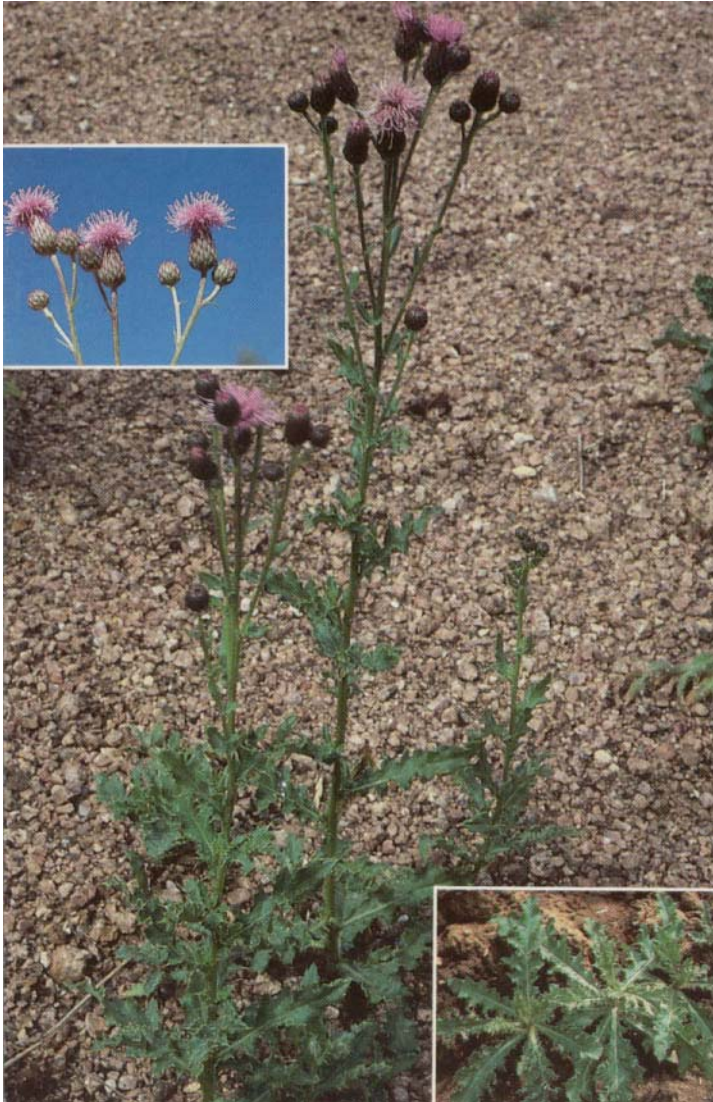


## Noxious Weed: CANADA THISTLE (*Cirsium arvense* L.)



Photos by Tom Whitson, Roy Reichenbach

**Growth Habitat:** Perennial, erect, up to 4 ft. tall.

**Leaves:** Varies from light to dark green, oblong or lance shaped, deeply cut, spiny toothed margins (some may be smooth); slightly hairy below.

**Stem:** Smooth to slightly hairy, branched at top.

**Flower:** Small bristly clusters, 3/8 to 5/8 inch in diameter, light lavender to deep rose purple. Plants are male or female.

**Roots:** Extensive, fleshy, creeping rootstocks.

**Seeds:** Smooth, light to dark brown, tipped by a cupped conical point, approx 1/8" long.

**Other:** Reproduces by seed and creeping rootstocks.

**Management:** Mechanical control - Mowing hay meadows can be an effective tool if combined with herbicide treatments. Always combine mowing with cultural and chemical control. Mowing at hay cutting stimulates new Canada thistle shoots to develop from its root system.

Biological control - *Ceutorhyncus litura* is a weevil currently used as a biocontrol agent in Colorado. *Ceutorhyncus* alone will not effectively control Canada thistle. Combine the weevil with cultural techniques that allow for maximum desirable plant competition. *Urophora cardui* is another biocontrol insect available from the Colorado Department of Agriculture.

For more details on invasive weeds visit:

<http://www.coopext.colostate.edu/boulder/AG/agweedsspecificweeds.shtml>

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Chemical Control - Read the label, follow directions and use precautions. Research at Colorado State University shows that Tordon 22K (picloram), Curtail (clopyralid plus 2,4-D), Transline (clopyralid), Banvel/Vanquish/Clarity (dicamba), 2,4-D and Telar (chlorsulfuron) are effective against Canada thistle. These herbicides are most effective when combined with cultural and/or mechanical control.

Banvel/Vanquish/Clarity, and 2,4-D may be used on pastures, rangeland and non-crop areas. Tordon, Curtail, Telar and Transline may be applied on noncrop areas only. Colorado State University data indicates that Banvel/Vanquish/Clarity or Telar are effective when combined with 2,4-D as a split-season application.

Apply 2,4-D, 2 quarts per acre (A), in spring when Canada thistle is 10 to 15 inches tall, in pre-bud to early bud growth stages. Re-treat in fall with Banvel/Vanquish/Clarity (2 quarts/A) or Telar (1 ounce/A) to re-growth. Use a surfactant (0.25 percent to 0.5 percent v/v) with Telar for adequate control. Banvel/Vanquish/Clarity may also be applied in early spring at 2 quarts/A when Canada thistle is in the rosette stage. Tordon (1 quart/A) or Tordon plus 2,4-D (1 quart + 1 quart/A) is effective whenever Canada thistle is actively growing. Fall applications are especially effective.

Curtail and Transline are effective when applied in spring after all Canada thistle plants have emerged. Apply Curtail (2 to 3 quarts/A) when the oldest Canada thistle plants are entering the bud growth stage and the youngest are in the rosette to bolting growth stages. Apply Transline (2/3 to 1 pt/A) when Canada thistle is in the rosette to bud growth stages. Transline at 1 pt/A also is effective when applied in fall.

Recent research at Colorado State University shows that the performance of Curtail to control Canada thistle can be improved when preceded by two or three mowings. When Canada thistle infestations occur in situations where root growth would be restricted, such as habitats with high water tables, begin mowing when it is 12 to 15 inches tall. Repeat mowings at about one month intervals. Apply Curtail at 2 to 3 quarts/A in October or about one month after the third mowing. Follow this regimen for two consecutive years.

For more chemical control information go to: <http://www.coopext.colostate.edu/boulder/AG/agweedsspecificweeds.shtml>. For more information on noxious weeds go to: <http://www.ci.boulder.co.us/environmentalaffairs/ipm/index.htm> or <http://www.ag.state.co.us/dpi>

Colorado State University Cooperative Extension. Beck, K.G. Canada Thistle. Publication 3.108. 2000.

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