

LOWER HUDSON PARTNERSHIP FOR REGIONAL INVASIVE SPECIES MANAGEMENT**BEST MANAGEMENT PRACTICES****Siebold's viburnum**

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

Siebold's viburnum (Siebold's arrowwood)*Viburnum sieboldii***REGIONAL STATUS**

Siebold's viburnum is Tier 2- Emerging invasive species in the Lower Hudson PRISM. These species are just starting to become established in localized parts of the Lower Hudson region.

General management guideline for Tier 2 species:

Eradication, or containment and spread prevention is recommended, along with restricting the area of invasion by focusing on removing outlying and border populations. These species should be a high priority for surveys, prevention, and education and outreach.

No regulation

Lower Hudson PRISM recommends: This species is just beginning to become established in localized parts of the Lower Hudson PRISM region. Eradication, spread prevention and containment are the management recommendations for this species along with survey work and education and outreach efforts to increase spread prevention and detection rates.

INVASIVENESS

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

IMPACTS OF THIS SPECIES

As a relatively new introduction, the ecological ramifications of Siebold's viburnum are yet unknown. A large, quick growing, shade tolerant shrub with a high reproductive potential, the species is capable of changing both the composition and density of the shrub layer in habitats it invades by out competing other vegetation.

BACKGROUND INFORMATION**History of Introduction**

Siebold's viburnum was brought to the United States via the horticultural trade, likely in the early 1900s. Since then, many varieties and hybrids of the species have been spawned, although most appear to be less problematic than the straight species alone. Although the planting and potential expansion range of this cold hardy shrub spans all 50 states, it has been reported as established in only ten. ⁽¹⁾

Description

- Siebold's viburnum is a member of the Moschatel family (*Adoxaceae*)
- Siebold's viburnum is a large shrub native to Japan. ⁽⁸⁾

- **Leaves:**

- Leaves are 2-5 inches long, opposite, simple, and deciduous— although highly glossy and quite tough. The leaf margin is serrated.

- **Flowers:**

- Large clusters of creamy white flowers emerge in May and June. Clusters are large— approximately 6 inches in width.

- **Fruit/Seed:**

- Pinkish red single-seeded fruits ripen to dark blue, or even black late summer through fall. Fruit is attractive to birds and other small mammals and is borne on bright red stems.

Key identifying characteristics: This species is easy to confuse with the plethora of other native and non-native viburnums occupying the Hudson Valley landscape. Among the non-native viburnums, the Japanese snowball, *Viburnum plicatum* has the most similar leaf shape and is also glossy, however, Siebold's viburnum gives off a foul odor when the leaves are crushed. None of the native viburnums have similarly ovate, highly glossy leaves. ⁽⁸⁾

Reproduction and Spread

- Although the reproductive potential of Siebold's viburnum is under investigated, anecdotal evidences suggests the species is a prolific seeder, capable of producing over 100 seeds per plant. ⁽⁶⁾

Habitat

- Siebold's viburnum prefers moist, freely draining soil in full sun, but is shade tolerant and can adapt to a wide variety of soils. It most commonly colonises disturbed woodland edges and canopy gaps.

CONTROL INFORMATION

Biological Control

Although the viburnum leaf beetle will feed and develop on Siebold's viburnum, a handful of native American viburnums are its preferred host. ⁽²⁾

Manual or Mechanical Control

Pulling / Digging Up: Pulling by hand as a control method is possible only if plants are young, and under three feet tall. Weed wrenches may be used on larger plants, although Siebold's viburnum can reach 20 feet in height. Root fragments have the potential to re-sprout. ⁽³⁾

Mowing: Siebold's viburnum has the potential to re-sprout from any untreated cut stumps. If pursuing this method of management, cutting must be repeated throughout the growing season as new growth emerges. ⁽³⁾

Girdling: Not applicable

Prescribed Fire: No information available

Prescribed Grazing: No information available

Soil Tilling: Not applicable

Mulching: Not applicable

Solarization: Not applicable

Hot Foam Spray: Not applicable

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 3.75% solution of glyphosate is best utilized as a foliar spray, however, triclopyr is also effective. Some managers report a solution of as low as 1% glyphosate as effective. Always follow all instructions on the herbicide label ⁽⁷⁾

Cut Stump: Cut stump herbicide application is an effective way of managing Siebold's viburnum. Shrubs should be cut in the fall, prior to fruit set. Apply a 20% solution of glyphosate to the stump to inhibit re-sprouting. ⁽⁴⁾

Basal Bark: 25% solution of triclopyr applied July through September ⁽⁴⁾

Hack-And-Squirt

Stem Injection: Not applicable

Pre-Emergent Spray: Not applicable

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SUMMARY OF BEST MANAGEMENT PRACTICES

General management overview and recommendation:

As with any other invasive infestation complex, large stands of Seibold's viburnum are best managed via a combination of mechanical and chemical means. Small seedlings can be hand pulled or sprayed while larger shrubs must be treated with a basal bark or cut stump application to attain effective, fast control. All managed infestations should be monitored to ensure exhaustion of the seed bank and to prevent reinvasion from nearby populations. Any new seedlings can be hand pulled or sprayed.

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. As Siebold's viburnum has a relatively long-lived seed bank of up to ten years, controlled populations known to have produced fruit should be surveilled every growing season to hand pull seedlings. ⁽⁵⁾

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.

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