



Bruce Trail
CONSERVANCY

Species of Significance on the Bruce Trail

May 9, 2026



MISSION

**Preserving a ribbon of wilderness,
for everyone, forever.**

VISION

The Bruce Trail secured within a permanently protected natural corridor along the Niagara Escarpment.

VALUES

Commitment | Integrity | Stewardship | Collaboration | Respect

Overview:

1. Invasive Species Basics
2. Invasive Species & the Bruce Trail
3. Important Invasives
 - The Main Offenders
 - Health Hazards
 - Emerging Invaders
4. Species at Risk
5. Reporting & Resources

What is an Invasive Species?

Native: A species that has existed in an area for a long time period (thousands of years) and has evolved in the presence of the local environment and in tandem with other native species

Non-native: A species that has been introduced to an area outside of its native range, often by humans (either intentionally or by accident)

Invasive: A non-native species whose introduction does or is likely to cause economic or environmental harm or harm to human health.





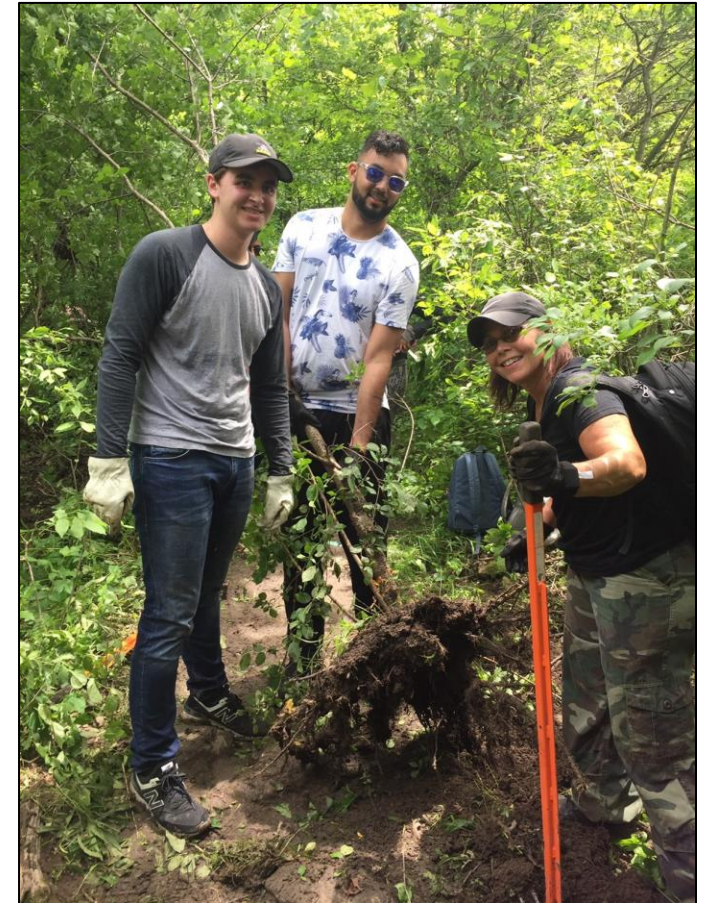
What makes a species invasive?

- Thrives in disturbed ecosystems
- Can outcompete native species for food and habitat
- Few predators in introduced range
- High reproductive rate
- Adaptable or generalist life strategy



Invasive Species and the BTC

- Invasive species are one of the top threats to biodiversity
- Managing invasive species is part of the BTC's work to conserve and steward our ribbon of wilderness



BTC Invasive Species Priority Areas

1. Health & safety of trail users
2. Rare species or community types
3. Areas with high native biodiversity, natural character, ANSIs, ESAs, PSWs
4. Areas along trails & streams – pathways for spread
5. Areas not close to a significant source population

Property Name	Priority for Invasive Species Removal	Progress/Completed?	Comments
McCloskey (WMH-1of3)	Low		See Hosking
Niagara-On-The-Lake Easement	High	Volunteers & BTC hand-pulled/out & sprayed buckthorn on west side of the property just north of the trail in November 2021; Volunteers hand-pulled garlic mustard in spring 2022	The highest priority. Garlic Mustard is due to its unique disturbed eastern Rose are also found throughout the area which
Pennachetti	Low		Overall this property has Tartarian Honeys
Ricenburg	Low	Volunteers hand-pulled garlic mustard and greater celandine in 2022. Garlic mustard crib installed spring 2022.	The highest priority. inundated with in dumping yard wa Many garden pla
Rossetto	Low		The highest priority. inundated with in dumping yard wa Many garden pla
Sigfrid	Medium		The highest priority. presence of a re prevent the spre population size of property. It would



General Management Considerations for Trail Captains:

- Trail Maintenance activities can help or hurt depending on species & timing
- Trimming when seeds are ripe may lead to further spread
- Trimming herbaceous plants before seed set can help prevent spread
- Trail Captains are eyes on the ground and can help track invasive species

Reminder - Brush Your Boots!

When travelling to/from an area with a lot of invasive species, try to:

- Brush off your boots
- Wash your clothes/remove seeds
- Clean other tools/equipment that may be transporting seeds/plant material





THE KEY PLAYERS

- Common in the region
- Management possible at the local level but the species is likely here to stay
- Focus on minimizing spread & impact
- Tracking is good but reporting is not urgent





Invasive shrubs & trees

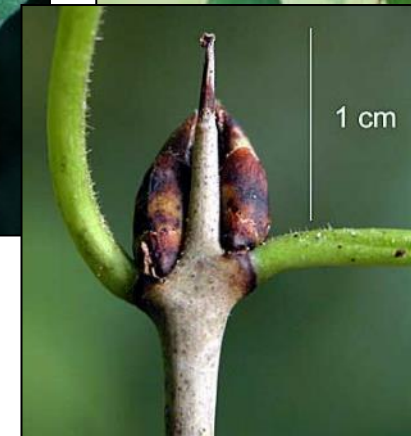
- Common invaders:
 - Buckthorn – common & glossy
 - Honeysuckle – several species
 - Multiflora rose
 - Privet, barberry, Norway maple
- Can form dense thickets that reduce groundcover and impede forest regeneration
- Small individuals can be pulled by hand
- Large individuals can be cut but must be treated to prevent re-sprouting





Common Buckthorn (*Rhamnus cathartica*)

- Shrub or small tree
- Finely toothed, glossy, “Egg-shaped” leaves with veins curving towards tip
- Opposite to Sub-opposite branching pattern
- Short thorn in-between buds at branch tips



Common Buckthorn (*Rhamnus cathartica*)

- Clusters of small 4-petaled green flowers in spring – becoming purple-black berries in fall
- Bark is shiny when young, becoming rough with age; has orange inner bark
- Glossy buckthorn is similar but leaf veins do not curve & edges are not toothed



Honeysuckles (*Lonicera spp.*)

- Multi-stemmed shrub with light brown bark
- Leaves in pairs with smooth edges
- Showy white or pink flowers
- Bright red/orange berries in multiples of 2
- The invasive species have hollow stems (native species have white 'pith' filling the stem)



Invasive herbaceous plants

- Common invaders:
 - Garlic mustard
 - Dog strangling vine
 - Periwinkle, Goutweed
- Can outcompete native wildflowers & reduce diversity of forest ground cover





Garlic Mustard (*Alliaria petiolata*)

- 1st year - kidney shaped leaves with scalloped edges
- 2nd year - triangular sharply toothed leaves and white flowers with 4 petals clustered at the top of each stem
- Grows up to 1 m tall with seed pods that reach upwards and contain up to 16 seeds
- New leaves emit garlic smell when crushed, fades as the plant matures.





Garlic Mustard Control & Considerations

- Trim/mow right before or during flowering – repeat cutting likely required 2 - 4 weeks later
- Try to avoid using mechanical trimmer/mower after seed pods have dried (spreads seeds)
- Clean equipment & boots afterwards if you are cutting when the seeds are ripe





Dog Strangling Vine (*Vincetoxicum rossicum*)

- Milkweed family – confuses monarchs!
- Vine up to 2m long
- Opposite leaves with rounded bases and smooth edges tapering to sharp point
- Clusters of small star-shaped pink to red-brown 5 petaled flowers
- Thin pointy seed pods develop in late summer that dry and reveal fluffy white seeds





Dog Strangling Vine Control

- Mowing or cutting of seed heads BEFORE they ripen helps reduce spread
- Try to avoid trimming once seed heads ripen (dry out and start releasing fluffy seed) - likely to cause further spread
- Clean equipment if you do have to trim during seed dispersal





Periwinkle & Goutweed – Horticultural escapes!

- Spreading groundcovers, typically escaped from gardens
- Can spread by root/stem fragments
- Remove any roots & stems caught in equipment before moving to another location





Common Reed (*Phragmites australis ssp. australis*)

- Common in wetlands, ditches, roadsides
- Tall bamboo-like plant (up to 5m)
- Large, feather-like seed heads
- Stems stay standing through winter
- Can spread by root/stem fragment or by seed
- Avoid cutting when seed heads are ripe and clean equipment





Health Hazards - The Carrot Family – Giant Hogweed, Wild Parsnip

- Tall plants (hogweed grows up to 5m)
- Umbrella-shaped clusters of flowers
- Most species in this family have white flowers, but wild parsnip flowers are yellow
- Finely divided leaves
- PHYTOPHOTOTOXIC – Safety Hazard!
- Do not touch or attempt to remove - report immediately to BTC
- If you think you've touched it, avoid sun exposure and wash with soap and water ASAP - seek medical assistance if necessary





The Carrot Family – Giant Hogweed, Wild Parsnip





Emerging Invasive Species - Report Immediately!

Japanese stiltgrass



Oak wilt



Hemlock woolly adelgid



Spotted lanternfly





Japanese stiltgrass

- Found in Niagara section
- Small bamboo-like grass that sprawls over the ground to form a mat
- Leaves are ~7cm long and have smooth edges and a **silvery midvein**
- Turns purple-brown in the fall
- 1-3 greenish flower 'spikes'
- Small patches can be hand pulled/dug



Oak Wilt

- Found in Niagara & Springwater
- Fungal disease spread by beetles through wounds
- Can kill mature trees, especially red oaks, in weeks
- Symptoms:
 - Dull green, brown or yellow leaves
 - Premature leaf discoloration beginning on tips and moving inward
 - Early and sudden leaf drop beginning at the crown of the tree
 - Cracks in the trunk of dead trees
 - White, grey or black fungus under bark surface of dead trees
- **DO NOT PRUNE OAKS BETWEEN APRIL AND NOVEMBER**





Hemlock Woolly Adelgid

- Tiny sap-sucking insect
- Feeds on and kills Hemlock (*Tsuga canadensis*) in as little as 4 years
- Most easily detected by cottony white egg sacs at the base of needles
- Has been found in Niagara and Iroquoia
- If suspected, clean clothes & gear before travelling elsewhere



Spotted Lanternfly

- Likely to spread into the Niagara region
- Feeds on many host plants, including invasive tree-of-heaven, grape and native trees
- Likely to weaken (but perhaps not kill) trees via feeding damage and fungal growth encouraged by honeydew



SPECIES AT RISK

- Important to recognize as they cannot be cut/removed
- Helpful to track/report
- Trail considerations are species-specific
- For wildlife, consider breeding habitat and breeding windows when planning major trail work



Butternut (Endangered)

- Similar to black walnut
- Oval fruits
- Large terminal leaflets
- Bark with flattened ridges
- Leaf scar straight across the top & fuzzy



Butternut fruit



Butternut leaf



Butternut (Endangered)

- It is illegal to injure an endangered species - do not prune
- Trail is often re-routed to avoid young trees to minimize risk of cutting
- Major trail work near root zone may require a permit
- Dead trees must be assessed before removal





Black Ash (Endangered)

- Opposite, compound leaves
- Tuft of hair at the base of each leaflet
- Long terminal bud & space between buds
- Corky bark
- Found in swamps & wet areas





Black Ash (Endangered)

- It is illegal to injure trees taller than 1.37m and >8cm DBH that appear healthy
- Trail may be re-routed to avoid young trees to minimize risk of cutting
- Major trail work near root zone may require a permit





American Ginseng (Endangered)

- 5 stalked, finely toothed leaflets arranged in a circular pattern (bottom 2 leaflets are smaller)
- Cluster of greenish white flowers
- Fruits are a cluster of bright red berries
- Found in deciduous forests/woodlands



Below: American ginseng, Above: Virginia creeper



American Ginseng (Endangered)

- At risk due to poaching
- If found near the trail, a re-route is necessary so it is not within viewing distance (report to BTC staff)
- DO NOT SHARE locations publicly (iNaturalist will not show observations in Ontario)



Reporting & Tracking:

- Non-urgent & tracking: iNaturalist
 - Download app or go to website & create a free account
 - Join the BTC project
 - Start uploading observations!
 - Detailed instructions available at brucetrail.org
- Urgent: Email BTC Staff
 - Mara McHaffie: mmchaffie@brucetrail.org

Resources:

- Talk to the Land Stewardship Director or BTC staff if you have questions or need help!
- Boot brushes & pull parties for invasive species
- ontarioinvasiveplants.ca for great resources on ID & management
- iNaturalist for ID
- We will share these slides

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brucetrail.org

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