



INVASIVE PLANT FACT SHEET

Shrub Honeysuckles

(*Lonicera* spp.)

Photo credit: Dave Jackson

Background

Shrub honeysuckles consist of several species (*L. maackii*, *L. morrowii*, *L. tatarica*, *L. × bella*, *L. standishii*) introduced from Europe and East Asia in the 1800s. These species can hybridize, though none are unique enough in identification or treatment to be isolated from the complex. Though the iconic scent and blossoms appeal to generalists such as the European honey bee, the nutritional value of invasive shrub honeysuckle fruit is far less than that of native plants. In some wildlife species, the consumption of this “junk food” has been documented to be detrimental to their health and life cycle.

Description

Size: The arcing stems can grow to between 6 feet and 20 feet in height.

Flowers: Emerging throughout spring, depending on local climate and species, the fragrant flowers have four petals and grow in two pairs from the leaf axils. Flower color varies, but flowers usually start out white and turn yellow or pinkish as they age.

Fruit: Replacing the flowers starting in midsummer, the shiny, round berries are orange, red, or pinkish. Like the flowers, they appear along the stem in groups of four and are ¼ inch across.

Leaves: Simple, oppositely arranged leaves are 2–3 inches long with smooth, or entire, margins.

Stems: The grayish-brown bark is distinctly striated, or vertically shredded in appearance, which is especially noticeable on large stems. All stems have a hollow center (pith) regardless of size and species.

Look-alikes

Fly honeysuckle (*Lonicera canadensis*) and other less common native shrub honeysuckles (*Diervilla lonicera*) all have a solid pith rather than the hollow pith seen in invasive species. Native snowberry (*Symphoricarpos* spp.) will have a similarly hollow pith, but its flowers are small, pink, and bell shaped, and the fruit is white. Native dogwoods (*Cornus* spp.) and viburnums (*Viburnum* spp.) also branch oppositely, but the leaves are not similar and they will have solid piths.

Dispersal

Honeysuckles are spread through the dispersal of their abundant fruit. The berries are available to wildlife from midsummer through winter, and are eaten by birds and small mammals.



- A. Flowers (*L. x bella*)
- B. Stem with hollow center, or pith
- C. Opposite leaf arrangement and unripe fruit
- D. Ripe fruit
- E. Lower stems showing striated bark

Photos by Dave Jackson and Kimberly Bohn

Site

Intolerant of shade, shrub honeysuckles are not typically found in mature forest interiors. They prefer areas with full to partial sun, like forest openings and edges, roadsides, abandoned agricultural fields, and other disturbed habitats where sunlight is penetrating the canopy, such as after a timber harvest. Some

species (*L. morrowii* and *L. x bella*) are also capable of tolerating seasonal wetness and can be found in bogs and along creek beds.

Management Calendar

The management calendar for shrub honeysuckles is quite flexible because the foliage emerges early and falls late. Basal bark and cut stump treatments provide a year-round window of opportunity.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Leaf Out												
Flowering and Seed Ripening												
Foliar Herbicide Application												
Basal Bark and Cut Stump Treatments												

Treatment and Timing

Shrub honeysuckles leaf out early and drop their leaves late, providing a long foliar application window. Basal bark and stump treatments can be made anytime the weather permits. Product names reflect the current Pennsylvania state herbicide contract; additional brands with the same active ingredients are available.

Treatment	Timing	Herbicide	Product Rate	Comments
Foliar	Mid-May to onset of fall color	Aquaneat (glyphosate) plus Garlon 3A or Vastlan (triclopyr amine)	3 quarts/acre plus 2 quarts/acre or 1.5 quarts/acre	A combination of glyphosate plus triclopyr is effective against a broad spectrum of woody species. Additionally, this mixture reduces risk to nontargets because it has practically no soil activity and the herbicide products are safe for aquatic applications. Garlon 3A and Vastlan are both triclopyr amine formulations but have different active ingredient concentrations. A surfactant (e.g., CWC 90) needs to be added. If using a different glyphosate product, be sure to check the product label to see if a surfactant is needed; some come premixed.
Basal Bark	Year-round	Pathfinder II or Garlon 4 Ultra (triclopyr ester)	Ready-to-use or 20%, 1:4 in basal oil	Oil-based herbicides penetrate the plant's bark and travel systemically through the plant. Basal bark applications wet the entire circumference of the lower 12 to 18 inches of the stem. Aim for full coverage on stems without creating excessive runoff.
Cut Stump	Year-round	Pathfinder II or Garlon 4 Ultra (triclopyr ester)	Ready-to-use or 20%, 1:4 in basal oil	Cut stump treatments with oil-based triclopyr ester herbicides are applied to the cut surface as well as the bark of the stump and can be applied anytime after the stems are cut. An oil-soluble colorant should be added to improve tracking, avoid skips, and duplicate treatment.
		Aquaneat (glyphosate) or Garlon 3A or Vastlan (triclopyr amine)	50%, 1:1 mix with water	Unlike the oil-based herbicides, water-based treatments are only applied to the cut surface and must be made immediately after the stems are cut. A water-soluble colorant should be added to improve tracking, avoid skips, and duplicate treatment.

Control

In controlling shrub honeysuckle, as with other invasives, prioritize work on sites to “save the best,” focusing first on sites with abundant native vegetation and a low number of invasive species, rather than starting on sites that are completely overrun. Think in terms of maximizing “acres protected” when working to optimize your productivity and the resulting ecological benefit of invasive control work. Shrub honeysuckles are prolific and large infestations can be difficult to control.

These species leaf out early and drop their foliage late compared to most native woody species, making identification relatively simple and creating a longer operational window for treatment.

Small infestations of young plants can be easily pulled by hand. Larger stems can be removed with a weed wrench or a hoe. Mowing effectively eliminates the canopy, though cutting individual stems is not feasible for most situations. Smaller stems are easily cut with heavy-duty rotary or flail cutters (i.e.,

“brush hogs”). A chainsaw works well to cut larger stems. These mechanical controls are not standalone treatments since the plant readily resprouts from stumps and root fragments left behind. To be effective, mowing must be followed with an herbicide application to either cut stumps or the regrowth. Treating regrowth with a foliar application in the fall (or the next growing season) is likely easier than stump treatments after mowing because the targets are easier to find and selectively treating sprouts that are below waist high with a backpack sprayer is a relatively quick and manageable process compared to spraying a mature plant’s foliage.

An effective foliar treatment for shrub honeysuckles is a solution of glyphosate and triclopyr at a 2:1 ratio. Calibrate your spray application to achieve the proper dosage. This mix provides a broader control spectrum than either ingredient alone, is nonselective, and poses minimal risk to nontargets via root absorption of herbicide. Foliar treatments can be done anytime during the growing season, from leaf expansion to the onset of fall color.

Stem treatments are effective against exotic shrub honeysuckles and can be applied throughout the year, providing scheduling flexibility. Treatment options include basal bark and stump treatments, which can be done anytime the weather permits. Basal bark treatments use a concentrated solution of the ester formulation of the herbicide triclopyr in basal oil applied to the entire circumference of the lower 12–18 inches of the stem, depending on its size. If immediate removal of top growth is desired, the preferred approach is to cut the stems close to the soil line and treat the stump. Oil-based (1:4 solution) preparations of triclopyr can be applied anytime after cutting, while water-based (1:1 solution) treatments should be applied immediately after the stems are cut.

Value to Wildlife

Shrub honeysuckles are a well-known feature in our landscape, especially the sweet fragrance of their flowers. While they appear to be attractive to pollinators, they largely appeal to generalists such as the European honey bee (*Apis mellifera*), another nonnative species. Many native bee species are specialist pollinators of specific genera of native plants and do not make use of honeysuckle blossoms. Additionally, shrub honeysuckle fruit is low in the proteins and fats required by migratory birds on their flights, making it effectively like junk food. Although they are not totally without ecological value, the monoculture shrub honeysuckles create and the cascading losses through many trophic levels (plants, insects, birds) should be considered alongside any perceived use by wildlife.

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