

INVASIVE PLANTS  
IN WISCONSIN

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**I**nvasive 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](http://fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin).

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# Bush honeysuckles

## (*Lonicera* spp.)

**B**ush honeysuckles are dense, multi-stemmed shrubs, 6–12' tall. Older stems may have shaggy, peeling bark and are often hollow.

### Legal classification in Wisconsin:

- **Amur** honeysuckle (*Lonicera maackii*): Prohibited/restricted
- **Bell's** honeysuckle (*Lonicera x bella*): Restricted
- **Morrow's** honeysuckle (*Lonicera morrowii*): Restricted
- **Tartarian** honeysuckle (*Lonicera tatarica*): Restricted

**Leaves:** Opposite, simple, oval, and margins do not have teeth or lobes (entire). Leaves expand earlier in spring and remain on shrubs longer in fall than native bush species.

- **Amur:** Dark green, sharply pointed leaves with hairs along the underside veins.
- **Bell's:** Hybrid between the Tartarian and Morrow's. Shows characteristics of both.
- **Morrow's:** Covered in soft hairs.
- **Tartarian:** Smooth and hairless with bluish-green leaves.

**Flowers:** Middle to late spring. Fragrant, tubular flowers where leaf attaches to stem (axil).

- **Amur:** White, yellowing with age, two flowers per leaf axil.
- **Bell's:** Hybrid between the Tartarian and Morrow's. Shows characteristics of both.
- **Morrow's:** White, yellowing with age, two flowers per leaf axil.
- **Tartarian:** Pink to dark red.

**Fruits and seeds:** Red, orange, or yellow fruit containing many seeds. Found on plants late into the winter.

**Roots:** Shallow fibrous roots extending from a woody crown.

**Similar species:** Native *Lonicera* shrubs have shorter, more open growth forms and solid stems. Native *Diervilla* species have yellow flowers and grow in dry or rocky sites. Native species develop leaves 1–2 weeks later and leaves fall earlier in the fall.

### Ecological threat:

- Invades a broad range of plant communities; especially susceptible sites are sunny upland habitats like forest edges, roadsides, pastures, and old fields.
- Also invades fens, bogs, and lakeshores.
- Most natural communities are susceptible to invasion by one or more of the species; both disturbed and non-disturbed sites are susceptible.
- Common in urban areas.



## Non-chemical control      Chemical control

### Removal

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

Plants can be removed any time of the year as long as the entire root crown is removed. Small to medium honeysuckles can be pulled or dug by hand, while larger bushes will require using a leverage tool. Larger plants may necessitate removal of soil near the plant to facilitate removal. If fruiting, avoid moving off the site unless material can be transported without spreading fruit to other locations.

### Mowing

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

Immediately after leaf or flower formation is the most effective time to mow. Cut the main stem of the plant within 2" of the ground. This method induces sprouting and should be followed with mowing or herbicide application to resprouts later in the season. Mowing is most effective with small populations in shaded habitats. The number of seasons it will take for control using mowing exclusively is not known.

### Prescribed burning

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

Spring burns can kill germinating seedlings and can suppress above-ground growth of established plants, depending on fire intensity. After the fire, established plants will quickly resprout and reinvade areas. Burning in consecutive years will reduce honeysuckle cover and crown volume, but the number of years necessary for control is not known. A handheld propane torch can be effective for treating seedlings.

### 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 timing for control. If infestations are mixed with desirable vegetation, herbicide applications without soil activity in the early spring or late fall can reduce injury to desirable plants since honeysuckles leaf out earlier and drop leaves later than most desirable vegetation.

#### dicamba\*

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

**Common name:** Banvel

**Rate:**

**broadcast:** 16–32 fl oz/A (0.5–1.0 lb a.e./A)

**spot:** Equivalent to broadcast rates.

**Timing:** Apply to regrowth following mowing.

**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.

#### glyphosate\*

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

**Common name:** Roundup

**Rate:**

**broadcast:** 1.7–3.7 lb a.e./A

**spot:** For a 3 lb a.e./gal product: 1–4% (0.03–0.12 lb a.e./gal)

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

**Remarks:** Wick application is effective on small plants with 33–75% (1.5–3.4 lb a.e./gal).

**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.



\*Active ingredient (a.i.)

**imazapyr\***

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

**Common name:** Arsenal

**Rate:**

**broadcast:** 48–64 fl oz/A  
 (0.75–1 lb a.e./A)

**spot:** 0.5–2% (0.01–0.04 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 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.

**metsulfuron\***

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

**Common name:** Escort

**Rate:**

**broadcast:** 0.5–3 oz/A (0.3–1.8 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 since even minute quantities of the spray may cause severe injury to plants.

**picloram + 2,4-D\***

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

**Common name:** Grazon

Some products containing picloram are restricted-use in Wisconsin.

**Rate:**

**broadcast:** 48–64 fl oz/A (picloram: 0.2–0.25 lb a.e./A + 2,4-D: 0.75–1.0 lb a.e./A)

**spot:** 0.5–1% (picloram: 0.003–0.005 lb a.e./gal + 2,4-D: 0.01–0.02 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. 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 + 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: 3.0 lb a.e./A)

**spot:** 1–1.5% (triclopyr: 0.01–0.02 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, since 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 snow is covering the cut surface. Use lower rates on smaller plants and higher rates on larger plants.

### 2,4-D\*

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

**Common name:** Many

**Rate:**

For a 3.8 lb a.e./gal product: 2% (0.076 lb a.e./gal)

**Timing:** Apply any time of year.

**Caution:** Use aquatically labeled product if potential exists for solution to contact surface water. 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.

### glyphosate\*

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

**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: 90–100%**

**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\*

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

**Common name:** Tordon K

Some products containing picloram are restricted-use in Wisconsin.

**Rate:**

50–100% (1.0–2.0 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. 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 picloram 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: 90–100%**

**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.*

## 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. Do not use this method if there is heavy sap flow or if snow is covering the application area. Use lower rates on smaller plants and higher rates on larger plants.

### 2,4-D\*

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

**Common name:** Many

**Rate:**

For a 3.8 lb a.e./gal product: 2% (0.076 lb a.e./gal)

**Timing:** Apply any time of year.

**Caution:** Use aquatically labeled product if potential exists for solution to contact surface water. 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.



### aminopyralid\*

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

**Common name:** Milestone

**Rate:**

3–5% (0.06–0.1 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. Remains in soil for up to one 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. Do not compost treated plants since herbicide can persist through composting process.

### dicamba\*

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

**Common name:** Banvel

**Rate:**

25–50% in oil and water  
(1.0–2.0 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: 50–70%**

**Common name:** Stalker

**Rate:** 6–9% 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: 90–100%**  
**Season after treatment: 90–100%**

**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.

\*Active ingredient (a.i.)



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