

LOWER HUDSON PARTNERSHIP FOR REGIONAL INVASIVE SPECIES MANAGEMENT**BEST MANAGEMENT PRACTICES****Jetbead**

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

Jetbead

Rhodotypos scandens (Corchorus scandens, Kerria tetrapetala, Rhodotypos kerrioides, Rhodotypos tetrapetalus)

REGIONAL STATUS

Jetbead is Tier 3- Established invasive species in the Lower Hudson PRISM. These species are common or abundant through most of the Lower Hudson valley but not in most of the surrounding regions.

General management guideline for Tier 3 species:

Focus on containment and spread prevention with special attention to borders with areas uninvaded by this species and threatened conservation targets. Surveys should focus on detecting this species to help prevent spread. Target strategic management to slow the spread, as the species is likely too widespread for eradication, but many surrounding regions could be at risk if left unattended.

No regulation

Lower Hudson PRISM recommends: This species is common and abundant throughout most of the Hudson Valley but not in most of the 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 spread.

INVASIVENESS

New York State has assessed this species' invasiveness as M-Moderate

IMPACTS OF THIS SPECIES

A multi-stemmed deciduous shrub, jetbead is shade tolerant and capable of invading forested areas, quickly displacing the native shrub layer. These dense, homogenous stands can inhibit germination and establishment of other species in both the herbaceous and canopy layers. ⁽¹⁾

BACKGROUND INFORMATION**History of Introduction**

Introduced in 1866 from its native range in China, Japan, and Korea, jetbead was—and still is—a prized ornamental specimen. ⁽³⁾ The species is now extant in 17 states. ⁽²⁾

Description

- Jetbead is a member of the Rose family (*Rosaceae*).
- A member of the rose family, jetbead sports a beautiful spring-blooming, white, four-petaled flower. The leggy, open-branching shrub grows 5-7 feet tall and is most conspicuous during its spring bloom, as the species has little to no fall color and its fruits are small, often sparse and black. ⁽⁴⁾

• Leaves:

- Leaves are simple, oppositely arranged, doubly toothed on the margins and conspicuously ribbed. The color of the leaves is helpful in identifying the species as they stay bright green into the fall season. ⁽⁵⁾

• Flowers:

- Flowers are arranged in terminal clusters and are white, four petaled, spring blooming, and approximately 1.5 inches in diameter. ⁽⁶⁾

• Fruit/Seed:

- Fruit matures in early to mid-fall in the Hudson Valley, with clusters of four round, bead-like, highly glossy drupes approximately ¼ of an inch in diameter gradually turning jet black. Immature fruits appear mid-summer and are a dark, reddish orange. ⁽⁶⁾

Key identifying characteristics: Both the native arrowwood viburnum (*Viburnum dentatum*) and the invasive Linden viburnum (*Viburnum dilatatum*) can be confused with jetbead due to the species' highly serrated leaves. Arrowwood viburnum, however, has umbels of white flowers in spring and clusters of small dark blue fruits come summer's end. Linden viburnum, similarly, has a large umbel of white flowers in late spring to early summer and bright red berries later in the season. This invasive species' leaves and stems are also softly fuzzy. ⁽⁷⁾

Reproduction and Spread

- Little information is available on the reproductive potential of jetbead, however, high seed viability has been reported. Studies are needed to determine if the species requires disturbance to establish in new sites. ⁽⁹⁾
- **Vectors:** Birds, small mammals, horticultural trade. ⁽⁸⁾

Habitat

- Jetbead prefers evenly moist, well-drained soils in sunny conditions but is tolerant of a variety of soils and will grow in dense shade. It is commonly found close to intentional plantings but can travel long distances if dispersed by birds. In the Hudson Valley, the species can be found on roadsides, forest edges and understory. ⁽¹⁾

Likelihood of naturalization: Moderate. Jetbead is shade tolerant, can adapt to various soil conditions and is capable of both rapid vegetative spread and long distance dispersal. However, the species requires both scarification and cold stratification for germination— a characteristic that may limit the species establishment in certain habitats and regions: ⁽⁹⁾

CONTROL INFORMATION

Biological Control

No biological control option is currently available.

Manual or Mechanical Control

Pulling / Digging Up: Hand pulling or digging young plants is effective, if time consuming. ⁽¹⁾

Mowing: Cutting at leaf out may decrease this species' capacity for vegetative growth and spread, however, this management strategy is more efficient if undertaken in conjunction with foliar spraying when new vegetation begins to grow back. Utmost care must be taken to complete any mowing, weed whacking or cutting before the formation of fruit so as not to spread any viable seeds. ⁽¹⁾

Girdling: Not applicable

Prescribed Fire: No information available

Prescribed Grazing: No information available

Soil Tilling: No information available

Mulching: No information available

Solarization: Not applicable

Hot Foam Spray: No information available

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 listed on a pesticide label, requiring a 2(ee) exemption from NYSDEC. Always thoroughly read the label of any pesticide and consult the NYSDEC or a licensed pesticide applicator with questions.

Chemical Control

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Foliar Spray: A 1% solution of glyphosate is effective against this species. Repeat application may be necessary in several weeks. Always read and follow all instructions on the herbicide label. ⁽⁵⁾

Cut Stump: Cut stump herbicide application is an effective way of managing this species. Shrubs should be cut in the fall, prior to fruit set. Apply a 20% solution of glyphosate to the stump to inhibit re-sprouting.

Basal Bark: 25% solution of triclopyr applied July through September

Hack-And-Squirt

Stem Injection: Not applicable

Pre-Emergent Spray: No information available

SUMMARY OF BEST MANAGEMENT PRACTICES

General management overview and recommendation: Jetbead can be managed quickly and effectively by consistent, careful hand pulling if populations are discovered early. For large populations, repeated cutting and foliar spray of systemic herbicide such as glyphosate is an effective management option, as are cut stump treatments. ⁽⁸⁾

Post treatment monitoring: Depending on the management method employed, controlled populations should be revisited throughout the growing season to monitor for re-sprouting, especially if mechanical methods such as cutting or pulling are used without herbicide application.

Disposal Methods

- Waste material can be chipped, burned or composted so long as management was completed prior to fruit set. Any fruit must be bagged and disposed of, and roots thoroughly dried.

REFERENCES

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