

Invasive Honeysuckles

(*Lonicera* spp.)

Best Management Practice Technical Document for Land Managers

March 2017

- DISCLAIMER -

The intent of this document is to relay specific information relating to invasive plant control practices that have been advised by leading professionals across Ontario. This document contains the most up-to-date research and knowledge available at the time of publication and reflects current provincial and federal legislation regarding pesticide usage. It is subject to change as legislation is updated or new research findings emerge and is not intended to provide legal advice. The timing suggested will differ throughout Ontario and should be tailored to your region.

Use this document after you have performed monitoring, assessed your priority areas and made sure that the control options listed in this document are allowed and appropriate on your site. For more information, please refer to the Ontario Invasive Plant Council's Best Management Practices document for invasive honeysuckles.

Strategy and Cautions

- Remove the outlying populations (isolated plants or satellite populations), the young, small plants and the most prolific seed producers first.
- Remove honeysuckles before fruit develops, which is typically at 3-5 years old.
- Small plants (≤ 5 cm in diameter) can be removed manually.
- Large, older shrubs (> 5 cm in diameter) can be controlled using a systemic herbicide.

Caution: Manual control methods which do not result in total removal of the root will result in vigorous re-sprouting. These methods should only be used in combination with an herbicide application.

Management of Small Shrubs (≤ 5 cm Diameter)

Because the root systems of invasive honeysuckles are shallow, even some large plants can be manually pulled. Small plants can be hand pulled any time of the year. For larger shrubs, cut stems down first and then use a mechanical lever, such as a weed wrench, to pry up the root systems. Use a digging tool for larger plants or in harder, less pliable soil. Manual control is easiest after a rain when the soil is soft and pliable. If possible, cut off berried branches in the summer, before the berries get too ripe and fall off, then come back in the fall and pull out the cut stems. Any root that remains has the potential to re-sprout but fibrous root removal is unnecessary.

Management of Large Shrubs (> 5 cm Diameter)

Application of a glyphosate-based or triclopyr-based herbicide is most effective for managing large plants. The stump cut method is preferable but a basal bark application can also be effective. Large shrubs (> 5 cm diameter) can be cut and the stumps treated with either glyphosate (must be applied immediately following cut) or triclopyr mixed with bark oil. This is most effective in spring or early summer but can be used into the fall. These plants can also be sprayed with triclopyr using a basal bark application. Pesticide drift may prohibit pesticide use near water.

Legal Considerations and Regulatory Tools for Chemical Control

Herbicides must be applied in accordance with the federal *Pest Control Products Act*, the Ontario *Pesticides Act*, Ontario Regulation 63/09 and in accordance with all label directions. Ensure you have the most current label and are aware of any re-evaluation decisions. The easiest way to find a chemical label is by using the PMRA's label search tool, which can be found by searching "PMRA label search" in any major search engine. Only licensed pesticide applicators are legally allowed to apply restricted pesticides in Ontario.



Ontario's *Cosmetic Pesticides Ban Act* prohibits the non-essential use of prescribed pesticides (Class 9) on land. Exceptions exist to allow the use of these herbicides for control of plants, such as invasive honeysuckles, that are detrimental to the environment, economy, agriculture and/or human health. To qualify for these exceptions specific criteria must be met and appropriate ministry approval is required.

Table 1: Exceptions to the Ontario *Cosmetic Pesticides Ban Act* which may be applicable for control of invasive honeysuckles.

Public health or safety:	This plant can cause sightline issues along road sides.
Forestry:	Honeysuckles outcompete native vegetation and take over the understory of forest and woodland habitats. This exception therefore applies to treed areas greater than 1 hectare.
Natural resource:	Honeysuckles reduce the quality of wildlife habitat and reduce biodiversity.

For more information on these exceptions and applicable procedures, please refer to the Ontario Invasive Plant Council's Best Management Practices document for invasive honeysuckles.

Herbicide Selection and Application

The application and herbicide selection for invasive honeysuckles depends on species, site conditions, time of year and the type of restoration plan desired but, in general, professionals consulted for this document recommend using glyphosate-based or triclopyr-based herbicides.

Table 2: Chemical control techniques recommended by experts for invasive honeysuckles.

Chemical Control Method	Chemical and Concentration	Timing and Application	Details
CUT STUMP	Glyphosate (95% solution*).	Spring, summer or fall. Use a paint brush or squirt bottle to apply.	Apply immediately following cut.
	Triclopyr (20% solution**) mixed with bark oil.	All year. Follow herbicide label instructions regarding temperatures at which the herbicide can be applied.	Use a paint brush or squirt bottle to apply. Can be applied to stumps days to weeks after cutting.
BASAL BARK	Triclopyr (20% solution**) mixed with bark oil.	All year. Follow herbicide label instructions regarding temperatures at which the herbicide can be applied.	Apply chemical all the way around the stem in a 30 cm high strip.

*Based on a product containing 540 g/l of chemical. **Based on a product containing 755 g/l of chemical. Please read the label in full before use to ensure that these recommendations meet the requirements of the herbicide you have selected.

Disposal

Do not compost viable plant material (berries and roots) at home or send to landfill. If your municipality has a high-heat compost program, plants can be sent there. Alternatively, solarize viable plant material by placing it in sealed black plastic bags and leaving them in direct sunlight for 1-3 weeks. Alternatively, place in yard waste bags, cover with a dark-coloured tarp and leave in the sun for 1-3 weeks. When seedlings or young shrubs are pulled, they should be disposed of in a manner that will ensure that their roots will dry out completely. When feasible, it is advised to remove limbs containing dense clusters of berries. The remaining biomass can be sent to municipal composting facilities while the solarized seed-containing berries are best disposed of at the landfill. Branches and stems (other than viable seeds and roots) that has been cut can be burnt as firewood, composted, chipped or sent to municipal composting facilities.

Rehabilitation and Monitoring

Control is much more successful when heavily infested areas, often with seed-saturated soil seedbanks, are re-planted with native tree and plant species that are able to out-compete new growth. See the Ontario Invasive Plant Council's Best Management Practices document for more details. Follow-up monitoring and removal of new growth is crucial for successful control. Monitoring is crucial for at least the following 5 years.