

Scientific Name: *Rosa multiflora*

Common Name: Multiflora Rose

Updated: 5/5/2016

A. Priority: C

B. Description – Multiflora rose is an evergreen perennial shrub that is native to Japan, Korea and eastern China and was introduced to the United States in 1886 as rootstock for ornamental roses. In the 1930's, the U.S. Department of Agriculture promoted this species for erosion control and for use as "living fences" for confining livestock. Various conservation organizations have also promoted its use for wildlife cover and food. In some states, it was planted within highway medians as a crash barrier and as a means to reduce headlight glare from oncoming vehicles. It was also widely planted as an ornamental and is now found throughout North Carolina and the southeastern US as a common weed in pastures, abandoned fields, roadsides, and old home sites. **Growth Habit:** Large, arching shrub up to 10+ feet, with multiple woody stems in distinct clumps. The lower stems are typically erect and the tips arch back to the ground. Dense thickets can be common. **Leaves:** Pinnately compound with 5-11 alternate leaflets and a terminal leaflet. Leaflets are broadly oval with finely serrated margins. A feathery stipule, which is diagnostic for the species, occurs at the base of each leaf. **Stems:** Smooth, erect at the bases with arching tips and curved, flattened, broad-based thorns. **Flowers and Fruits:** Clusters of fragrant, white to pinkish-white, 5-petaled flowers bloom in May or June. Small red fruits called rose hips develop from September through October and can persist through winter. The species reproduces by rooting at the tips of its arching branches (also known as layering) and by seeds, which are produced in enormous quantities. The seeds can be widely dispersed by birds and are reported to remain viable in the soil for 10-20 years. New plants typically grow slowly for the first one or two years, and then rapidly expand.

C. Damage and threats – The species' dense growth habit displaces native vegetation, particularly low-growing herbaceous species. In extreme cases, it can form a monoculture and individual clumps can cover over 100 square feet. Biodiversity in these sites can be quite low. Although it was once widely planted for small mammal habitat, many small mammals will avoid it once the infestation becomes impenetrable, leading to potential shifts of local animal diversity.

D. Management Options

Mechanical Control:

Multiflora rose can be controlled but not killed with mechanical controls, including pulling, stumping, or periodic mowing. Pulling is not recommended, as the shrubs will vigorously resprout unless the entire root system is removed, which is unlikely. It is easy to top-kill the species through repeated mowing or stumping; however, cutting will not kill the shrubs and will stimulate extensive resprouting from the roots. The use of goats via herbivory can be used to successfully control this species if multiple applications are carried out.

Chemical Control: Use of a systematic herbicide is the best option to control Multiflora Rose. We recommend using aquatic formulations of herbicides in this region to limit potentially unwanted effects to the surrounding environment.

- a. **Foliar Spray** – This method involves spraying a dilute herbicide directly onto the plant's leaves. Application needs to occur when foliage is present, sometime between full leaf and the onset of fall for full effectiveness. Caution should be taken when applying herbicide with this method as non-target plants can easily be killed by drift or overspray. Application should cover at least 80% of the leaves. To treat Multiflora, use a 2-4% solution of aquatic triclopyr in water with a 0.5% non-ionic surfactant and apply directly to leaves until just before runoff. Air temperatures must be above 65 degrees and winds should be lower than 5 mph.
- b. **Cut Stump** – This method involves cutting the stump as close to the ground as possible (no more than 5in.) and immediately applying a systematic herbicide. It is best to use this method between summer and fall, but it may be used as long as the ground is not frozen. To treat using this method, apply a 50% formulation of aquatic glyphosate or triclopyr directly to the cut stump. Bag or burn all cut material as it will resprout if left on site!

E. Recommended Management Strategy

- a. We recommend treating Multiflora Rose with a foliar application so long as non-target vegetation will not be harmed. If rare/ desired plant or animal species may be impacted, a cut stump treatment on every stem should be conducted. All cut material must be bagged as it will vigorously resprout if contact with the soil/ or a moist surface is made.
- b. Continued applications need to be conducted at least yearly to get the infestation under control.
- c. Seedlings can be pulled out each spring as they come up from the seed bank and should be bagged and properly disposed of.

F. Additional and Updated Information

For additional information including photographs and the most up to date control recommendations please visit www.wachng.org/Plants.