

## **Background, Life History**

Wintercreeper (*Euonymus fortunei*) is a perennial evergreen vine. It was first introduced into the United States from China in 1907 as an ornamental ground cover plant. Nurseries still commonly sell it. Wintercreeper can spread from plantings into natural areas and relatively undisturbed woodlands and forests. Wintercreeper was chosen for cultivation because it grows rapidly, even under harsh conditions. Found in a variety of habitats, wintercreeper can tolerate full sun, heavy shade and moist soil conditions.

Wintercreeper can form an extensive ground cover of up to three feet in height. It spreads vegetatively along vines in contact with the ground by producing small roots called rootlets. The rootlets can develop into new plants. Aerial rootlets allow wintercreeper to climb rocks and trees, reaching heights of 40 to 70 feet. Birds, small mammals and water also disperse wintercreeper seeds.

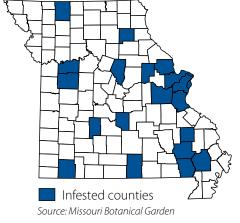
The opposite leaves are oval, slightly toothed, glossy and less than an inch long. The leathery dark green leaves have silvery-white veins. The young stems are green, with branches becoming light gray, and covered with tiny warts with age.

The flowers occur in clusters, with a long flower stalk, and develop from May to July. Individual flowers are yellow-green and have five petals. Plants usually only flower when climbing and almost never when trailing along the ground. Fruits are spherical and smooth, with a pinkish-red capsule containing orange seeds. Fruits mature from September to November.



Wintercreeper is well adapted to varying light and soil conditions. It therefore threatens native plants and natural habitats in open-to-shady and moist-to-dry locations. Due to wintercreeper's aggressiveness, it can form a dense ground cover that reduces or eliminates native groundcover species in woodlands and forests. As it outcompetes native plants for space and sunlight, it also hinders them by depleting nutrients and moisture in the soil. The dense ground cover can also restrict tree seedling establishment. Climbing wintercreeper can smother and kill shrubs and small trees.







Glossy evergreen leaves with prominent silvery-white venation help identify wintercreeper.



New plants emerge from seed spread by birds.



Dense growth can eliminate native ground flora.

## Control

In areas that have only a small amount of wintercreeper, pull up individual vines by the roots and remove. This method can be labor intensive and requires that the entire plant, including all roots, runners and seeds be removed or re-sprouting will occur.

Mature stands of wintercreeper can be very difficult to control. In areas of heavy infestation, cut vines by hand and spray each cut stem with 25 percent glyphosate or triclopyr solution. Cut stump treatment is best applied after the last killing frost and prior to spring wildflower emergence to prevent harm to non-target species. Cutting without the application of herbicides is generally not recommended because this will lead to root sprouting.

Foliar spraying with a 2 to 5 percent solution of glyphosate or triclopyr with surfactant is an alternative control measure in areas with extensive growth. Applications of 3 percent glyphosate with a surfactant in September while wintercreeper is still actively growing have shown to be very effective. However, be careful to avoid non-target species. The waxy nature

of the leaves hinders herbicide absorption. Therefore, it can take from 12 to 18 months before the effects of application are evident. Because wintercreeper is aggressive, repeating control measures in subsequent years will be necessary to ensure complete control.

## **Identifying Wintercreeper**

- evergreen vine sprawling along ground or climbing trees and shrubs
- opposite oval, dark green, glossy leaves less than 1 inch in length
- often with distinct silvery-white veins in leaves
- smooth, pinkish-orange fruits mature in fall

## For Additional Information

www.invasive.org/browse/subinfo.cfm?sub=3024 www.invasive.org/weedcd/pdfs/wow/winter\_creeper.pdf www.nps.gov/plants/alien/fact/eufo1.htm

www.MissouriConservation.org

For more information or to report a population, contact your local Missouri Department of Conservation office, e-mail **WildlifeDivision@mdc.mo.gov**, or write:

Wintercreeper Missouri Department of Conservation Invasive Species Coordinator P.O. Box 180 Jefferson City, MO 65102-0180

