

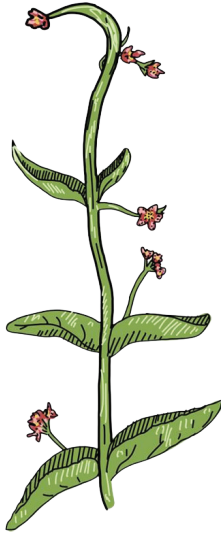


— INVASIVE TERRESTRIAL —
PLANT
— SPECIES —

A QUICK REFERENCE GUIDE



SECOND EDITION MARCH, 2025



Note: At the time of writing (March 2025), we are providing you with the most up-to-date information on terrestrial invasive species in Ontario, including biological, geographic, and regulatory status. It is important to understand the scientific names, establishment status, geographic ranges, regulatory status, etc. may change over time.



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INTRODUCTION

Invasive species are plants, animals, and micro-organisms that, when introduced outside of their natural environment, out-compete native species (Government of Canada, 2016). Invasive species can have harmful consequences for the natural environment, economy, and society, including human health. However, not all introduced species are invasive. Some, like the introduced Chinook Salmon (*Oncorhynchus tshawytscha*), produce economic incentives for society, while also not posing a significant threat to native fish and their ecosystems.

Invasive species, by contrast, are a concern because they have a 'displacement capacity,' meaning they out-compete our native species for space, food, and other resources.

Invasive terrestrial plants can overwhelm a variety of habitats, out-competing native flora for light and nutrients. For example, invasive plants can impact native forest succession by shading out native saplings, establish in open habitats thus reducing the diversity of native pollinator-friendly species, and spread along riparian areas impacting sensitive fish and herptile habitat.

HOW DO INVASIVE TERRESTRIAL PLANTS ARRIVE AND SPREAD?

Invasive terrestrial plants may be spread or introduced through many means, such as infested packaging material, seed dispersal via both environmental and human sources, or by escaping from gardens.

INVASIVE SPECIES ACT, 2015

The Ontario Invasive Species Act (ISA) came into force on November 3rd, 2016. The goal of the ISA is to support the prevention, early detection, response to, and eradication of invasive species in Ontario. Preventing invasive species from arriving and becoming established in Ontario is critical in the fight against this growing threat. Some key elements of the ISA:

- » Giving Ontario the tools to regulate invasive species as either prohibited or restricted and banning activities such as buying, selling, possessing, and transporting certain invasive species;
- » Enabling response actions to address urgent threats; and
- » Helping to promote compliance through modernized inspection and enforcement measures.

INVASIVE TERRESTRIAL PLANT SPECIES REGULATED AS RESTRICTED UNDER THE INVASIVE SPECIES ACT, 2015 AS OF JANUARY 1ST, 2025.

In Ontario, it's **illegal** to import, deposit, release, breed/grow, buy, sell, lease, or trade the following species. It is also illegal to bring these plants into provincial parks and conservation reserves and to possess, transport, deposit or release them in these protected areas.

Black Dog-Strangling Vine

(Vincetoxicum nigrum) page 52

Bohemian Knotweed *(Fallopia x bohemica)* page 22

Dog-Strangling Vine *(Vincetoxicum rossicum)* page 52

European Common Reed

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Giant Knotweed *(Fallopia sachalinensis)* page 28

Himalayan Knotweed *(Koenigia polystachya)* page 34

Japanese Knotweed *(Fallopia japonica)* page 36

Tree-of-Heaven *(Ailanthus altissima)* page 74

To learn more about Ontario's Invasive Species Act, visit
ontario.ca/page/managing-invasive-species-ontario

WHAT CAN I DO?

- » Learn to identify invasive species that are a threat to Ontario and how to prevent the spread of these unwanted species.
- » Avoid using invasive plants in gardens. Instead, buy native plants from reputable garden suppliers. Native plants provide habitat and food sources for native wildlife.
- » Bag invasive plants and solarize (put them in direct sunlight) for at least 48 hours before sending them to the landfill. Never compost or discard them into natural areas, including roadside ditches.
- » Inspect clothing, equipment, and pets when exiting or entering a natural area to avoid transporting seeds and root fragments to new locations.
- » Understand the Invasive Species Act, 2015. If you have any information about the illegal importation, distribution, or sale of prohibited or restricted invasive species, report it immediately to the Ontario Ministry of Natural Resources TIPS line at 1-877-TIPS-MNR (847-7667) toll-free any time.
- » If you see an invasive plant in the wild, report the sighting.

HOW TO REPORT INVASIVE SPECIES

- » Call: 1-800-563-7711
- » Email: ISAP@ofah.org
- » Create a profile: on EDDMapS.org and submit your reports digitally.



When submitting a report through the Invading Species Hotline or online at EDDMapS.org, it is best to have the following information on hand to submit a complete report:

What?

What species do you suspect you encountered?
Are there native lookalikes that you may not have considered?

Picture?

In order to confirm reports, a picture is required. However, with some high-priority species, it is best to always report!

To photograph an invasive plant:

-
- » Photograph the entire plant with something for scale.
 - » Take close-ups of the leaves' upper and lower surface.
 - » Take close-ups of the flowers and fruit.
-

When and where?

Be sure to note the date and geographical location where you encountered the invasive plant (e.g. latitude and longitude).

Specimen?

Do you have the plant on hand? If so, call **1-800-563-7711** and ISAP staff will direct you on your next steps.





Grasses

EUROPEAN COMMON REED

Phragmites australis subsp. *australis*

PLANT TYPE: PERENNIAL GRASS



ARRANGEMENT

- » Alternate.

LEAVES

- » Long tapered leaf 2-4 cm wide, blue-green.
- » Leaf sheaths remain attached and are difficult to remove.

FLOWERS/SEEDS

- » Dense cascading 'broom-like' reddish-brown flower head. The flower head becomes tan-grey throughout dormancy (fall and winter) in Ontario.
- » 'Cottony' in appearance when mature.

BUDS/STEM

- » Stems rough and ridged, ligule a densely hairy band.
- » Mature plants 2-4 m tall.

HABITAT

- » Moist to wet soils, full to partial sun.
- » Found in riparian areas; coastal habitats, wetlands, watercourses, and road side ditches.

LOOKALIKE SPECIES

- » The native species of manna grass (*Glyceria* spp.), including tall northern, eastern, and rattlesnake grass.
- » A native common reed (*Phragmites americanus*) exists but has a smooth, often red stem, and does not grow as densely as invasive phragmites.

MISCANTHUS

Miscanthus spp.

PLANT TYPE: PERENNIAL GRASS



ARRANGEMENT

- » Alternate.

LEAVES

- » Leaves form from a central clump, radiating like a fountain from base of plants.

FLOWERS/SEEDS

- » Flowering stalk up to 1.5 m tall.
- » Light silvery pink-reddish flowers, turning tan in fall.

BUDS/STEM

- » Typically reaches 2-4 m or higher.

HABITAT

- » Tolerable of a range of conditions, from dry to moist soils, prefers partial to full sun.
- » Found along roadsides, forest edges, old fields, and riparian areas.

LOOKALIKE SPECIES

- » Invasive European common reed (*Phragmites australis* subsp. *australis*).

REED OR GIANT MANNA GRASS

Glyceria maxima

PLANT TYPE: PERENNIAL GRASS



ARRANGEMENT

- » Alternate.

LEAVES

- » Stem sheaths near the base are slightly rough. Ligule when pulled from stem is tube-like.
- » Base reddish in spring, but fading as season progresses.
- » Red/purple tinge often still detectable on outer sheath at base of stem in late season.
- » Stems are robust; fleshy and thick.

FLOWERS/SEEDS

- » Upright with a cascading broom like 'flower' head.

BUDS/STEM

- » Mature plants up to or greater than 1.5 m.

HABITAT

- » Moist to fresh soils in open wetlands and edges of watercourses.

LOOKALIKE SPECIES

- » The native species of manna grass (*Glyceria* spp.), including tall northern, eastern, and rattlesnake grass, have smooth stem sheaths and flowering heads tend to bend over and not stand upright.
- » Rarely do these native species exceed 1.5 m in height.



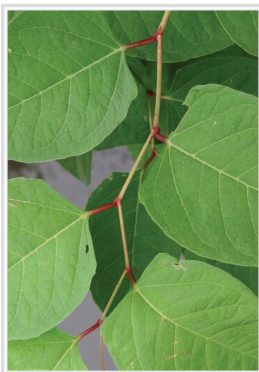


Herbs

BOHEMIAN KNOTWEED

Fallopia x bohemica

PLANT TYPE: HERBACEOUS PERENNIAL



ARRANGEMENT

- » Alternate.

LEAVES

- » Size and shape of leaves can vary, leaves are 10 cm to 20 cm (2-8 in) long.
- » Shovel shape with a flat base or have a heart-shaped base that tapers off to the tip.

FLOWERS/SEEDS

- » Greenish-white to creamy-white flowers, erect or loose drooping arrangements.
- » Flowers bloom mid-August to late September and can continue for several weeks or until the presence of frost.

BUDS/STEM

- » Bamboo-like stems that branch and are hollow throughout the stem, except at the nodes.
- » Green stems are mottled reddish-brown, with this darker colour heavy at the nodes.
- » Mature plants are typically 2-5 m (6.5-16.5 ft) tall.

HABITAT

- » Thrives in riparian zones (e.g., beaches, shorelines, wetlands) and areas where soil has been disturbed (e.g., roadsides, ditches, and lawns).

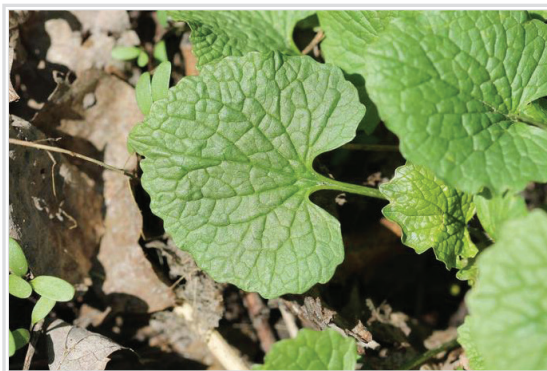
LOOKALIKE SPECIES

- » Bohemian knotweed closely resembles its parents and is commonly misidentified as Japanese knotweed.

GARLIC MUSTARD

Alliaria petiolata

PLANT TYPE: HERBACEOUS BIENNIAL



ARRANGEMENT

- » Basal rosette (first-year)
- » Alternate (second-year)

LEAVES

- » Saw-tooth edge, elongated heart shape with prominent veins. Garlic/onion smell when crushed.
- » Young (first year) leaves are more rounded than mature leaves.

FLOWERS/SEEDS

- » Cluster of small white flowers with four petals.
- » Small black < 1 mm rounded seeds are found in elongated 'tube-like' seed pods (similar to a bean pod).

HABITAT

- » Found in a wide range of sunny and fully shaded habitats, including undisturbed forest, forest edges, riverbanks, and roadsides.

LOOKALIKE SPECIES

- » First-year garlic mustard can resemble a number of species native to Ontario, including violets (*Viola* spp.) and wild ginger (*Asarum canadense*).
- » First-year garlic mustard leaves will have a distinct garlic smell when crushed.

GIANT HOGWEED

Heracleum mantegazzianum

PLANT TYPE: HERBACEOUS PERENNIAL



Do not touch this plant because it is poisonous. If you do, wash your skin immediately in cool soapy water and do not expose the area to sunlight.

ARRANGEMENT

- » Alternate.

LEAVES

- » Lobed leaf 1-2 m wide, lobes sharp-pointed and irregular.

FLOWERS/SEEDS

- » Small, white flowers in a large umbrella-shaped cluster, 75 cm wide.

BUDS/STEM

- » Hairy stem with purple spots.

HABITAT

- » Fresh to wet soils in swamps, riparian areas, meadows, and woodlands.

LOOKALIKE SPECIES

- » Cow parsnip (*Heracleum maximum*) typically does not exceed heights of 1-2 m. It has smaller flowers, no distinct purple spots on stems, and leaves are not as shiny, or deeply and irregularly lobed as giant hogweed. The sap of cow parsnip contains the same toxic properties as giant hogweed and contact with this plant should also be avoided. Cow parsnip is native to Ontario and in some cases is regionally rare. Control of cow parsnip should only be undertaken where it poses a health and safety hazard.
- » Angelica (*Angelica atropurpurea*), native to Ontario, has rounded-topped flower cluster, shaped like a globe, leaves divided into many leaflets and the stem is hairless.

GIANT KNOTWEED

Fallopia sachalinensis

PLANT TYPE: HERBACEOUS ANNUAL



ARRANGEMENT

- » Alternate.

LEAVES

- » Leaves can range from 20-40 cm (8-16 in) in length, and have a deep heart shaped base that tapers off to a tip.

FLOWERS/SEEDS

- » Flowers are small, greenish-white to creamy-white in colour and grow in branched, compact clusters that can be upright or drooping.

BUDS/STEM

- » Little to no branching on the stems and have a reddish-brown mottling.
- » Hollow, bamboo-like stem that typically grow to form large upright thickets.

HABITAT

- » Grow in diverse landscapes that vary in soil, nutrients, pH, moisture, and sunlight.
- » Thrives in damp areas with lots of light (riverbanks, shorelines, beaches). Grows well in disturbed areas and commonly found along roadsides.

LOOKALIKE SPECIES

- » Similar to other knotweed species but can be differentiated primarily based on their leaves and overall size and branching of stems.

GOUTWEED

Aegopodium podagraria

PLANT TYPE: HERBACEOUS PERENNIAL



ARRANGEMENT

- » Opposite.

LEAVES

- » Compound leaf with serrated edges, can be non-variegated or variegated green and white.

FLOWERS/SEEDS

- » Flat-topped 'umbrella like' flower head with many small white flowers.

BUDS/STEM

- » Upright, hollow, and grooved.

HABITAT

- » Various - dry to fresh soils in forest, successional areas, and urban environments. An escapee from residential gardens.

LOOKALIKE SPECIES

- » Water hemlock (*Cicuta maculata*) - found in wet areas. Angelica (*Angelica atropurpurea*) has similar compound leaves but grows up to 2 m tall. Golden alexanders (*Zizia aurea*) is a rare native plant found in flood plains with similar but more slender leaves and yellow flowers in May to June.

HIMALAYAN BALSAM

Impatiens glandulifera

PLANT TYPE: HERBACEOUS ANNUAL



ARRANGEMENT

- » Opposite or whorled.

LEAVES

- » Lance-shaped leaf with sharply toothed edges.

FLOWERS/SEEDS

- » Flowers are pink, large, and showy.

BUDS/STEM

- » Purple-tinged, hollow stem, reaching 1-3 m in height.

HABITAT

- » Wet and moist soils in wetlands, floodplains, and riparian areas.

LOOKALIKE SPECIES

- » Touch-me-not or jewelweed (*Impatiens capensis*) has orange or yellow flowers, and leaves are more oblong-shaped (below). Jewelweed is native to Ontario.



HIMALAYAN KNOTWEED

Polygonum polystachyum

PLANT TYPE: HERBACEOUS PERENNIAL



ARRANGEMENT

- » Alternate.

LEAVES

- » Mature leaves are alternate, long (9-22 cm) and pointed. Leaf base is slightly heart-shaped to tapered.

FLOWERS/SEEDS

- » Flowers are pinkish-white.
- » The seeds are smooth, shiny and black, 3 mm long and encased in a papery-fringed capsule. Seeds can be wind dispersed.

BUDS/STEM

- » Stems are numerous, densely haired, ribbed, red-brown, erect, and branching.
- » Stems are hollow and have jointed nodes surrounded by a papery stipule.

HABITAT

- » Grows in loamy, silty, or sandy soils. Requires full sun and moist sites.

LOOKALIKE SPECIES

- » Young plants may be confused with lady's thumb (*Persicaria maculosa*) or it can be confused with other knotweeds.

JAPANESE KNOTWEED

Fallopia japonica

PLANT TYPE: HERBACEOUS PERENNIAL



ARRANGEMENT

- » Alternate.

LEAVES

- » Tear-drop shaped, sharp pointed, dark green, and flattened at base.

FLOWERS/SEEDS

- » Flowering stalk of many small greenish-white flowers.

BUDS/STEM

- » Large plant with a hollow, 'bamboo-like' stem.
- » Stems are light-green maturing to tan colour, with reddish bands/joints.

HABITAT

- » Moist to wet soils, prefers full sun but can tolerate partial to full shade.
- » Often found in riparian areas of wetlands and watercourses, and along roadside ditches.

LOOKALIKE SPECIES

- » Japanese knotweed can be easily confused with other knotweed species (giant, Himalayan, and bohemian).

LILY-OF-THE-VALLEY

Convallaria majalis

PLANT TYPE: HERBACEOUS PERENNIAL



ARRANGEMENT

- » Basal.

LEAVES

- » 1-2 oblong elliptic leaves, measuring 5-15 cm.

FLOWERS/SEEDS

- » Flowering stems display 5-10 fragrant and small, drooping, and bell-shaped white flowers in spring/summer. In fall, may develop orange-red berries with 1-6 seeds.

BUDS/STEM

- » Stems are 20-35 cm tall, green, and bearing 1-2 leaves.

HABITAT

- » Often found in undisturbed woodlands, moist-fresh forest edges, spreading out extensively via rhizomes underground.
- » Can tolerate partial to full shade, and grows easily in sunny areas.

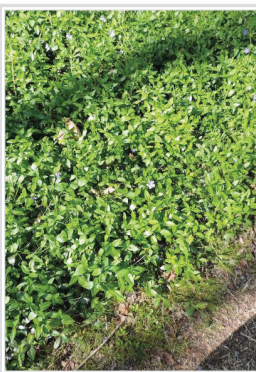
LOOKALIKE SPECIES

- » False Solomon's seal (*Maianthemum racemosum*), rose-twisted stalk (*Streptopus lanceolatus*), blue-bead lily (*Clintonia borealis*), and various other species native to Ontario from the *Orchidaceae* family.

PERIWINKLE

Vinca minor

PLANT TYPE: HERBACEOUS PERENNIAL



ARRANGEMENT

- » Opposite.

LEAVES

- » Small, lance-shaped, shiny, and evergreen.

FLOWERS/SEEDS

- » Showy blue/purple flowers.

BUDS/STEM

- » A creeping, trailing ground plant.

HABITAT

- » Dry to fresh soils, preferring slightly moist conditions and tolerant of periodic drought.
- » Prefers partial sun, but will tolerate a range of conditions from full sun to full shade.
- » Found in woodlands and along riparian areas.

LOOKALIKE SPECIES

- » Wintergreen (*Gaultheria procumbens*) native to Ontario, has similar leaves, but has an obvious minty smell when the leaf is crushed.
- » Partridgeberry (*Mitchella repens*), also native to Ontario, has similar leaves but are more round to egg-shaped with prominent pale veins; flowers are white, followed by red berries.

PURPLE LOOSESTRIFE

Lythrum salicaria

PLANT TYPE: HERBACEOUS PERENNIAL



CHARACTERISTICS

ARRANGEMENT

- » Opposite or whorled.

LEAVES

- » 3-10 cm long, with smooth edges.

FLOWERS/SEEDS

- » Individual flowers have 5-7 pink-purple petals about 10 mm long, arranged on long flower spikes at the top of stems.

BUDS/STEM

- » One horizontal underground stem, known as a rhizome, can produce 30 to 50 erect stems.
- » The stems are woody and square, and each one can form a plant up to 2.4 m high and 1.5 m wide.

HABITAT

- » Prefers partial to full sun and tolerates a range of soil moisture conditions, preferring higher moisture such as that found in wetlands, roadsides, and disturbed areas.

LOOKALIKE SPECIES

- » May be confused with native wetland plants including blue vervain (*Verbena hastata*) and fireweed (*Chamaenerion angustifolium*).

SPOTTED KNAPWEED

Centaurea stoebe

PLANT TYPE: HERBACEOUS BIENNIAL OR
SHORT-LIVED PERENNIAL



ARRANGEMENT

- » Alternate.

LEAVES

- » The first year rosette of deeply lobed leaves are borne on short stems.
- » The mature flowering stems have alternate leaves. Leaves become smaller as they advance up the stem.

FLOWERS/SEEDS

- » Closed flower heads are egg-shaped and surrounded by green bracts, marked with fine vertical streaks, and tipped with a dark comb-like fringe.
- » The bracts give a “spotted” appearance to the flower head. The flower colour is pink-purple, but can be a light purple or white.
- » Seeds have a tuft of bristles.

BUDS/STEM

- » Up to 1.5 m tall, with several branching upright stems growing from a stout taproot.

HABITAT

- » Partial to full sun; can tolerate a range of soil moisture types and conditions, including drought.

LOOKALIKE SPECIES

- » Pitcher’s thistle (*Cirsium pitcheri*), a federally listed endangered species and provincially listed threatened species. Pitcher’s thistle does not have dark bracts, lacking the spotted appearance.

WILD CHERVIL

Anthriscus sylvestris

PLANT TYPE: ANNUAL, BIENNIAL, OR SHORT-LIVED
HERBACEOUS PERENNIAL



ARRANGEMENT

- » Alternate.

LEAVES

- » Leaves are compounded 2 or 3 times, 30-45 cm long, and wide and triangular in outline.
- » Leaflets are up to 5 cm long, divided and fern-like, dark green and somewhat shiny on the upper surface, and short hairs are present on the lower surface.
- » Basal and lower leaves are largest and long-stalked, becoming smaller, less divided, and stalk-less as they ascend the stem.

FLOWERS/SEEDS

- » Flat clusters of 3-6 cm umbels, consisting of 4-15 smaller clusters (umbellets), each of those bearing ~ 20 white flowers that are 2-4 mm.
- » Each flower produces two shiny and long brown seeds that are joined.

BUDS/STEM

- » Stems are hollow with soft hairs. Sheath-like where the stalk joins the stem and the sheath is ribbed and hairy.
- » Multiple stems from the base, branched, ribbed, and have short hairs, especially on the lower plant.

HABITAT

- » Tolerates partial shade to full sun and wet to moist soils, but prefers open habitats such as roadsides, open woodlands, riparian areas, and fields.

WILD PARSNIP

Pastinaca sativa

PLANT TYPE: HERBACEOUS PERENNIAL



Do not touch this plant because it is poisonous. If you do, wash your skin immediately in cool soapy water and do not expose the area to sunlight.

ARRANGEMENT

- » Opposite and whorled around stem.

LEAVES

- » Compound leaves are arranged in pairs, each with 2-5 pairs of sharply toothed mitten-shaped leaflets.

FLOWERS/SEEDS

- » Yellow (sometimes greenish) flowers form umbel-shaped clusters that are 10-20 cm across.
- » Seeds are flat and round.

BUDS/STEM

- » Deeply-grooved, 2-5 cm thick, and smooth with few hairs.

HABITAT

- » Partial sun to full sun and can tolerate a variety of soil types.
- » Often found growing in open meadow habitats, open woodlands, roadsides, agriculture, and riparian areas.

LOOKALIKE SPECIES

- » Native cow parsnip (*Heracleum maximum*) is similar but has large white umbel-shaped flowers and the stem is covered with many fine hairs giving it a fuzzy appearance.
- » Angelica (*Angelica* spp.) looks similar as well, but the stems are smooth and hairless and the flowers, while variable in colour, are distinctly globe-shaped.





Vines

DOG-STRANGLING VINE

Vincetoxicum rossicum and
V. nigrum

PLANT TYPE: HERBACEOUS TWINING VINE



ARRANGEMENT

- » Opposite.

LEAVES

- » Lance-shaped with smooth margins.

FLOWERS/SEEDS

- » Bean-shaped seed pod with seeds attached to downy 'umbrellas'. Flowers are pink (*V. rossicum*) or purple (*V. louseae*) with five petals

BUDS/STEM

- » Twining vine.

HABITAT

- » Dry to moist soils; growing readily in full sun to partial shade.
- » Found in mixed woodlands, pine plantations, woodland edges, riparian areas, and meadows.

LOOKALIKE SPECIES

- » Swamp milkweed (*Asclepias incarnata*), native to Ontario, is an upright plant, typically found in wetland habitats.

ORIENTAL BITTERSWEET

Celastrus orbiculatus

PLANT TYPE: HERBACEOUS PERENNIAL VINE



ARRANGEMENT

- » Alternate.

LEAVES

- » Highly variable glossy leaves (from round or egg-shaped to oblong or elliptical), smooth with wavy, slightly toothed margins, and tips that taper to a point.

FLOWERS/SEEDS

- » From May to June it produces yellow-green five-petaled flowers at the leaf axils.
- » Female plants produce round leathery seed pods containing red fruit and 3-6 seeds, which turn from green in spring to bright yellow-orange in the fall, persisting through winter.

BUDS/STEM

- » Has light brown stems with lenticels and white piths. Roots have a distinctive orange hue.

HABITAT

- » Most productive in sunlight but shade tolerant.
- » Found in woodlands, woodland edges, old fields, meadows, and roadsides.
- » Does not grow well in wet habitats.

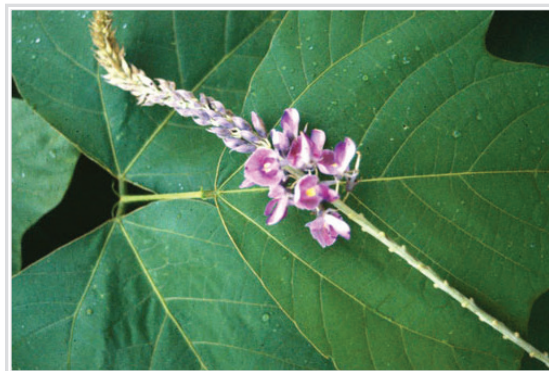
LOOKALIKE SPECIES

- » American bittersweet (*C. scandens*) is a native species and a close botanical relative to invasive oriental bittersweet. There is evidence that the two species can hybridize, threatening the native bittersweet species.

KUDZU

Pueraria montana

PLANT TYPE: HERBACEOUS PERENNIAL CLIMBING VINE



ARRANGEMENT

- » Alternate.

LEAVES

- » Three broad leaflets per leaf, each 7-25 cm long.

FLOWERS/SEEDS

- » Flowers are purple, grow in long hanging clusters, and are highly fragrant.
- » Brown flattened seed pods are 5-10 cm long and grow in clusters.

BUDS/STEM

- » Young stems are yellow-green.
- » Mature, dark brown, and woody stems with white pits in the bark can reach up to 10 cm in diameter and 10-30 m in length.

HABITAT

- » Preferred habitats are sunny and include woodland edges, open woodlands, old fields, meadows, roadsides, and disturbed areas.
- » Also known as “the vine that ate the south.”

LOOKALIKE SPECIES

- » Resembles the native species hog-peanut (*Amphicarpea bracteata*), but hog-peanut only grows to 1.5 m and has paler violet or white flowers.
- » Kudzu may also be mistaken for riverbank grape (*Vitis riparia*), a native species that is able to climb trees but has shredded bark and coarsely toothed leaves with no leaflets.





Trees and Shrubs

AUTUMN OLIVE

Elaeagnus umbellata

PLANT TYPE: SHRUB



ARRANGEMENT

- » Alternate.

LEAVES

- » Elliptical with a slightly wavy margin lacking teeth, and distinguished from other similar shrubs by the silvery scales found on the lower leaf surface.

BARK

- » As shrub matures, the bark becomes light grey to grey-brown.

FLOWERS/SEEDS

- » Clusters of bell-shaped, cream to pale yellow flowers, which bloom in early spring, followed by pink to red berries dotted with scales.

BUDS/STEM

- » Young twigs are silvery or golden brown, speckled, and often with thorns 3-5 cm long.

HABITAT

- » Moderately shade tolerant and tolerant of a variety of soil types.
- » Typically found along woodland edges, open woodlands, fields, riparian areas, roadsides, and disturbed areas.

LOOKALIKE SPECIES

- » May be mistaken with one of many native willow (*Salix* spp.) species.

BLACK LOCUST

Robinia pseudoacacia

PLANT TYPE: TREE



ARRANGEMENT

- » Alternate.

LEAVES

- » Pinnately (odd) compound leaflets with 7-21 oval smooth-edged leaflets (terminal leaflet present). Leaflets are 30-50 mm long on a stalk that is 20-30 cm long, giving it a fern-like appearance.

BARK

- » Seedlings and young sprouts have paired 1.3 cm long stipular spines (resembling stubby thorns) at the base of their leaves.

FLOWERS/SEEDS

- » Smooth, flat, and dark red-brown seed pods (key identification feature) are 7-12 cm long. Pods form in fall and persist through winter. Fragrant clusters of 10-25 pea-like white flowers.

BUDS/STEM

- » Smooth bark; brown to green in young trees, tan to grey-brown, deeply furrowed ridges in older trees, and orange inner bark. Often form colonies with many suckers at margins.

HABITAT

- » Range of soil types including very poor, dry soils, but not those with a high water table. Generally intolerant of shade, thriving in areas such as meadows, woodlands, and riparian areas.

LOOKALIKE SPECIES

- » Similar looking to honey locust (*Gleditsia triacanthos*), which is native to Ontario.

CHINESE PRIVET

Ligustrum sinense Lour.

PLANT TYPE: SHRUB/SMALL TREE



ARRANGEMENT

- » Opposite.

LEAVES

- » Oblong 2.5-6 cm long and 0.5-1.5 cm wide. Pairs arranged approximately 2.5 cm apart along the stem.
- » Hairs occur along the midvein and sometimes on branch veins of the lower surfaces.

FLOWERS/SEEDS

- » Panicles of white to cream flowers bloom in spring (April to June).
- » Fleshy-blue fruits develop later; approximately 0.5 cm in diameter and each containing a hard seed.

BUDS/STEM

- » Produces suckers. When immature, twigs are densely hairy.
- » Tan-coloured lenticels are also present on the twig's surface.

HABITAT

- » Found in full shade to full sun, and damp or drought conditions.
- » Often found in full fields, fencerows, meadows, roadsides, woodlands, and riparian areas.

EUROPEAN & GLOSSY BUCKTHORN

Rhamnus cathartica & *Frangula alnus*

PLANT TYPE: SHRUB/SMALL TREE



ARRANGEMENT

- » European buckthorn are sub-opposite (almost opposite). Glossy buckthorn are alternate.

LEAVES

- » The European buckthorn leaf is egg-shaped, the edge of the leaf is “pebbled” (small rounded teeth). Veins converging toward leaf top. The glossy buckthorn leaf is more slender (teardrop-shaped) and smooth margined.

BARK

- » Smooth, young bark with prominent raised patches or lenticels; rough texture and peeling bark when mature. Removing outer bark will reveal orange heartwood.

FLOWERS/SEEDS

- » Flowers are green-yellowish, small, and inconspicuous. Green berries becoming purplish/black in late summer, berry < 1 cm in diameter.

BUDS/STEM

- » European buckthorn has thorn-like tip on many twigs. Glossy buckthorn buds have no bud scales and lack thorny tips on twigs.

HABITAT

- » Various: forest, thickets, and meadows, with dry to moist soils.

LOOKALIKE SPECIES

- » Native dogwoods lack the thorny “tip” and are truly opposite in their arrangement of twigs, and only alternate-leaved pagoda dogwood (*Cornus alternifolia*) have alternate branching.

EUROPEAN (OR BLACK) ALDER

Alnus glutinosa

PLANT TYPE: SHRUB/SMALL TREE



ARRANGEMENT

- » Alternate.

LEAVES

- » Oblong-shaped leaf with blunt tip, slightly wedge-shaped base, and wavy serrated margin.
- » Glossy dark-green upper surface and paler underside with rusty-brown hairs.

BARK

- » Greyish dark-brown with obvious, silver lenticels.

FLOWERS/SEEDS

- » Pine cone type fruit on European alder is large (about 2 cm) and on a long stalk (> 1 cm).

BUDS/STEM

- » Buds are light and bulb-shaped.

HABITAT

- » Moist and wet soils, often establishing in riparian areas.

LOOKALIKE SPECIES

- » Speckled alder (*Alnus incana* spp. *rugosa*) leaves are wedge-shaped and come to a point. Seed cone is short stalked (stems are $\leq$ 50 mm). The speckled alder is a multi-stemmed tall shrub, while European alder grows more like a tree from a single stem.

JAPANESE BARBERRY

Berberis thunbergii

PLANT TYPE: SHRUB



ARRANGEMENT

- » Alternate.

LEAVES

- » Smooth-edged and ovate; clustered at the branch.
- » Often one of the first to leaf-out in spring.

BARK

- » Smooth, young bark with prominent raised patches or lenticels; rough texture and peeling bark when mature.

FLOWERS/SEEDS

- » Yellow and bloom in May. Fruits are bright red, and found singly or in clusters attached by a long slender stalk.
- » Fruit mature in mid-summer and persist through the winter.

BUDS/STEM

- » Multi-stemmed with additional stems arising from rhizomes.
- » Stems have spines.
- » Young stems are reddish; older stems are grey.

HABITAT

- » Prefers partial to full sun, intolerant of drought or prolonged wet conditions.

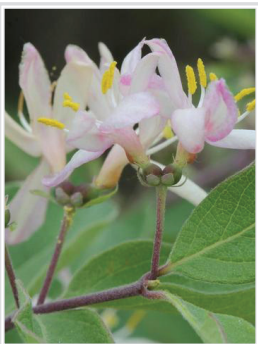
LOOKALIKE SPECIES

- » Native dogwoods lack the thorny “tip” and are truly opposite in their arrangement of twigs, and only alternate-leaved pagoda dogwood (*Cornus alternifolia*) have alternate branching.

NON-NATIVE BUSH HONEYSUCKLES

Lonicera spp.

PLANT TYPE: SHRUB



ARRANGEMENT

- » Opposite.

LEAVES

- » All invasive non-native bush honeysuckles have leaves with smooth margins; leaf can be hairy or smooth.

BARK

- » Generally papery.

FLOWERS/SEEDS

- » Showy flowers (various colours: white, pink, yellow, or orange)
- » Fruit typically two bright red berries fused together.

BUDS/STEM

- » Brittle stems; growth form tends to be messy and tangled, reaching heights 1.5-4 m tall. Older stems have hollow piths.

HABITAT

- » Various; dry to fresh soils in forest and successional areas.

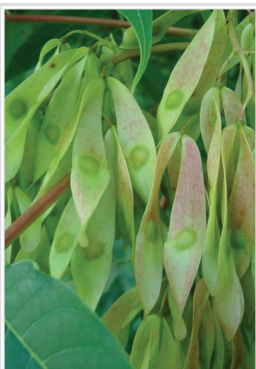
LOOKALIKE SPECIES

- » Ontario native honeysuckles: bush honeysuckle (*Diervilla lonicera*) is < 1 m in height, fly honeysuckle (*L. canadensis*) is < 1.5 m in height, Glaucous honeysuckle (*L. dioica*) and hairy (*L. hirsuta*) honeysuckle are both vines.

TREE-OF-HEAVEN

Ailanthus altissima

PLANT TYPE: TREE



ARRANGEMENT

- » Alternate.

LEAVES

- » Pinnately compound with 11-41 leaflets on a central stalk that are 25-75 cm long.
- » Leaflets are 5-15 cm, pointed, and widest at the base. A basal lobe is present with a water gland underneath.
- » Will omit an unpleasant odor when bruised.

BARK

- » Thin, firm, and greenish-grey with irregular pale vertical lines with age.

FLOWERS/SEEDS

- » Small, yellowish-green flowers in large clusters at tips of shoots. Seeds contained in a reddish or yellowish-brown long twisted wing.

BUDS/STEM

- » Rounded, small, brownish, and hairy with 2-4 scales; no terminal bud present.

HABITAT

- » Tolerant of a range of conditions from partial shade to full sun, however, intolerant of full shade.
- » Found along woodland edges, old fields, and roadsides.

LOOKALIKE SPECIES

- » Sumac species (*Rhus* spp.).

GLOSSARY OF PLANT TERMS

Basal

leaves attached to stem in groups of three or more at the same level, generally with symmetrical orientation.

Biennial

having a life cycle (from seed to maturity to seed) of 2 years.

Climbing vine

vines which climb using tendrils or suckers.

Forest succession

the process of change in the species structure of an ecological community over time.

Herptile

a reptile or amphibian.

Lenticel

a raised, cork-like marking or spot on young bark.

Ligule

found at the inner base of the leaf, between where the leaf attaches to the main stem and the stem itself. Commonly forms a translucent membrane or a fringe of hairs.

Margin

the boundary area extending along the edge of the leaf.

Panicle

a loose branching cluster of flowers.

Perennial

growing for 3 or more years, usually flowering and producing fruit each year.

Pith

the soft, spongy tissue at the centre of some stems and branches.

Rhizome

a horizontal underground stem, distinguished from a root by the presence of nodes, buds and/or scale-like leaves.

Riparian

adjacent to a river or stream, including shores and floodplains.

Stamen

the pollen-bearing organ of a flower.

Stipule

a small, leaf-like growth at the base of a leafstalk.

Suckers

an adventitious shoot arising from a root.

Senescence

the process of aging of biological organisms, signifying a stop of cell division. Leaf senescence in winter deciduous species signals the transition from the active to the dormant stage.

Twining vine

a climbing plant that climbs by its shoots growing in a helix.

PLANT RECOGNITION TERMS



entire



*toothed/
serrated*



compound



lobed



opposite



*lance
shaped*



*heart
shaped*



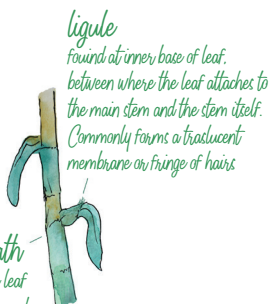
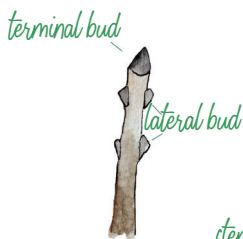
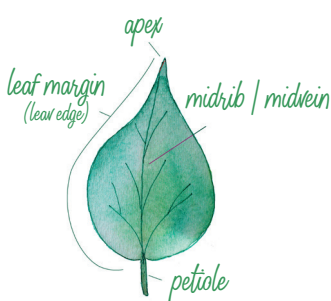
*tear drop
shaped*



egg shaped



alternate



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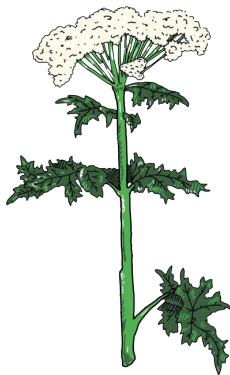


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European or Black Alder

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Japanese Barberry

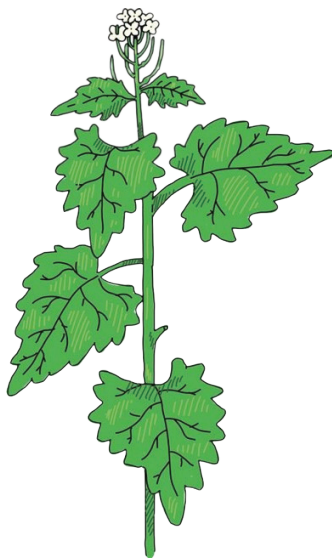
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