MANAGEMENT OF

INVASIVE PLANTS IN WISCONSIN

A3924-10

Japanese honeysuckle
(Lonicera japonica)

Brendon Panke and Mark Renz

Invasive plants can thrive and aggressively spread beyond their natural range, disrupting ecosystems. The *Management of Invasive Plants in Wisconsin* series explains how to identify invasive plants and provides common management options. Management methods recommend specific timings for treatment, as well as expected effectiveness. For more information, go to: fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin.

Japanese honeysuckle is a wood perennial vine that forms a mat of vegetation and climbs into tree canopies. Vines are typically 6–10′ long, but can grow up to 30′. Young stems are brown to red and have soft, fine hairs, while older stems are woody and hollow with bark that peels in long strips.

Legal classification in Wisconsin: Prohibited

Leaves: Simple, opposite, oblong to oval, 1.5–3″ long, sometimes lobed, rounded base, tips vary from round to blunt-point and may be covered with fine, soft hairs. Leaves persist on vine until mid-winter.

Flowers: Late spring to early summer. Tubular and very fragrant, with petals fused to form two lips and stamens protruding beyond petals. White to pink, turning yellow with age, and occurring in pairs where the leaf attaches to the stem (leaf axil).

Fruits and seeds: Small, round berries are 0.25″ in diameter and display singly in leaf axil. Fruits are purple-black when ripe and contain 2–3 seeds.

Roots: Produces underground rhizomes and long, above-ground stolons that develop roots where nodes contact soil.

Similar species: Native honeysuckle vines have red or orange berries, flowers at tips of stems, and leaves that are fused at the base around the stem (connate) below flowers. Leaves of non-flowering plants have hairless undersides, while Japanese honeysuckle does not.

Ecological threat:

- Invades disturbed sites, open woods, woodland edges, forest openings, floodplains, fields, roadsides, barrens, and fencerows. Prefers sunny locations, but tolerates most light levels. Sensitive to dry conditions. Severe winter temperatures may restrict its northward spread and low rainfall may limit westward spread.

UW Extension Cooperative Extension

NPM

Non-chemical control

Removal

Effectiveness in season: 90–100%
Season after treatment: 70–90%

Seedlings and small to medium honeysuckles can be controlled by pulling or digging plants as long as the rhizomes and rooted stolons are removed. Larger plants may necessitate removal of soil near the plant base to facilitate removal. If the vine has invaded a tree, remove only the below-ground tissue. If seeds are present when removal is taking place, avoid movement off-site unless material can be transported without spreading seed to other locations.

Mowing

Effectiveness in season: 50–70%
Season after treatment: < 50%

After initial removal, mowing resprouts can reduce the number and length of vegetative runners produced. However, mowing increases the density of honeysuckle stems and can cause the honeysuckle to enter a low, matted growth form; therefore it is not an effective strategy when used exclusively. Mowing is not recommended unless integrated with other methods.

Prescribed burning

Effectiveness in season: 50–70%
Season after treatment: < 50%

Spring burns can kill germinating seedlings and young plants. Fire can also suppress above-ground growth of established plants depending on fire intensity. After the fire, established plants will quickly resprout or reroot and reinvade areas; this management method is not recommended unless integrated with other techniques. A hand-held propane torch can be effective for treating seedlings. Caution must be taken when burning where the vine climbs into trees as honeysuckle could act as ladder fuel and carry fire into the crown of trees.

Chemical control

Foliar

Apply directly to individual plants or broadcast across an infested area. Broadcasted foliar applications are typically the most cost-effective treatment in dense infestations. Use lower rates on smaller plants and less dense populations and higher rates on larger plants and denser populations. Immediately after leaf and flower formation is the most effective application timing.

glyphosate*

Effectiveness in season: 70–90%
Season after treatment: 50–70%

Common name: Roundup

Rate:
broadcast: 2.0–3.7 lb a.e./A
spot: For a 3 lb a.e./gal product: 1.0–2.5% (0.03–0.06 lb a.e./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground as glyphosate is not selective. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury to plants.

imazapyr*

Effectiveness in season: 70–90%
Season after treatment: 70–90%

Common name: Arsenal

Rate:
broadcast: 32–48 fl oz/A (0.50–0.75 lb a.e./A)
spot: 0.5–1.5% (0.01–0.03 lb a.e./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground as imazapyr is not selective and can remain in the soil for several months to over a year depending on application rate. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury to plants.

metsulfuron*

Effectiveness in season: 70–90%
Season after treatment: 70–90%

Common name: Escort

Rate:
broadcast: 0.5–1.5 oz/A (0.3–0.9 oz a.i./A)
spot: 0.04 oz/gal (0.02 oz a.i./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Do not apply directly to water or to areas where surface water is present. Remains in the soil for months depending on application rate. Overspray or drift to desirable plants should be avoided as even minute quantities of the spray may cause severe injury to plants.

triclopyr + 2,4-D*

Effectiveness in season: 70–90%
Season after treatment: 50–70%

Common name: Crossbow

Rate: broadcast: 192 fl oz/A (triclopyr: 1.5 lb a.e./A + 2,4-D: 3 lb a.e./A)
spot: 1.0–1.5% (triclopyr: 0.01–0.015 lb a.e./gal + 2,4-D: 0.02–0.03 lb a.e./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury to plants.

***Active ingredient (a.i.)**

Cut stump

Cut a stem of a plant near the base and apply herbicide to the cut surface that remains rooted in the ground. Apply as soon as possible after cutting, but no later than one hour after cutting. Do not use this method if there is heavy sap flow or if snow covers the cut surface. Use lower rates on smaller plants and higher rates on larger plants.

glyphosate*

Effectiveness in season: 90–100%
Season after treatment: 50–70%

Common name: Roundup

Rate: For a 3 lb a.e./gal product: 18–25% (0.5–0.75 lb a.e./gal)

Timing: Apply any time of year.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

imazapyr*

Effectiveness in season: 90–100%
Season after treatment: 50–70%

Common name: Stalker

Rate: 5% in oil (0.1 lb a.e./gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

picloram + 2,4-D*

Effectiveness in season: 90–100%
Season after treatment: 50–70%

Common name: Pathway

Some products containing picloram are restricted-use in Wisconsin.

Rate: 100% (picloram: 3% + 2,4-D: 11.2%)

Timing: Apply any time of year.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Remains in the soil for more than one year, depending on application rate, and has the potential to contaminate surface runoff water during this timeframe. Maintenance of a vegetative buffer strip is recommended between the areas this product is applied and surface water features. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.

triclopyr*

Effectiveness in season: 90–100%
Season after treatment: 50–70%

Common name: Garlon

Rate: 20–30% in oil (0.8–1.2 lb a.e./gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr + 2,4-D*

Effectiveness in season: 90–100%
Season after treatment: 50–70%

Common name: Crossbow

Rate: 4% in oil (triclopyr: 0.04 lb a.e./gal + 2,4-D: 0.08 lb a.e./gal)

Timing: Apply any time of year.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

***Active ingredient (a.i.)**

Basal bark

Apply herbicide in a ring around the entire stem. Applications should be made at least 6" wide (6–18") to the base of a woody stem. Ideal for stems ≤ 6" in diameter. Use lower rates on smaller plants and higher rates on larger plants.

dicamba*

Effectiveness in season: 50–70%
Season after treatment: 70–90%

Common name: Banvel

Rate: 25–50% in oil and water (1–2 lb a.e./gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil) or both. Consult the label to determine the appropriate carrier.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Rates > 16oz/A (0.5 lb a.e./A) may cause stunting and discoloration of sensitive grasses, such as smooth brome.

imazapyr*

Effectiveness in season: 50–70%
Season after treatment: 70–90%

Common name: Stalker

Rate: 6.0–9.0% in oil (0.1–0.2 lb a.e./gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr*

Effectiveness in season: 50–70%
Season after treatment: 70–90%

Common name: Garlon

Rate: 20–30% in oil (0.8–1.2 lb a.e./ gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Herbicide information is based on label rates and reports by researchers and land managers. Products known to provide effective control or in common use are included. Those that do not provide sufficient control or lack information for effectiveness on target species have been omitted.

References to pesticide products in this publication are for your convenience and not an endorsement of one product instead of a similar product. You are responsible for using pesticides in accordance with the label directions. *Read the label before any application.*

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