



Canada thistle

Cirsium arvense

Identification:

Asteraceae (Aster Family)

Perennial forb **Height:** 1-4' **Width:**
Flower: Indigo, Lavender **Blooms:** Mid-summer to Early fall **Fruit:**

Leaf Arrangement:
Fall Color:

In late-April or early-May, Canada thistle emerges as a small rosette, but new shoots can come up at almost any time of the year. Leaves are irregularly lobed with small spines along the margins. The upper surface of mature leaf is dark green with a paler underside. Mature plants reach 2-5 feet in height and begin flowering in June. The flowers are magenta in color and numerous, 3/4" to 1 1/4" in diameter. By July their seeds, windborn on delicate fluff (pappus), can be found all over the landscape. While other thistles are individual florets and stalks, this plant tends to grow in colonies. Unlike bull or musk thistle, the flowers and stems of Canada thistle do not have spines or prickles. Differentiate the native pasture thistle by looking for the nearly white underside of the pasture thistle leaves (as opposed to pale green).



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NR-40 Restricted

AKA: creeping thistle

Description & Impact:

Canada thistle grows in meadows, prairies, fields, pastures and waste places. This Eurasia member of the aster family was introduced to North America in the early 1600s. One of the most tenacious and economically impacting agricultural weeds, it is listed as a noxious weed in 43 states. This perennial has a strong root system with roots that can extend horizontally 15 ft. or more and vertically 6-15 ft. deep. It may produce 1,000 to 1,500 seeds per flowering stalk and seeds can remain viable in soil up to 20 years. Canada thistle's ability to rapidly spread both by adventive roots and prolific seeding make it particularly difficult to manage.

Control Methods:

Chemical: Herbicide is most effective in the rosette stage of growth (6-10"), so the best times to spray are in late spring or after they resprout following mowing or other treatments. Another critical time is in June after flower buds are formed, but before flowers open. Fall herbicide application can be done even after the first hard frost if the plants still appear lively and the temperature is above 50 degrees. Glyphosate (Round-Up®) is only partially effective on Canada thistle and repeated treatments will be needed. Transline® and Milestone® are most effective, often controlling thistle in a single treatment and have the added benefit that they will not harm grasses and some other plants. Broad-leaf specific herbicides such as triclopyr (Garlon 3A®, etc) are moderately effective and more readily available. In sensitive areas, a leaf-spritz application of Garlon 4 done before seed production will be effective with limited collateral damage. Always read herbicide labels carefully before use and apply according to the instruction on the product label.

Organic: Chemical-free control of Canada thistle is unlikely unless you are extremely observant and persistent. The extensive root systems of this plant make them resistant to tilling or digging. Starting in early June as the thistle begins to flower, mow, cut or pull all stems, and repeat this every 3 weeks through the entire growing season is optimal for depleting the roots' energy stores. Well established plants may take two years or more to kill off entirely. Smothering is only effective if the entire colony can be covered. Late spring burns can be helpful in controlling this species, but should be done after the plants have sprouted.

Revegetation Recommendations: Whichever approach you take, it is important to establish a hearty, stable and diverse community of native prairie or savanna plants to compete with Canada thistle. Ultimately, competition from other plants will be a critical asset when trying to eliminate an established colony of Canada thistle.

Citations: