

Brush Management

Multiflora Rose

Conservation Practice Specification Guide **MA-314**



Multiflora rose



Multiflora rose flower



Multiflora rose – fringed stipules

General Specifications

A conservation plan shall be prepared in accordance with the criteria and general specifications of the Brush Management (314) conservation practice standard. The conservation plan also will describe the requirements for applying the practice to achieve its intended purpose(s).

Specifications for applying this practice shall be prepared for each site and recorded and filed using approved jobsheets.

General Criteria

- An *invasive* species is one that displays rapid growth and spread, establishes over large areas, and persists. Invasiveness is characterized by robust vegetative growth, high reproductive rate, abundant seed production, high seed germination rate, and longevity. Some native plants exhibit invasive tendencies in certain situations.
- Early detection and eradication of invasive plants, before they become well established, is an important component of any invasive plant control plan.

- Follow the attached brush management component of the overall conservation plan.
- Methods of herbaceous weed control must comply with Federal, State, and local regulations. This includes reading and following pesticide labels.
- All necessary pesticide applicator licenses/permits shall be obtained.
- Control methods will be designed to protect and encourage the growth of desirable native plant species.
- The control methods will be used in a manner that does not degrade aquatic resources. Where pesticides are planned, a risk analysis (Win-PST) and appropriate mitigation will be completed.
- The control method(s) used will be designed to protect the soil from erosion and to avoid the degradation of soil quality.
- Disposal of noxious or invasive plant species from the site treated will be by appropriate methods (e.g., burned, piled, contained) to lessen the potential for the plants or their propagules (seed, shoots, stems, etc.) to repopulate the site or spread to new areas.

- Be prepared to control seedlings that may establish following removal of larger plants and near brush piles.

Considerations

Consider choosing methods of control that cause no or limited soil disturbance. Disturbed soil may lead to increased germination of invasive plant seeds.

Multiflora Rose

Multiflora rose has a wide tolerance for various soil, moisture and light conditions. It can grow in dense woods, along stream banks and roadsides and in open fields and pastures. It has a tenacious and unstoppable growth habit and was initially recognized as a problem on pastures and unplowed lands, where it disrupted cattle grazing.

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 stipules. Beginning in May or June, clusters of showy, fragrant, white to pink flowers appear, each about an inch across. Small bright red fruits, or rose hips, develop during the summer, becoming leathery, and remain on the plant through the winter.

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 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 tracts of birds.

Similar Natives

Several roses are native to Massachusetts; *Rosa blanda* (Meadow rose), *Rosa carolina* (Pasture rose), *Rosa palustris* (Swamp rose) and *Rosa virginiana* (Virginia rose); however, native roses are less abundant and more specialized in habitat requirements than multiflora rose. The combination of fringed stipules and white flowers will separate *Rosa multiflora* from all these other species.

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. It is important to note that because of the long-lived stores of seed in the soil, any control program for multiflora rose must be monitored and multiple follow-up treatments are usually required.

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, a wasp (rose seed chalcid) that infests and kills developing rose seeds, and rose stem girdler, a beetle whose larvae girdles and kills plant canes.

Mechanical Control

Pulling or removing individual plants from the soil is only effective if all roots are removed, or when plants that subsequently develop from severed roots are removed as well. This approach is more applicable to scattered, light infestations.

Cutting may be appropriate for small initial populations and for environmentally sensitive areas where herbicides cannot be used. Repeated cutting will control the spread of multiflora rose but will not eradicate it. Stems should be cut at least once per growing season as close to ground level as possible. For areas containing large populations of multiflora rose, repeated mowing around the perimeter of the infestation can potentially block the spread of multiflora rose.

Prescribed Burning

Burning has not been tried for control of multiflora rose.

Chemical Control

Various herbicides have been used successfully in controlling multiflora rose. Multiflora rose is susceptible to both glyphosate and triclopyr. Glyphosate (brand names Roundup, and for use near waterbodies, Rodeo) is a nonselective herbicide which kills both grasses and broad-

leaved plants while triclopyr (brand names Garlon, Pathfinder, and others) is a selective herbicide that kills broad-leaved plants but does little or no harm to grasses.

Triclopyr can be applied starting in spring before or during flowering. Glyphosate is most effective when applied after flowering (early summer) until early fall. Cut-stump treatments with both herbicides also provide control, but cutting stumps in established thickets is very difficult because of the numerous thorny branches.

Important Note

Mention of specific pesticide products in this document does not constitute an endorsement. These products are mentioned specifically in control literature used to create this document.

Disposal

There are 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.

Safety

Develop a safety plan for individuals exposed to chemicals including telephone numbers and addresses for emergency treatment centers and the telephone number for the nearest poison control center.

- For human exposure questions, contact the regional poison control center:

**Regional Center for Poison Control & Prevention
Serving Massachusetts & Rhode Island
Children's Hospital Boston
300 Longwood Ave, IC Smith Building
Boston, MA 02115
1-800-222-1222**

Or see the national website for the **American Association of Poison Control Centers** at <http://www.aapcc.org/>

- For advice and assistance with emergency spills that involve agrichemicals, contact:
**Mass Department of Environmental Protection
24-Hour Emergency Response
1-888-304-1133**

- National 24-hour assistance for emergency spills, contact:
**CHEMTREC
1-800-262-8200**
<http://www.chemtrec.org/Chemtrec/>
- For non-emergency information, contact the **National Pesticide Information Center (NPIC)**
1-800-858-7378
<http://www.npic.orst.edu/>

References

Massachusetts Department of Agricultural Resources Pesticide Bureau—Rights of Way Management. <http://www.mass.gov/agr/pesticides/rightofway/index.htm>

Mehrhoff, L. J., J. A. Silander, Jr., S. A. Leicht, E. S. Mosher and N. M. Tabak. 2003. IPANE: Invasive Plant Atlas of New England. Department of Ecology & Evolutionary Biology, University of Connecticut, Storrs, CT, USA. URL: <http://nbii-nin.ciesin.columbia.edu/ipane/>

Sorrie, Bruce A. and P. Somers. 1999. The Vascular Plants of Massachusetts: A County Checklist. MA Div. Fisheries and Wildlife. Natural Heritage and Endangered Species Program.

Tennessee Exotic Pest Plant Council. Tennessee Exotic Pest Plant Management Manual. 1997. http://www.tneppc.org/invasive_plants

The Nature Conservancy - Element Stewardship Abstract (and references therein) <http://www.imapinvasives.org/GIST/ESA/index.html>

Weeds Gone Wild: Alien Plant Invaders of Natural Areas. Alien Plant Working Group of the Plant Conservation Alliance (National Park Service) <http://www.nps.gov/plants/alien/index.htm>