

# Invasive Alien Plant Species of Virginia

## Canada Thistle (*Cirsium arvense* (L.) Scop.)

### Description

Canada thistle is a herbaceous perennial in the aster (Asteraceae) family which may grow up to five feet in height. It is characterized by sharp, bristly, dark green leaves which are often woolly on the undersides. The purple, occasionally white, flowers are ½ to 1 inch long. Plants bear either male or female flowers. Both male and female plants must be present in an area to produce viable seed. The fragrant flowers attract honeybees, the primary pollinator for this species. A single plant may produce up to 1,500 seeds annually, however, the plant's main means of reproduction is its well developed lateral root system. These roots can grow up to 18 feet in one growing season and send up new shoots every 3 to 6 inches. Canada thistle may be confused with native thistle species. Therefore, consult a natural resource expert for accurate identification before attempting control measures.

### Habitat

Canada thistle grows in most soil conditions except saturated soils. It prefers an open site with full sun. It is found in open disturbed areas such as roadsides, ditch banks and pastures. It will also invade barrens, glades, savannahs, meadows and dunes.

### Distribution

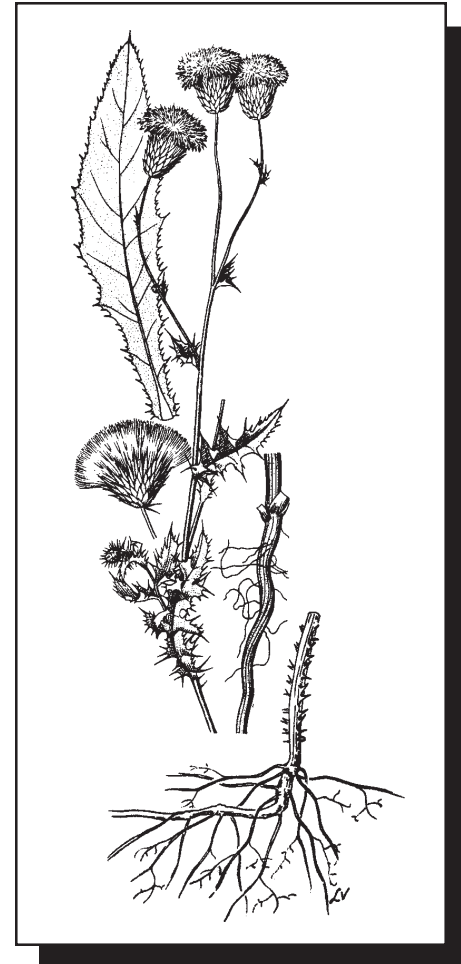
A native of Eurasia, Canada thistle was introduced to North America in the late 17th century. Today it is found from Canada to Virginia, and all states across the northern half the country. In Virginia this species is reported from most counties in the Blue Ridge and Shenandoah Valley region and northern piedmont.

### Threats

Canada thistle's rapid growth aggressively competes with native plants and crops for nutrients, moisture and light. It releases chemicals toxic to other plants. The result is a loss of natural diversity. It is known to harbor other pest species, e.g., insects, and has long been recognized as an agricultural pest. Both natural and human-caused disturbances can create the opportunity for Canada thistle to become established in natural communities.

### Control

Methods used for control of Canada thistle include mechanical, chemical and biological. Mowing may be the most restrictive method. When timed correctly, mowing can prevent seed set and starve the root starch reserves. However, this method is labor intensive and costly. Prescribed fire may be effective, but



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results have varied in response to the timing of the burn and the region in which it is conducted. The extensive root system of this plant reduces the effectiveness of herbicides. Glyphosate, a non-selective herbicide with a short residual life span, was found most effective when applied to the stems rather

For more information, contact the Department of Conservation and Recreation or the Virginia Native Plant Society.



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Virginia Native Plant Society

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than the leaves. Effectiveness was reduced during dry periods in water-stressed plants. Various biological control agents, including insects and fungi, have been used but have had little effect. Consult an agricultural extension agent or natural resource specialist for the best approach to your situation.

For more information on native plant conservation, contact the Virginia Native Plant Society at the address below. For information on Virginia's natural areas and natural heritage resources, contact the Virginia Department of Con-

servation and Recreation's Natural Heritage Program at the address below.

*This fact sheet was prepared with the assistance of Laura A. Peters and Nicole M. LaChance in the process of their fulfilling course requirements at Virginia Polytechnic Institute and State University.*

### References

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