THE DISPOSAL OF INVASIVE *plants* IN NORTHERN ONTARIO REGIONS

NORTHERN ONTARIO'S MOST WANTED

Ontario's most volatile invasive plants are wreaking havoc on the province's natives and their respective habitats. Many provincially funded and non-profit organizations are working together to combat the problem from the soil-up, and so are concerned citizens and local naturalists who want to get involved. To better assist the public with information on how to dispose of these organic materials, Trent Community Research Centre, in partnership with the Ontario Invasive Plant Council, have sponsored the production of print media that consolidates existing data about treatment and disposal of Invasive Plant Materials.

This informative pamphlet has been designed with your community in mind, and contains important information about how you can help prevent the spread of your municipality's most invasive plant species through the most appropriate disposal/removal channels. As each plant requires specialized treatment to ensure that the potential to spread stops when the roots are pulled, and because every municipality practices unique waste-management protocol, its important to ensure our collective efforts to mitigate invasive species aren't in vain. The Early Detection & Rapid Response Network of Ontario thanks you for your help!

JAPANESE KNOTWEED

IDENTIFICATION

Forms dense vegetative thickets that resemble bamboo along wet areas.

- Thick, hollow greenish purple stems
- Oval leaves that are wider at stem
- Spring flowers are tiny, and grow in whitish green clusters
- Grows best in full sunlight and open areas, but can tolerate full shade in moist soil
- Takes advatage of disturbed areas like roadsides, railbeds, and woodland edges
- Survives in heavily polluted areas

REMOVAL

- Continual monthly mowing
- Dig new infestations
- Excavate large populations

DISPOSAL

- Place in plastic bags and leave in sunlight for a week

www.cloca.com

DO NOT COMPOST!

GARLIC MUSTARD

IDENTIFICATION

Year 1: 2-12 cm diameter leaves, with 3-4 leaves per rosette; Crushed leaves smell strongly of garlic; low growing, with a very slender, white 'S' shaped taproot
Year 2: Plants are much taller and can reach 1m in height; leaves serrated, long and triangular; tiny white flowers with 4 petals; blossom in early May; produce 10-20 tiny black seeds in 6cm seed pods

DO NOT COMPOST!

REMOVAL

- Mechanical: pulling, basal cutting and mowing
- Herbicide application
- Heat application has proven useful- consult municipality on open fire and perscribed burning by laws

DISPOSAL

- Place in plastic bags and leave in sunlight for a week

HIMALAYAN BALSAM

IDENTIFICATION

- Plants grow in full sun or partial shade
- Seeds are produced inside a green capsule that explodes from the slightest touch
- Smooth hollow stem and purple/reddish in colour; 5 cm in diameter
- Leaves are usually in groups of 3 and have sharply toothed edges
- The purple, pink or white flowers with 5 petals resemble a policeman's helmet and grow 5-10 flowers on each stem, blooming from July to September

DISPOSAL

Bag and take to waste management facility. Large amounts can be dried on tarps and left to decompose on site

REMOVAL

- Hand-pulling before flowering, cutting before seed production and the use of herbicide on larger populations

Produced in Partnership with Community Based Resource Management Program at Trent University, Trent Community Research Centre and the Ontario Invasive Plant Council. Carolyn Holmes, Kristin Phasey, Carly Spitzer and Josie Wilman. March 2016. Funding made available by the Ontario Trillium Foundation. All photographs provided by the Ontario Invasive Plant Coucil unless otherwise specified.

Ontario Trillium Foundation / Fondation Trillium de l'Ontario

ADDITIONAL *Species* OF CONCERN IN ONTARIO

EUROPEAN BUCKTHORN

IDENTIFICATION

- Tall shrub with thick woody stems and gray bark
- Invasive leaves are oval, shiny and sharp with strongly curved veins and sometimes fine serrations
- Flowers appear in early June and are 6mm long
- The fruit is red/brown to black

REMOVAL

- Cut first, girdle then apply herbicides (must do all three)
- Must be done consecutively for at least 3-5 years

DISPOSAL

- Pile the cut stems/ roots and branches and burn them before they are dry removing all berries.
- Remove all fruit and place into waste stream. Chip and compost.

DOG STRANGLING VINE

DISPOSAL

- Place in black plastic bags, seal and leave to cook in the sun
- Take to waste management facility
- Cook seeds and plants to 55°C for 15 days or 100°C for 10-20 minutes.
- Soak seeds in alcohol/gas ***only recommended or very small quantities**

IDENTIFICATION

- 1 to 2 m tall and wraps around trees
- Leaves are oval with a pointed tip
- Pink/maroon flowers with 5 petals and grow in clusters of 5 to 20; bloom in late June and into July
- Seed pods are bean-shaped

REMOVAL

- Digging: ensure getting all roots
- Clipping/Mowing: after flowering, before seed production
- Tarping: used in high sun areas

HONEYSUCKLE

REMOVAL

Dig out the roots in the fall and cut all regrowth in the spring
- Digging in conjunction with cutting over multiple years will eradicate plant

DISPOSAL

- Remove all fruit (place into waste stream) and chip plant which can be sent to municipal compost sites
- Air dry roots and branches and then consult munipality on burn/open fire policies in your area

PERIWINKLE

Photo By J. Leekie, www.bcinvasives.ca

REMOVAL

-Rake or pull plants by hand
-Tarp the area after pulling or raking to kill the plants

DISPOSAL

Disposal Methods:
- Place plants in black plastic bag and leave in the sun to die
- Put in the garbage

DO NOT COMPOST!

PHRAGMITES

REMOVAL

- Cut down plant as close to the bottom as possible. Repeat. Then dry and burn.
- Seed heads- remove them and put in bags to dry out for a couples weeks
- Herbicides- Alternate bewteen Imazapyr and glyphosate. Spray between spring and late fall

DISPOSAL

- Place plant material in thick plastic bags and place in sun to dry for 3-4 days
- Burn- Consult experts to plan safe burns and municipality policies

IDENTIFICATION

-Tall, fringed grass often seen in ditches. Prefers standing water and thrives in disturbed areas

The battle against invasive species is likely to continue to present challenges to municipalities. Ontario's native ecosystems are in danger of being out-competed, and without community awareness and efforts, important biodiversity may be lost. It is important that any efforts made towards mitigating invasives from our province are done through the use of educated solutions and collaborative efforts between the province, the municipalities and the members of our communities. For more information on how you can protect your property and neighborhood, or for any additional questions or concerns, please feel free to to access the following online resources:

Invasive Species Centre — www.invasivespeciescentre.ca

Ontario Invasive Plant Council — www.ontarioinvasiveplants.ca

EDRR EARLY DETECTION & RAPID RESPONSE NETWORK ONTARIO — www.edrrontario.ca

www.ontario.ca/ministry-natural-resources-and-forestry