



FACT SHEET: INVASIVE WEEDS

MULTIFLORA ROSE



Multiflora rose (*Rosa multiflora*, C.P. Thunberg), is a noxious, non-native shrub found throughout Pennsylvania. Native to Japan, Korea, and eastern China, this rose was introduced into the United States in 1866 as rootstock for ornamental roses. Later, the U.S. Soil Conservation Service promoted this rose for live fences and erosion control and it was planted by the Pennsylvania Game Commission for wildlife cover and food. Multiflora rose was also planted in highway median strips as

crash barriers and to reduce glare from headlights. Multiflora rose is now considered an invasive weed because of its aggressive growth habit. This rose forms impenetrable thickets that exclude native plant species.

Multiflora rose is a thorny perennial shrub with arching stems or canes. This shrub grows six to ten feet tall and can occasionally reach fifteen feet in height. The leaves are pinnately compound. Typically, they have seven leaflets per leaf, but can have between five and eleven leaflets. The two inch long leaflets are oval. The base of each leaf bears a pair of fringed bracts. The clusters of showy white to pink, fragrant flowers bloom between May and June. The small, bright red fruits, referred to as rose hips, develop in the summer and remain on the bush through the winter.

There are two ways multiflora rose spreads. Birds eat the fruit, distributing the seeds. These seeds can remain viable in the soil for up to 20 years. The other way this rose spreads is through layering. Layering occurs when the cane tips touch the ground and grow roots, forming a new plant. Because of these dispersal methods, multiflora rose spreads quickly and can be found throughout the United States, but cannot tolerate temperatures below -28° F. The plant tolerates various soil moisture and lighting conditions but thrives in sunny well-drained soils.



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Mechanical control of multiflora rose is very time consuming because the roots will resprout. Mowing can be an effective, non-selective mechanical removal method. Mowing needs to be repeated three to six times during the growing season for two to four consecutive years, because new plants may arise from root fragments and dormant seeds

Several herbicides control multiflora rose. Glyphosate applied to cut surface of the stems in the growing season or dormancy period effectively controls the rose. Triclopyr is another herbicide that kills multiflora rose when applied to the cut stems within a few hours of cutting. For both herbicides, application during the dormant season is recommended to reduce the likelihood of damaging non-target species. Between July and September, fosamine can be sprayed on the leaves. Leaf dieback will not occur until the following summer. Fosamine is non-volatile and will only affect woody species. Dicamba is another herbicide that can be applied as a foliar spray during May and June when the plants are in full leaf-out and are flowering. This herbicide will affect all broad-leaf vegetation. Do not spray if desirable broad-leaf vegetation is present. Another effective chemical treatment is water softener salt placed at the base of the plant, but it will remain in the soil for years. The herbicide Escort is very effective in controlling multiflora rose. This herbicide is applied as a foliar spray when the plant is flowering. Read and follow the label directions before applying.

Multiflora rose can also be controlled by biological means. Rose-rosetta is a native virus vectored by an eriophid mite (*Phyllocoptes fruitiphilus*) that can be fatal. However, this virus infects native and commercially imported roses, plums, and apples. Two non-native insects can also be used to control multiflora rose. The larva of the rose stem girdler beetle kills the rose canes by girdling them. The rose seed chalcid wasp feeds on the rose seeds, making the seeds sterile.

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