## UCONN UNIVERSITY OF CONNECTICUT

# **INVASIVE PLANT FACTSHEET**

EXTENSION

# Multiflora rose (Rosa multiflora)

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## **Identifying Features:**

- **OVERVIEW:** Multiflora rose is an invasive shrub that grows to 10-15 ft tall and 9-13 ft wide (Figure 1), forming impenetrable thickets.
- LEAVES: Compound, with 5-11 (usually 7-9) leaflets (Figure 2). Leaflets are dark green and smooth on the upper surface; paler with short hairs on the underside. The base of each leaf stalk bears a pair of fringed stipules (Figure 3), which distinguish multiflora rose from native rose species.
- **STEMS:** Juvenile stems are green with red thorns, which mature to brown (Figure 4). Arching branch habit allows tips of stems to bend to the soil surface, where they can take root and form new (clonal) plants.
- FLOWERS: White to pinkish five-petaled flowers, which open in May and June; 0.5 to 1.5 in. in diameter (Figure 5). Occur in branched clusters.
- SEEDS: Tan to yellow; up to .16 in. Seed germination rates are high - up to 90% in the absence of drought and stress. Seed remains viable for up to 20 years.
- **FRUITS:** Bright red, smooth hips (Figure 6). Fruits form in clusters after flower blooms during the summer and persist on plant through the winter.
- REPRODUCTION/SPREAD: Plants can produce up to 500,000 seeds per year, which are eaten and spread by birds. Can also reproduce vegetatively from the canes (layering) and root sprouts.

#### Habitat:

Multiflora rose thrives in full sun and well-drained, infertile soils. It is known to proliferate in pastures, field edges, and along roadsides. Multiflora rose can also persist in part shade, although flower and fruit production is less abundant.







From top: 1) mature plant; 2) young compound leaves; 3) stipules; 4) juvenile vs. mature stems (photo by James H. Miller, USDA Forest Service, Bugwood.org); 5) flowers (photo source: Penn State Extension; 6) mature fruit. Photos by Alyssa Siegel-Miles except where noted.



### **Control:**

A combination of control tactics is necessary to manage this plant. The optimal time for eradication success is right before the plant flowers. A long-term management plan, including continued follow-up maintenance, is critical to prevent reinfestation or new establishment by seed.

#### **MECHANICAL CONTROL:**

- Pulling, digging, cutting, and mowing may be viable components of a control strategy. Seedlings may be hand pulled. Small plants may be removed by digging, ensuring that the entire root crown is extracted to prevent regrowth. Cut back top growth of established plants to enable easier removal of the root crown (e.g., with a brush mower). Utilize tools (e.g., Weed Wrench, Extractigator) to facilitate the removal of larger specimens.
- Cutting should be done monthly, beginning early in the season. Repeated mowing, with six or more cuts per year near the ground for two to four years, will weaken the plant, inhibit flower and fruit production, and may eventually kill small infestations. Cutting is usually performed in combination with another form of control (e.g., chemical) for greater efficacy.

#### CHEMICAL CONTROL: Follow label instructions for any chemical application.

Cutting or mowing large infestations before any herbicide applications is recommended: it will stress the plants, which will increase herbicide effectiveness.

- **Cut stump:** Immediately after cutting, apply a systemic herbicide (e.g., glyphosate or triclopyr) to freshly cut stems or stumps with a paint brush or sponge applicator. Treatment can be applied anytime during the year when the plant is actively growing; greatest effectiveness will occur in July to mid-September. For best results, cut plants to 6-12 in. in March-June and allow them to resprout. Cut them again to 1 in. and apply herbicide to the cut stumps in July to mid-September.
- Foliar: A systemic herbicide can be applied directly to foliage from July to September. After initial mowing, allow the plant to regrow; apply foliar treatment once regrowth has reached 2-3 ft.
- Refer to Penn State Extension for more details.

#### **Distribution:**

Multiflora rose is widespread in the northeast United States, the Midwest, and southeastern states, with scattered infestations in California and Oregon.

#### **Other Facts and Background:**

Multiflora rose is native to China, Japan, and Korea.



EDDMapS. 2024. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health. Available online at www.eddmaps.org/; last accessed June 7, 2024.

The plant was introduced to the United States in the 1860s for its ornamental value, was routinely used as root stock for rose breeding programs, and was promoted by the USDA Soil Conservation Service for erosion control. It was frequently used as a 'living fence' and touted as a food and cover source for wildlife. By the 1960s, the invasive properties of the plant were well established and the overall effect of the plant on habitat value was determined to be negative.

Sources: Connecticut Invasive Plants Council. (2024, October). Connecticut Invasive Plant List. https://cipwg.uconn.edu/invasive plant list Munger, G. T. (2002). Rosa multiflora. Fire Effects Information System, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. https://www.fs.usda.gov/database/feis/plants/shrub/rosmul/all.html

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