

NEW JERSEY NON-NATIVE PLANTS



Canadian thistle

(*Cirsium arvense*)

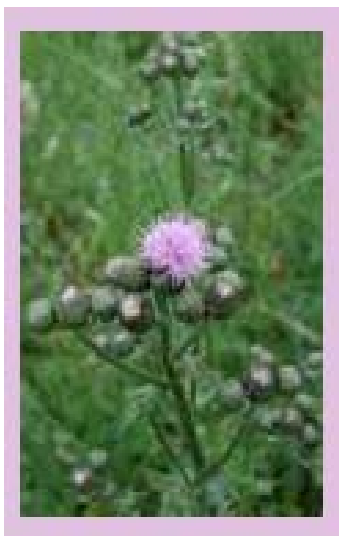
Description

Canadian thistle is a herbaceous perennial, growing from 0.5-1 meters tall. The stems are branched and ridged, and sometimes slightly hairy. The alternate, lance-shaped leaves have lobed spiny margins. It can be distinguished from other thistles by creeping horizontal roots, dense clonal growth, and small (1–1.5 cm diameter) dioecious flowerheads (male and female flowers on separate plants). Some plants may produce self-fertile hermaphrodite flowers. The color of the insect-pollinated flowers ranges from lavender to pink, or white. Seed production is prolific, and one plant can produce an estimated 40,000 seeds, each capable of remaining viable in the soil for up to 20 years. Seeds are dispersed by wind and possibly by water, and also as contaminants in agricultural seeds, in farm animal droppings, and on farm machinery. Plants spread primarily by vegetative growth, despite high seed production. Horizontal roots can expand by 4-5 meters per year. Plants also propagate from stem and root fragments. Root fragments as small as an inch can resprout.



Why is Canadian thistle bad for New Jersey?

Canadian thistle is listed as a Federal Noxious Weed, primarily because of its economic impact on agriculture. Canadian thistle is shade intolerant, but grows along forest edges. It competes with and displaces native vegetation, changing the structure and composition of some habitats. It primarily threatens non-forested plant communities, such as savannas, glades, sand dunes, fields, and meadows. It has been collected most often from disturbed areas and fields, but also occurs in meadows and limestone fens.



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Control:

How can you get rid of Canadian thistle?

Because Canadian thistle expands primarily by vegetative means, killing established clones is most effective for management. However, seedlings are the most susceptible growth stage.

Mechanical: Burning can increase the competitiveness of indigenous species, but does not eliminate thistle. Mowing can be effective if done during the summer, and again in early fall, leaving enough stem and leaves to avoid stimulating the rootbuds.

Chemical: Herbicides may be used with effectiveness in the fall, but populations differ in their susceptibility to herbicides, and herbicides could adversely affect indigenous plants. Foliar application of glyphosate (i.e. Roundup) works well on Canadian thistle. Control may be most effective when the plant is under stress, such as during drought, flood, or after a severe winter. Repeated treatments are necessary to eliminate the seed bank.

