

Brush Management – Invasive Plant Control

Multiflora Rose – *Rosa Multiflora*

Conservation Practice Job Sheet

VT-314



Multiflora Rose (*Rosa Multiflora*)

Multiflora Rose

Multiflora rose has a wide tolerance for various soil, moisture, and light conditions. It can grow in dense woods, prairies, along stream banks and roadsides and in open fields and pastures. Its tenacious and unstoppable growth habit was eventually recognized as a problem on pastures and unplowed lands, where it disrupted cattle grazing. For these reasons, multiflora rose is classified as a noxious weed.

Multiflora rose reproduces by seed and by forming new plants that root from the tips of arching canes that contact the ground. Fruits are readily sought after by birds which are the primary dispersers of its seed. It has been estimated that an average multiflora rose plant may produce a million seeds per year, which may remain viable in the soil for up to twenty years. Germination of multiflora rose seeds is enhanced by passing through the digestive tract of birds.

Description

Multiflora rose is a thorny, perennial shrub with arching stems (canes), and leaves divided into five to eleven sharply toothed leaflets. The base of each leaf stalk bears a pair of fringed bracts. Beginning in May or June, clusters of showy, fragrant, white to pink flowers appear, each about an inch across.



Multiflora Rose, Flower

Small bright red fruits, or rose hips, develop during the summer, becoming leathery, and remain on the plant through the winter. Conscience

Similar Natives

Rosa setigera is a similar native that is on the edge of its range in New Hampshire. Multiflora rose though similar, exhibits a more trailing or arching habit, with mostly white flowers in a pyramid inflorescence, a glabrous style and smaller fruit.

Control

Mechanical and chemical methods are currently the most widely used methods for managing multiflora rose. In high quality natural communities, cutting of individual plants is preferred to site mowing to minimize habitat disturbance. Various herbicides have been used successfully in controlling multiflora rose but, because of the long-lived stores of seed in the soil, follow-up treatments are likely to be necessary. Plant growth regulators have been used to control the spread of multiflora rose by preventing fruit set.

Biological Control

Biological control is not yet available for management of multiflora rose. However, researchers are

investigating several options, including a viral pathogen (rose-rosette disease), which is spread by a tiny native mite, and a seed infesting wasp, the European rose chalcid.

Mechanical Control

Pulling or removing individual plants by hand is effective when plants are small. Special care should be taken to ensure that all roots are removed to prevent resprouting. If plants develop from severed roots these should be removed as well.

Cutting is appropriate for small initial populations and for environmentally sensitive areas where herbicides cannot be used. Repeated cutting will control the spread, but will not eradicate it. Stems should be cut at least once per growing season as close to ground level as possible.

For disturbed areas containing large populations of multiflora rose, mowing can provide partial control, by restricting top growth and spread. Research indicates that mowing three to six times a year can be effective. The objective of a mowing program is to clear the existing vegetation and reduce the reproductive capacity of the below ground portions of the plant. Repeatedly mowing the perimeter of a site to block this type of expansion can be somewhat effective in preventing the spread of multiflora rose.

Prescribed Burning

Prescribed burning has not been tried for multiflora rose.

Chemical Control

Various herbicides have been tested and found effective for control of multiflora rose. Cut-stem treatments are effective but difficult due to dense growth and thorns. Foliar applications are the most common and are very effective. It is important to note that multiflora rose has the typical regenerative powers of the rose family, and control programs must be monitored and followed up if necessary by repeated herbicide application or used in conjunction with other control methods such as mowing^{1,2}.

Refer to the pesticide label for complete instructions on the use and application of a given herbicide. Some applications, by rule, may only be done by a certified pesticide applicator, and/or might require the applicator hold a special permit. Private landowners can apply anything purchased at your local garden store with out having a permit so long as it is not near

a water body or known public aquifer. You should contact the Vermont Agency of Agriculture Agrichemical Management Section if there are any concerns before applying any pesticides.

¹- Lynn, L.B., R.A. Rogers, and J.C. Graham. 1979. "Response of woody species to glyphosate in northeastern states." Proc. Northeastern Weed Sci. Soc.

²- Ahrens, J.F. 1979. "Chemical control of multiflora rose." Proceedings NE Weed Science Society.

Disposal

There are a few general rules of thumb that will ensure proper disposal. Be sure the plant is dead before placing in a mulch or compost pile. Either dry it out in the sun, or bag it in a heavy duty black plastic bag. If you have flowers and/or seeds on the plant, put the flowers and seed heads into the bag head first so that there is minimal risk in dispersing seed.

Information and Recommendations compiled from:

- Ahrens, J.F. 1979. "Chemical control of multiflora rose." Proceedings NE Weed Science Society.
- Alien Plant Invaders of Natural Areas (NPS)
- Invasive Plant Atlas of New England (IPANE)
- "Invasive Plant Management Guide." Stewardship Subcommittee of the Connecticut Invasive Plant Working Group.
http://www.hort.uconn.edu/cipwg/art_pubs/GUIDE/guideframe.htm
- Lynn, L.B., R.A. Rogers, and J.C. Graham. 1979. "Response of woody species to glyphosate in northeastern states." Proc. Northeastern Weed Sci. Soc.
- The Nature Conservancy - Element Stewardship Abstract (and references therein)

CAUTION: The VT Agency of Agriculture Division of Agricultural Resource Management and Environmental Stewardship, Agrichemical Management Section regulates the sale and use of pesticides in Vermont. Many labels and registrations change from year to year, so applicators will want to be sure they are using a currently, registered product. Contact the Agrichemical Section (802-828-6531) for information on pesticide registration, how to acquire a special permit, lists of currently-licensed pesticide applicators, and other information pertaining to the rules and regulations governing pesticide application in this state.