

# LEAFY SPURGE

## *Euphorbia esula*



**Description:** Leafy spurge is a perennial herb that grows 2-3 feet high. Leaves are alternate, narrow with pointed tips, smooth and hairless. The flowers are located on paired, yellowish-green, cup-shaped bracts. Bracts are seen in clusters of 7-10 at the top of the stem. Leafy spurge blooms from late spring to mid-summer. Seedpods are attached to the center of paired bracts.



**Native range:** Europe and Asia  
(<http://www.nps.gov/plants/alien/fact/eues1.htm>)



**Ecological threat:** This plant threatens prairies, grasslands, savannas, sand dunes and open woodlands. It displaces native vegetation by shading, usurping available water and nutrients, and through plant toxins that prevent the growth of other plants underneath it. It is very aggressive and can quickly overtake large areas of land.

**Current North American Range:** Leafy spurge is currently observed throughout all of Minnesota, Wisconsin, Michigan, Illinois, and southern Ontario. It can also be found in northern areas of Iowa, Missouri, Indiana, and southern Ohio.

Current Midwest general distribution, including southern Ontario  Not Known  Isolated  Locally Abundant  Widespread

**Early Detection and Rapid Response Can Help Stop the Spread!**

## LEAFY SPURGE, *Euphorbia esula*

**MANAGEMENT OPTIONS:** (<http://www.nps.gov/plants/alien/fact/eues1.htm>)

Because of its persistent nature and ability to regenerate from small pieces of root, leafy spurge is extremely difficult to eradicate.

### *Biological methods*

Biological control offers a highly promising management tactic for leafy spurge. The U.S. Department of Agriculture has shown success using six natural enemies of leafy spurge imported from Europe. These include a stem and root-boring beetle (*Oberea erythrocephala*), four root-mining flea beetles (*Aphthona* spp.) and a shoot-tip gall midge (*Spurgia esulae*). Large scale field-rearing and release programs are carried out cooperatively by federal and State officials in many northern states. The results are not as immediate as when herbicides are used but, if pesticide use is kept to a minimum, large numbers of these agents build up within a few years and have shown impressive results.

### *Chemical methods*

Several systemic herbicides have been found to be effective if applied in June, when the flowers and seeds are developing, or in early to mid-September, when the plants are moving nutrients downward into the roots. Preliminary research suggests that chemical treatment in the fall followed by a spring burn to reduce seed germination may be an effective strategy for reducing leafy spurge infestations. Multiple treatments are necessary every year for several years, making leafy spurge control an extremely expensive undertaking. If left uncontrolled for a single year, leafy spurge can reinfest rapidly.

### *Fire*

Prescribed burning, in conjunction with herbicides, may also be effective.

**For more information on control and management of this species, please visit the following Web sites:** [www.usda.plants.gov](http://www.usda.plants.gov), [www.nps.gov/plants/alien/factmain.htm](http://www.nps.gov/plants/alien/factmain.htm), [tncweeds.ucdavis.edu/comtrol.html](http://tncweeds.ucdavis.edu/comtrol.html), [dnr.wi.gov/invasives/plants.htm](http://dnr.wi.gov/invasives/plants.htm), [www.invasivespeciesinfo.gov/plants/main.shtml](http://www.invasivespeciesinfo.gov/plants/main.shtml), <http://www.nps.gov/plants/alien/fact/pope1.htm>

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