

INVASIVE EXOTICS

Canada Thistle

Cirsium arvense

Composite Family (Asteraceae)



What does it look like? Canada thistle, native to Eurasia, is a perennial thistle that grows up to 4 ft. in height. The pinnately lobed leaves are dark green and prickly with a hairy underside. Purple to white flowers are borne on numerous heads.

What habitats are threatened by this plant? Canada thistle is mostly found in open disturbed areas such as agricultural land, roadsides, ditch spoil banks, gopher mounds and overgrazed pastures. In undisturbed areas, Canada thistle has difficulty establishing from seed. It occurs on all soils except those that are waterlogged and poorly aerated.

How does this plant spread? Canada thistle produces creeping horizontal roots that produce dense patches of aerial shoots. These roots can grow to a length of 36 in. in one growing season. Under optimum conditions, vertical roots grow down as far as the water table. The plant can regenerate from fragments that are as small as 2 in. long and ½ in. in diameter. Along with root dispersal, one plant can produce up to 5,200 seeds per plant. Seeds are dispersed by wind and water runoff. About 90% of all seeds germinate within one year.

Why is this plant a threat? Canada thistle competes with crops for moisture, nutrients and light. It is responsible for millions of dollars of direct crop loss annually, with added costs for control. Its spiny nature and patchy growth render infested pastures unusable to livestock. Canada thistle interferes with the harvest of horticultural crops and harbors destructive insects and pathogens. In natural areas, Canada thistle is more often a legal and public relations issue rather than a biological threat. In gardens, Canada thistle not only colonizes bare soil, but shows remarkable capacity to insinuate itself even into dense ground cover plantings.

How can it be controlled? Mowing at 21-day intervals prevents seed set and starves the root system. This is a time-consuming and labor-intensive process. However, consistent timed mowing for a four-year period will eliminate the plant. For small infestations, hand-pulling followed by a glyphosate herbicide treatment such as Roundup when the plant regenerates prove effective. (Follow label directions when applying any herbicide.) For large infestations, herbicide use is more difficult due to the plant's deep, well-developed root system. Most herbicides that would be used to control broad-leaved perennials do not translocate easily into the root system. Herbicide treatment for large infestations is very involved and should be done by a professional.

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