

Invasive Plants of Wisconsin



Bush Honeysuckles (*Lonicera* sp.)

Authors: Brendon Panke and Mark Renz¹

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

Legal Classification in WI:

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 leaves, sharply pointed, 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, hairless, with bluish-green leaves.

Flowers: Mid-late spring. Mid-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 & seeds: Red, orange or yellow, containing many seeds. Usually can be 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, leaves fall earlier in the fall.

¹ Associate research specialist and assistant professor of agronomy, College of Agricultural and Life Sciences, University of Wisconsin-Madison, and Cooperative Extension, University of Wisconsin-Extension.

Ecological threat:

- Invade 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.

CONTROL METHODS:

Non-Chemical control

<p>Removal – Immediately after leaf or flower formation is the most effective time to remove plants. Small to medium sized honeysuckles can be controlled by pulling or digging plants as long as the root crown is removed. Small bushes can be pulled by hand and larger bushes can be pulled by using a leverage tool. Larger plants may necessitate removal of soil near the plant to facilitate removal. If fruiting, avoid movement off-site unless material can be transported without spreading fruit to other locations.</p>
<p>Mowing – 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. Method induces sprouting and should be followed with mowing or herbicide application to re-sprouts 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.</p>
<p>Prescribed burning – Spring burns can kill germinating seedlings and can suppress above ground growth of established plant depending on fire intensity. After the fire, established plants will quickly re-sprout 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 hand-held propane torch can be effective for treating seedlings.</p>

Chemical control²

<p>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. If infestations are mixed with desirable vegetation, applications of herbicide without soil activity in the early spring or late fall can reduce injury to desirable plants as honeysuckles leaf out earlier and drop leaves later than most desirable vegetation. 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.</p>	
<p>Active Ingredient (A.I.): dicamba</p>	<p>Rate – <i>broadcast</i>: 16-32 fl oz/A (0.5-1 lb a.i./A) <i>spot</i>: Equivalent to broadcast rates.</p>
<p>Common product name: Banvel</p>	<p>Timing – Apply to re-growth following mowing.</p> <p>Caution – Rates > 16oz/A (0.5 lb a.e./A) may cause stunting and discoloration of sensitive grasses, such as smooth brome. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>

² 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 over a similar product. You are responsible for using pesticides in accordance with the label directions. *Read the label before any application.*

<p>Active Ingredient (A.I.): glyphosate</p> <p>Common product name: Roundup</p>	<p>Rate – <i>broadcast</i>: 1.71-3.74 lb a.e./A <i>spot</i>: 1-4% (0.045-0.18 lb a.e./gal)</p> <p>Timing – When target species is actively growing and fully leafed out.</p> <p>Remarks - Wick application is effective on small plants with 33-75% (1.49-3.38 lb a.e./gal).</p> <p>Caution – Applications can result in bare ground as glyphosate is not selective. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): imazapyr</p> <p>Common product name: Arsenal</p>	<p>Rate – <i>broadcast</i>: 48-64 fl oz/A (0.75-1.0 lb a.e./A) <i>spot</i>: 0.5 -2% (0.02-0.04 lb a.e./gal)</p> <p>Timing – When target species is actively growing and fully leafed out.</p> <p>Caution - Applications can result in bare ground as imazapyr is not selective and can remain active in the soil for several months to over a year depending on application rate. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): metsulfuron</p> <p>Common product name: Escort</p>	<p>Rate – <i>broadcast</i>: 0.5-3.0 oz/A (0.3-1.8 oz a.i./A) <i>spot</i>: 0.5-2.0 oz/100gal (0.3-1.2 oz a.i./100 gal)</p> <p>Timing – When target species is actively growing and fully leafed out.</p>
<p>Active Ingredient (A.I.): triclopyr + 2,4-D</p> <p>Common product name: Crossbow</p>	<p>Rate – <i>broadcast</i>: 192 fl oz/A (triclopyr: 1.5 lb a.e./A + 2,4-D: 3 lb a.e./A) <i>spot</i>: 1-1.5% (triclopyr: 0.01-0.015 lb a.e./gal + 2,4-D: 0.02-0.030 lb a.e./gal)</p> <p>Timing – When target species is actively growing and fully leafed out.</p> <p>Caution – Can volatilize, avoid application during high temperatures and low humidity, especially when the application contacts impervious surfaces. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>

<p>Cut stump – Cut a stem of a plant near the base and apply herbicide to the cut surface that remains rooted in the ground. Do not use this method if there is heavy sap flow or snow covers the cut surface. Use lower rates on smaller plants and use higher rates on larger plants.</p>	
<p>Active Ingredient (A.I.): glyphosate</p> <p>Common product name: Roundup</p>	<p>Rate – 18-25% (0.8-1.13 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks – Mix with water. In temperatures below freezing solution can become unusable.</p> <p>Caution - Applications can result in bare ground as glyphosate is not selective. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): Imazapyr</p> <p>Common product name: Stalker</p>	<p>Rate – 5% (0.2 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks – May be mixed with antifreeze (ethylene glycol) in cold weather to avoid freezing.</p> <p>Caution - Avoid application to the soil as herbicide is not selective and can remain active in the soil for several months to over a year depending on application rate. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): picloram + 2,4-D</p> <p>Common product name: Pathway</p> <p>Some products containing picloram are restricted use in Wisconsin.</p>	<p>Rate – 100% (picloram: 3%; 2,4-D: 11.2%)</p> <p>Timing – Anytime of year.</p> <p>Caution –Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination. Persists in soil for up to one year, especially active on legumes. Do not compost treated plants as herbicide can persist through composting process. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>
<p>Active Ingredient (A.I.): triclopyr</p> <p>Common product name: Tahoe 4</p>	<p>Rate – 20-30% in oil (0.8-1.2 lb a.e./ gal)</p> <p>Timing – Anytime of year.</p> <p>Caution – Can volatilize, avoid application during high temperatures and low humidity, especially when the application contacts impervious surfaces. Overspray or drift to desirable plants should be avoided as even minute quantities of the spray may cause severe injury. Use aquatically labeled product if potential exists for solution to contact open waters.</p>

<p>Active Ingredient (A.I.): triclopyr + 2,4-D</p> <p>Common product name: Crossbow</p>	<p>Rate – 4% in oil (triclopyr: 0.04 lb a.e./gal + 2,4-D: 0.08 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Caution - Can volatilize, avoid application during high temperatures and low humidity, especially when application contact impervious surfaces. Overspray or drift to desirable plants should be avoided as even minute quantities of the spray may cause severe injury.</p>
<p>Hack-and-squirt – Using a hand axe, make cuts every three-four inches at 6-18" above the ground at the same level and apply solution into the cut area. Do not use this method if there is heavy sap flow. Use lower rates on smaller plants and use higher rates on larger plants.</p>	
<p>Active Ingredient (A.I.): glyphosate</p> <p>Common product name: Roundup</p>	<p>Rate – 50-100% (2.25-4.5 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks –In temperatures below freezing solution can freeze and be unusable.</p> <p>Caution - Applications can result in bare ground as glyphosate is not selective. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): imazapyr</p> <p>Common product name: Stalker</p>	<p>Rate – 5% (0.2 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks – May be mixed with antifreeze (ethylene glycol) in cold weather to avoid freezing.</p> <p>Caution - Avoid application to the soil as herbicide is not selective and can remain active in the soil for several months to over a year depending on application rate. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): picloram + 2,4-D</p> <p>Common product name: Pathway</p> <p>Some products containing picloram are restricted use in Wisconsin.</p>	<p>Rate – 100% (picloram: 3% + 2,4-D: 11.2%)</p> <p>Timing – Anytime of year.</p> <p>Caution – Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination. Persists in soil for up to one year, especially active on legumes. Do not compost treated plants as herbicide can persist through composting process. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>

<p>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 snow covers the application area. Use lower rates on smaller plants and use higher rates on larger plants.</p>	
<p>Active Ingredient (A.I.): dicamba</p> <p>Common product name: Banvel</p>	<p>Rate – 25-50% (1-2 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks – Mix with water. In temperatures below freezing solution can become unusable.</p> <p>Caution - May cause stunting and discoloration of sensitive grasses, such as smooth brome. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>
<p>Active Ingredient (A.I.): imazapyr</p> <p>Common product name: Stalker</p>	<p>Rate – 6-9% in oil (0.12-0.18 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks – May be mixed with antifreeze (ethylene glycol) in cold weather to avoid freezing.</p> <p>Caution - Avoid application to the soil as herbicide is not selective and can remain active in the soil for several months to over a year depending on application rate. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): triclopyr</p> <p>Common product name: Tahoe 4</p>	<p>Rate – 20-30% in oil (0.8-1.2 lb a.e./ gal)</p> <p>Timing – Anytime of year.</p> <p>Caution – Can volatilize, avoid application during high temperatures and low humidity, especially when the application contacts impervious surfaces. Overspray or drift to desirable plants should be avoided as even minute quantities of the spray may cause severe injury. Use aquatically labeled product if potential exists for solution to contact open waters.</p>

This series of fact sheets was created in cooperation with University of Wisconsin-Extension Team Horticulture.

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service, U .S. Department of Agriculture, under Award No. 2009-45060-06000.

University of Wisconsin-Extension, Cooperative Extension, in cooperation with the U.S. Department of Agriculture and Wisconsin counties, publishes this information to further the purpose of the May 8 and June 30, 1914, Acts of Congress. An EEO/AA employer, the University of Wisconsin-Extension, Cooperative Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. If you need this information in an alternative format, contact Equal Opportunity and Diversity Programs, University of Wisconsin-Extension, 432 N. Lake St., Rm. 501, Madison, WI 53706, diversity@uwex.edu, phone: (608) 262-0277, fax: (608) 262-8404, TTY: 711 Wisconsin Relay.