DRAFT (10/08/18)

LOWER HUDSON PARTNERSHIP FOR REGIONAL INVASIVE SPECIES MANAGEMENT

BEST MANAGEMENT PRACTICES

Amur honeysuckle

Prohibited Invasive Species (*6 NYCRR § 575.3(d)(2)(lx)*)

Amur honeysuckle ([synonym common names])
Lonicera mackii (*[synonym scientific names]*)

REGIONAL STATUS

Amur honeysuckle is Tier 3- Established in the Lower Hudson PRISM Region.

State law prohibits transporting, buying, selling or offering invasive Amur honeysuckle for sale or distributing plants, plant parts or seeds.

Lower Hudson PRISM recommends: This species is common and abundant throughout most of the Hudson Valley but not in surrounding areas. Focus should be on containment and spread prevention with special attention to borders with areas uninvaded by this species and threatened conservation targets. Surveys should detect this species to help prevent its spread.

INVASIVENESS

New York State has assessed this species' invasiveness as VH-Very High

IMPACTS OF THIS SPECIES

Amur honeysuckle is a wide-ranging invasive species, occurring across North America. Research has determined this common invasive has dramatic ecological impacts on the communities it invades, including causing major alterations in soil microbiota, decomposition rates, vegetation community structure, and light availability. [12]

BACKGROUND INFORMATION

History of Introduction

Amur honeysuckle was first introduced to North America in 1898, when it was grown at the New York Botanical Garden from seeds shipped from Canada. [(2)] The species is now extant in at least 26 states. [(3)]

Description

- Amur honeysuckle is a member of the Honeysuckle family (*Caprifoliaceae).*
- Amur honeysuckle is a tall, robust shrub growing up to 20 feet in height. This species is most conspicuous in summer, when fragrant gold and white-pinkish trumpet-shaped blooms appear, and early Autumn when bright red, circular berries cover the plant. [(4)]

- **Leaves:**
    - As with all honeysuckles, this species' leaves are oppositely arranged. Leaves are lightly hairy, dark green above and pale below, and have long, pointy tips. (4)

- **Flowers:**
    - Flowers are trumpet-shaped, and white-pinkish in color, situated in the leaf axils and fade to gold/yellow with age. (4)

- **Fruit/Seed:**
    - Fruit is a bright red translucent berry, appearing in late summer to early fall. (4)

Key identifying characteristics: Amur honeysuckle is easily confused with the plethora of other honeysuckles, native and non-native, present in the region. In general, nonnative honeysuckles are easy to distinguish from their native counterparts by the early appearance of the invasives' leaves in spring. The Eurasian fly honeysuckle (*Lonicera xylosteum*) is similar in overall appearance to amur honeysuckle but lacks its **long, tapering pointed leaf tips**. The same is true of Morrow's honeysuckle which has a more rounded leaf tip than its close relative, amur honeysuckle. (5) Of the exotic honeysuckles, amur honeysuckle alone has only lightly hairy leaves, and often appears glossy at a distance. (7)

Reproduction and Spread

- Amur honeysuckle reaches reproductive age as early as three years old and is capable of producing millions of viable seeds. The flowers are pollinated by a variety of insects, including bumblebees, and dispersed primarily by frugivorous birds. The potential for amur honeysuckle to form a long-lived seed bank is mostly unknown, however, some studies suggest viable seed does not persist in the soil. Both flowering and fruiting are largely dependent on sunlight availability, but shade does not keep this species from fruiting. (6)

- **Vectors:** Birds, small mammals, horticulture. (7)

Habitat

- Amur honeysuckle establishment is generally preceded by some sort of environmental disturbance. The species can colonize a wide variety of habitats, including fragmented woodlands, the edges of abandoned fields, riparian corridors, and waste places such as roadsides and vacant lots. It is especially aggressive on calcareous soils. (7)

Likelihood of naturalization: High. Amur honeysuckle is an extremely adaptable and aggressive invasive with the capacity to disperse long distances, via birds. The species is somewhat limited by drought and cold. It is hardy down to USDA zone 4. (6)

CONTROL INFORMATION

Biological Control

No biological control option is currently available for this species.

Manual or Mechanical Control

Pulling / Digging Up: Hand pulling or digging small seedlings or plants is effective. For larger shrubs, use of a weed wrench is recommended. If undertaking this management method without the use of herbicides, a commitment to pull at least once a year for 3-5 years is necessary to achieve any measure of control. [7]

Mowing: Mowing or weed whacking can prevent plants from flowering and fruiting if begun in spring and continued in regular intervals. Winter cutting should be avoided as it promotes vigorous re-sprouting. [7]

Girdling: Not advisable unless used in tandem with repeated cutting, or foliar spray. Girdling of larger shrubs will encourage re-sprouting. [7]

Prescribed Fire: Controlled burns can kill seedlings or small plants and will top kill larger individuals. This method of management is not very effective and must be utilized once a year. [7]

Torching: Torching is effective in small populations or on seedlings. [7]

Prescribed Grazing: Although deer do graze amur honeysuckle, bitter compounds in its tissues deter most livestock. [12]

Soil Tilling: Tilling is effective on smaller individuals but may not be an appropriate management method in most natural areas.

Mulching: No information available

Solarization: No information available

Hot Foam Spray: No information available

Chemical Control

The pesticide application rates and usage herein are recommendations based on research and interviews with land managers. When considering the use of pesticides, it is your responsibility to fully understand the laws, regulations and best practices required to apply pesticides in a responsible manner. At times, the pest you seek to treat may not be on a pesticide label, requiring a 2ee exemption from NYSDEC. Always thoroughly read the label of any pesticide and consult the NYSDEC or a licensed pesticide applicator with questions.

Foliar Spray: A 1-2% solution of glyphosate is effective against this species. Always read and follow all directions on the herbicide label. [8]

Cut Stump: Larger stems can be effectively controlled by cutting in spring and immediately applying a 20% solution of glyphosate or triclopyr. All treated plants should be monitored for re-sprouting in 2-3 weeks and in the following growing season. [8]

Basal Bark: A 25% solution of triclopyr applied to the bark of dormant amur honeysuckle is somewhat effective at controlling infestations, although this technique is best applied with other strategies, such as a follow-up cut stump. (9)

Cut and Frill: Apply a 50% solution of glyphosate or triclopyr to cuts in amur honeysuckle's cambium.

Stem Injection: Injecting stems towards the end of the growing season with a 50% solution of glyphosate has up to a 98% kill rate. (10)

Pre-Emergent Spray: Pre-emergent spray: Pre-emergent spray containing sulfometuron methyl is effective on germinating seedlings. This method of management should be used in combination with a foliar spray during the growing season, such as glyphosate. (11)

SUMMARY OF BEST MANAGEMENT PRACTICES

General management overview and recommendation:
As with any other invasive infestation complex, large aggregations of amur honeysuckle are best managed via a combination of mechanical and chemical means. Hand pulling of seedlings and small plants should be accompanied by cutting and herbicide application of larger shrubs in order to attain good control. All managed infestations should be monitored to ensure adequate revegetation of the controlled area and that re-invasion does not occur. Any new seedlings can be hand pulled.

Post treatment monitoring: Controlled populations should be revisited at least once the following season to ensure no new seedlings are present.

Disposal Methods
- All populations should be managed prior to seed set to reduce likelihood of regeneration. Managed material should be chipped and can be composted, provided no viable seed is present on plant material.

REFERENCES

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