range from green to reddish-green to purple-green. Produces an erect stalk bearing many clusters of pink, white, or greenish flowers. Good for mass plantings.

Ht. 30 - 60 cm
Spr. 30 cm

ALSO CONSIDER

- ★★★★ Red osier dogwood
Cornus sericea
- ★★★★ Nannyberry
Viburnum lentago

- ★★★ Canada buffaloberry*
Shepherdia canadensis
- ★★ Running serviceberry*
Amelanchier stolonifera

ALSO CONSIDER

- ★★★★ Mexican muhly*
Muhlenbergia mexicana
- ★★ Indian grass
Sorghastrum nutans

- ★ Blue oat grass
Helictotrichon sempervirens

ALSO CONSIDER

- ★★★★ Common arrowhead
Sagittaria latifolia
- ★★ Pickerel weed
Pontederia cordata

- ★★ Threesquare rush
Schoenoplectus pungens

GROUNDCOVER PLANTS TO ALSO CONSIDER

- ★★★★ Large leaved aster*
Aster macrophyllus
- ★★★★ Common strawberry*
Fragaria virginiana
- ★★ Wintergreen
Gaultheria procumbens

- ★ Green and gold
Chrysogonum virginianum
- ★ European wild ginger
Asarum europaeum