

# Canada Thistle

*Cirsium arvense* (L.) Scop



Rob Routledge, Sault College, Bugwood.org

**Plant Family:** Sunflower (Asteraceae)

**Other Names:** Californian thistle, Canadian thistle, field thistle, perennial thistle, corn thistle

**Similar Species:** Flower looks similar to spotted knapweed, plant looks similar to some thistle varieties

**Weed Classification:** Priority 2B

**Native to:** Europe

**Is This Weed Toxic?** No

## Identification

Canada thistle can reach heights of 4 feet and forms deep and extensive root systems, making it difficult to control. Creeping horizontal roots sprout new plants and expand very aggressively, growing many feet in just one season. These roots also grow deeper than many tilling operations can treat. Flowers resemble spotted knapweed in color and shape and tend to be smaller than other thistle species. Leaves are prickly to the touch and generally require gloves to handle. One plant is capable of producing over 3,000 seeds annually. This plant reproduces by both seed and root, but primarily from the roots. Seeds can survive burial in the soil for 20 years or more.

## Treatment

Since this plant stores food in its extensive roots, disrupting these roots with plowing every few weeks over multiple seasons can eventually result in a weakening of the plant system.

Hand-pulling can be effective in the same regard as plowing, but only if the infestation is small to begin with and it is adhered to stringently over multiple seasons.

Providing a cover crop and/or competition that is taller than the thistle can be used to prevent the thistle from thriving, although this will likely not lead to eliminating the plant.

Burning dead thistle can clean up debris from the previous season, allowing better contact for spring herbicide application. Repeated burning over many seasons can damage your existing grass and desirable plants so use in moderation. Burning GREEN Canada thistle shoots will likely result in an increased weed density because it can stimulate the release of dormant root buds which increases the growth of new shoots. Mowing will prevent plants from going seed if mowed shortly before the flower buds open. Although this technique may result in more green growth because it stimulates new root buds, it provides a good opportunity to apply herbicide.

The best time to treat Canada thistle with foliar herbicides is when the plants are actively growing up until after the first flower buds are formed but before the first flowers open. The fall regrowth period during September and October is also a good time to apply. Herbicide application will likely need to be repeated over multiple seasons.

U of MN Extension Service. "Canada Thistle Suppression with Burning." *On-Farm Cropping Trials Northwest and West Central Minnesota* (2006): n. pag. U of MN Extension Service. 2007. Web. 24 Jan. 2017.

"Canada Thistle." *National Invasive Species Information Center*. USDA, n.d. Web. 27 Feb. 2017.

Ross, Merrill. "Control Practices for Canada Thistle, Botany & Plant Pathology, Purdue U." *Control Practices for Canada Thistle, Botany & Plant Pathology, Purdue U*. Department of Botany and Plant Pathology, n.d. Web. 24 Jan. 2017.



Photo of two years of root growth from one foot of original root: Provided by the Department of Botany and Plant Pathology Purdue University, Jan Samanek, Phytosanitary Administration, Bugwood.org, Phil Westra, Colorado State University, Bugwood.org, Bull thistle flower next to Canada thistle flower: Steve Dewey, Utah State University, Bugwood.org, Bonsak Hammeraas, NIBIO - The Norwegian Institute of Bioeconomy Research, Bugwood.org