



Southeast Exotic Pest Plant Council Invasive Plant Manual

Common Name: Bush Honeysuckles

Scientific Name: *Lonicera mackii* (Rubr.) Maxim; *L. morrowii* Gray; *L. tartarica* L.; *L. X bella* Zabel

The four species of bush honeysuckle that cause most invasive problems (Amur, Morrow's, Tartarian, and Belle) will be referred to as bush honeysuckle. Belle honeysuckle is a hybrid cross between Tartarian and Morrow's honeysuckles and has many characteristics of both parents. These shrubs are frequently used for landscaping and to improve wildlife habitats; they have become naturalized in many areas of Tennessee. All are members of the Caprifoliaceae (Honeysuckle) family.

Height: All four species of bush honeysuckles grow to heights of 1.8-6.0 m (6-20 ft).

Twigs: The twigs of all the bush honeysuckles are generally glabrous, thornless, and have a hollow brown pith when mature. The leaf scars are small and inconspicuous. The buds are blunt to acute.

Leaves: Leaves of all these species are opposite, narrowly elliptic, ovate, to lance-ovate. The significant differences between individual species are dependent on the presence of pubescence.

Flower: The differences between the flowers of these four species are dependent on corolla and pedicel length. Tartarian honeysuckle is typically pink but may vary from red to white. Amur and Morrow's honeysuckle flowers are white, changing to yellow. Belle honeysuckle may vary between the character of both parents. Blooms May-June.

Fruit: The globose berries are typically dark red, occasionally yellow, and found in pairs in the axils of the leaves. They may remain on the shrub through winter. Each berry contains 2-6 seeds. Fruit matures September-October.

For a detailed description of individual species refer to Rehder, A. Manual of cultivated trees and shrubs. 1986.

Life History

The distribution of bush honeysuckle seeds is primarily accomplished by birds and small mammals. Following a period of cold stratification, seeds germinate in areas of sparse vegetation and can tolerate moderate shade but produce more seeds in full sun. It is suspected that bush



Photo from Warner Park Nature Center Archives

honeysuckle produces an allelopathic chemical that suppresses the growth of surrounding vegetation. Leaves appear early in the spring and remain into late fall, giving bush honeysuckle a competitive advantage over native plants.

Origin and Distribution

Bush honeysuckles are native to Asia and western Europe. Tartarian honeysuckle was first cultivated in North America in 1752. Morrow's and Amur honeysuckles were introduced into the U.S. in 1875 and 1855 respectively. Bush honeysuckle has been promoted by state and federal agencies to improve wildlife habitat and as a popular ornamental. They are present throughout Tennessee, the Northeast, and the Midwest.



Photo by James H. Miller



Photo by James H. Miller

Similar Species

The bush honeysuckles are similar to Canadian honeysuckle (*Lonicera canadensis* Bartr.), red honeysuckle (*Lonicera dioica* L.), yellow honeysuckle (*Lonicera flava* Sims.), grape honeysuckle (*Lonicera reticulata* Raf.), coralberry (*Symphoricarpos orbiculatus* Moench), and bush-honeysuckle (*Diervilla sessilifolia* Buckl.). Canadian honeysuckle grows at high elevations and reaches a maximum height of 2 m (6.5 ft). The remainder of the native honeysuckles are twining vine species and morphologically distinct. Coralberry has slender purple to brown twigs and the leaves of *D. sessilifolia* (Buckl.) are lanceolate and finely toothed.

Habitat

The bush honeysuckles are tolerant of a variety of edaphic and environmental conditions. Typical habitats include disturbed successional communities, wetlands, prairie, woodland edges, and partially closed forests. Most communities found in natural areas have the potential to support a population of one of the bush honeysuckle species. These shrubs are moderately shade tolerant, taking advantage of canopy gaps created by wind throw or insect defoliation. Honeysuckle bushes are commonly found growing under trees, tall shrubs, and along fence rows that act as perch sites for birds.

Management Recommendations

Mechanical Controls

Grubbing: This method is appropriate for small initial populations or environmentally sensitive areas where herbicides cannot be used. Using a pulaski or similar digging tool remove the entire plant, including all roots. Juvenile plants can be hand pulled depending on soil conditions and root development. Larger stems, up to 6 cm (2.5 in), can be removed using a Weed Wrench or similar uprooting tools. Any portions of the root system not removed may resprout. All plant parts, including mature fruit, should be bagged and disposed of to prevent reestablishment.

Herbicidal Controls

Foliar Spray Method: This method should be considered for large thickets of bush honeysuckle where risk to non-target species is minimal. Air temperature should be above 65°F to ensure absorption of herbicides.

Glyphosate: Apply a 2% solution of glyphosate and water plus a 0.5% non-ionic surfactant to thoroughly wet all leaves. Use a low pressure and coarse spray pattern to reduce spray drift damage to non-target species. Glyphosate is a non-selective systemic herbicide that may kill non-target

partially-sprayed plants.

Triclopyr: Apply a 2% solution of triclopyr and water plus a 0.5% non-ionic surfactant to thoroughly wet all leaves. Use a low pressure and coarse spray pattern to reduce spray drift damage to non-target species. Triclopyr is a selective herbicide for broadleaf species. In areas where desirable grasses are growing under or around bush honeysuckle, triclopyr can be used without non-target damage.

Cut Stump Method: This control method should be considered when treating individual bushes or where the presence of desirable species precludes foliar application. This treatment is effective as long as the ground is not frozen.

Glyphosate: Horizontally cut bush honeysuckle stems at or near ground level. Immediately apply a 25% solution of glyphosate and water to the cut stump, covering the outer 20% of the stump.

Triclopyr: Horizontally cut bush honeysuckle stems at or near ground level. Immediately apply a 25% solution of triclopyr and water to the cut stump, covering the outer 20% of the stump.

Basal Bark Method: This method is effective throughout the year as long as the ground is not frozen. Apply a mixture of 25% triclopyr and 75% horticultural oil to the basal parts of the shrub to a height of 30-38 cm (12-15 in) from the ground. Thorough wetting is necessary for good control; spray until run-off is noticeable at the ground line.

Bibliography

Anderson, B. D. Bush honeysuckle: vegetation management manual guideline. Illinois Nature Preserves Commission; 1990.

Gleason, H. A.; Cronquist, A. Manual of vascular plants of northeastern United States and adjacent Canada. 2nd ed. The New York Botanical Garden; 1991.

Harlow, W. M. Fruit key and twig key to trees and shrubs. New York, NY: Dover Publications; 1959.

Luken, J. O.; Thieret, J. W. Amur honeysuckle, its fall from grace. *Bioscience* 46(1):18- 24; 1996.

Patrick, L. Exotic species profile: Amur honeysuckle. *TN-EPPC News*. 2(3):4,6; 1995.

Pringle, J. S. *Lonicera maackii* (Caprifoliaceae) adventive in Ontario. *Canadian Field Naturalist* 87 (1):54-55; 1973.

Radford, A. E.; Ahles, H. E.; Bell, C. R. Manual of the vascular flora of the Carolinas. Chapel Hill, NC: The University of North Carolina Press; 1968.

Rehder, A. Manual of cultivated trees and shrubs. Portland, OR: Dioscorides Press; 1986.

Rietveld, W. J. Allelopathic effects of juglone on germination and growth of several herbaceous and woody species *Juglans nigra*, *Lonicera maackii*, *Lespedeza cuneata*, *Trifolium incarnatum*, *Alnus glutinosa*, *Elaeagnus umbellata*. *Journal of Chemical Ecology* 9(2): 295-308; 1983.

Sharp, W. C.; Belcher, C. R. 'Rem-red' Amur honeysuckle - a multipurpose landscape shrub *Lonicera maackii*. *American Nurseryman* 153(12):7, 94-96; 1981.

Swanson, R. E. A field guide to the trees and shrubs of the southern Appalachians. Baltimore: John Hopkins University Press; 1994.

Luken, J. O. Population structure and biomass allocation of the naturalized shrub *Lonicera maackii*

(Rupr.) Maxim in forest and open habitats. American Midland Naturalist 119:258-267; 1988.

Luken, J. O.; Mattimiro, D. T. Habitat-specific resilience of the invasive shrub Amur honeysuckle (*Lonicera maackii*) during repeated clipping. Ecological Applications 1:104-109; 1991.

Luken, J. O. Forest and pasture communities respond differently to cutting of exotic Amur honeysuckle. Restoration and Management Notes 8:122-123; 1990.

Williams, C. E.; Ralley, J. J.; Taylor, D. H. Consumption of seeds of the invasive Amur honeysuckle, *Lonicera maackii* (Rupr.) Maxim, by small animals. Natural Areas Journal 12(2): 86-89; 1992.

[[Home](#)] [[Contents](#)]



Invasive.org is a joint project of
The Bugwood Network, USDA Forest Service & USDA APHIS PPQ.
The University of Georgia - Warnell School of Forest Resources and
College of Agricultural and Environmental Sciences - Dept. of Entomology
Last updated on Wednesday, November 05, 2003 at 01:20 PM
Questions and/or comments to the [Bugwood Webmaster](#)