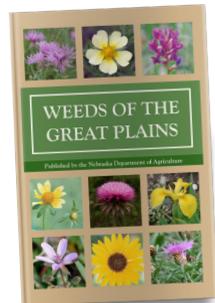


NOXIOUS WEEDS ARE EVERYONE'S CONCERN

Noxious weeds compete with pastures and crops, reducing yields substantially. Some noxious weeds are directly poisonous or injurious to man, livestock and wildlife. The losses resulting from noxious weed infestations can be staggering, costing residents of Nebraska millions of dollars due to production losses. This not only directly affects the landowner, but erodes the tax base for all residents in the State of Nebraska.

The business of noxious weed control is everyone's concern, and noxious weed control benefits everyone. The support of all individuals within the state is needed and vital for the control of noxious weeds within Nebraska. It is the duty of each person who owns land to effectively control noxious weeds on their land.

If you have questions or concerns about noxious weeds, please contact your local county noxious weed control authority or the Nebraska Department of Agriculture.



Material derived from *Weeds of the Great Plains*, published by the Nebraska Department of Agriculture.

For more information, visit nda.nebraska.gov.

CANADA THISTLE



NEBRASKA NOXIOUS WEED

PREPARED BY THE
NEBRASKA DEPARTMENT OF AGRICULTURE
AND THE
NEBRASKA WEED CONTROL ASSOCIATION

CANADA THISTLE FACTS

Common Name: Canada thistle (creeping thistle, California thistle)

Growth Form: Forb

Life Span: Perennial

Origin: Eurasia and North Africa

Flowering Dates: June–August

Reproduction: Rhizomes and seeds

Height: 0.3–1.2 m (1–3.9 ft)

Inflorescences: Dioecious; heads numerous in corymblike clusters; involucre (1–2 cm tall, 5–10 mm wide) with 5 or 6 series of bracts; bracts ovate (2–6 mm long, 0.7–1.2 mm wide), gradually pointed and rarely with short spines

Flowers: Pink to purple (rarely white) disk florets; male corollas 1.2–1.5 cm long; female corollas 1.8–2.5 cm long, fragrant

Fruits: Achenes, oblong (2.5–4 mm long and 1–1.5 mm wide), dark brown to tan, flattened, curved; pappus of white bristles (1.5–2.5 cm long); seeds 1

Seeds: Small

Stems: Erect, branching above, ridged, surfaces without hair above and pubescent below, hollow, with spines; forming dense colonies

Leaves: Alternate; blades simple; lower stem blades oblong to oblanceolate (5–18 cm long, 1.5–6 cm wide); margins shallowly to pinnately lobed to entire, lobes and margins short spined, surfaces white tomentose to without hair; sessile to petiolate, clasping or not; upper stem blades similar except reduced upwards, less lobed, sessile

Underground: Rhizomes, fleshy, extensive, creeping

Where Found: Central and northern Great Plains on pastures, cropland, ditch banks, roadsides, mud flats, stream and lake banks, and disturbed sites. Canada thistle can be especially abundant in deep and moist soil. (NE, SD, ND, KS, OK, TX, MN, IA, MO, MT, WY, CO, NM; Canada: Alberta, Saskatchewan, Manitoba)

Uses and Values: Canada thistle seeds are eaten by songbirds and sometimes furnishes nesting cover for rails and shorebirds. It is not grazed because of the spines.

Poisoning: It may accumulate toxic levels of nitrate.

Other: Canada thistle is an aggressive weed and is classified as a noxious weed throughout the Great Plains. This species is dioecious and large patches may not produce any seed. However, the patches may continue to become larger from the creeping rhizomes.

IMPACT OF CANADA THISTLE

Canada thistle is at home on the range and in cropland. It infests 290,000 acres of Nebraska's irrigated cropland, dry land fields, wet pastures, lake shores, and drainages. The bulk of Nebraska's Canada thistle grows in the Panhandle, but it is spreading eastward at a steady pace.

Canada thistle was brought to America from Eurasia in seed, feed, and animal bedding. It was first declared noxious in Nebraska in 1873. Landowners continually combat this aggressive, perennial weed to slow its spread.

Canada thistle is not just another pretty flower. Severe infestations can reduce wheat yields up to 65% and corn yields by 35%. Canada thistle reduces the carrying capacity of a pasture because cattle avoid the prickly, thistle-infested areas.



Heads are only 1 cm in diameter (or smaller) and rarely white as shown in this photograph.

CONTROLLING CANADA THISTLE

Mechanical and Cultural Control

As with most perennial noxious weeds, there is no magical "one-time treatment" to control Canada thistle. Integrated pest management is the best method in controlling this aggressive invader.

Canada thistle is a deep-rooted perennial which reproduces by seeds and roots. The extensive network of horizontal and vertical roots produce secondary plants. Root fragments as small as ½ inch have the ability to develop into new plants. Therefore, tillage and mowing are not successful long-term control methods. Specific grasses and crops successfully compete with Canada thistle for water, nutrients, and sunlight, which reduces plant vigor and population.

The pink to purple flowers on Canada thistle occurs from June to August. The heads are approximately ½ inch in diameter. A large plant may produce up to 5,000 seeds. Some seeds may lay dormant for up to 20 years. To prevent seed production, Canada thistle must be controlled in the spring.

Biological Control

Natural enemies (biocontrol agents) for control of Canada thistle have been used since the late 1980s in Nebraska. These agents work slowly, and the results may not be seen for many years. These agents are considered a tool to assist in the control of Canada thistle and should never be relied on to completely control any noxious weed. The use of biocontrol agents shall be as effective as the use of herbicides and shall be approved by your local county noxious weed control authority.

Canada Thistle Control Summary

The key to successful Canada thistle control is persistence. A watchful eye must be kept for new infestations. Timely efforts to control small patches are much easier and profitable. Continued follow-up is essential to stay on top of known infestations.



Herbicide Control

The use of herbicides can be an effective tool to assist in controlling noxious weeds. A person needs to identify the problem and the appropriate herbicide for the plant as well as the site that the plant is growing. If the noxious weed infestation is severe and scattered across a large area, then a broadcast application may be warranted. However, if the noxious weeds are in patches or a few scattered plants here and there, a person may be able to spot treat individual plants or patches. This approach requires less herbicide and has minimal impact on native plants and the environment. Controlling noxious weeds with herbicides is only one tool and should never be the only control option.

Additional information regarding herbicide use can be found through the Nebraska Cooperative Extension EC130 (*Guide for Weed, Disease, and Insect Management in Nebraska*) or your local county weed control authority at neweed.org.