

# Canada thistle

Adams County  
Weed Department  
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## Key ID Points

- 1 Purple flowers form in clusters of 1-5 per branch
- 2 Floral bracts are spineless
- 3 Small heads, vanilla scent

## Canada thistle Identification and Management



Canada thistle during the flowering stage. This stage typically occurs in the early summer. Seed production will follow and effective management options will then become limited.

## Identification and Impacts

Canada thistle (*Cirsium arvense*) is a non-native deep-rooted perennial that spreads by seeds and aggressive, creeping, horizontal roots (rhizomes). Canada thistle can grow 2 to 4 feet in height. The leaves are oblong, spiny, bright green in color, and are only slightly hairy on the undersurface. Flowers occur in small clusters that form on the ends of branches. They are about 1 cm in diameter, tubular shaped, and vary from white to purple in color with a strong vanilla scent (female flowers).

Canada thistle emerges from its root system from late April through May. It begins to flower in late spring to early summer with increase in day length. Canada thistle only produces about 1,000 to 1,500 seeds per plant. Typically, it reproduces vegetatively through a creeping root system, and can quickly form dense stands. Every piece of root, from ½ to 1 inch in length, is capable of forming new plants. The key

to controlling Canada thistle is to eliminate seed production and also to reduce the plant's nutrient reserves in its root system through persistent, long-term management.

Canada thistle is designated as a "B" list species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit [www.ag.state.co.us](http://www.ag.state.co.us).

Canada thistle is one of the most feared noxious weeds in the U.S. as it can infest many land types, from roadsides, ditch banks, riparian zones, pastures, irrigated cropland, to the most productive dryland cropland. Forage production is severely reduced because cattle will not graze near infestations.

Combining control methods for Canada thistle is imperative. The weed needs to be continually stressed, forcing it to exhaust root nutrient stores and eventually die. Of all control methods, prevention is most important. Maintain healthy pastures and rangeland and continually monitor your property for new infestations.

On the backside of this sheet are Canada thistle management recommendations. If you have any questions or would like more information, please contact the Adams County Weed Department at 303-637-8115. Please visit our website [www.adamscountyextension.org](http://www.adamscountyextension.org).

Canada thistle infestation.



*Cirsium arvense*

**CULTURAL**

Establishment of selected grasses can be an effective cultural control of Canada thistle. Contact your local Natural Resources Conservation Service for seed mix recommendations. Maintain healthy pastures and prevent bare spots caused by overgrazing. Bareground is prime habitat for weed invasions.

**BIOLOGICAL**

Cattle, goats, and sheep will graze on Canada thistle when the plants are young and succulent in the spring. Follow up grazing with a fall herbicide application.

Insects are available but have not been effective. Insects can be obtained at no charge from the Colorado Department of Agriculture. Please call 970-464-7916 or visit [www.ag.state.co.us](http://www.ag.state.co.us) for more information.

**MECHANICAL**

Due to the extensive root system, hand-pulling this plant is not a viable option. Mowing can be effective if done every 10 to 21 days throughout the growing season. Combining mowing with herbicides will further enhance control of Canada thistle.

Shallow tillage (disk, sweep) has shown to be counter-productive, creating a denser, more uniform stand of Canada thistle.

*Integrated Weed Management:*

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*Of all control methods, prevention is most important. Maintain healthy pastures and rangeland and continually monitor your property for new infestations.*

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**HERBICIDES**

The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow the label directions. The herbicide label is the LAW!

*Rates are approximate and based on equipment with an output of 30 gallons per acre. Please read label for exact rates.*

HERBICIDE	RATE	APPLICATION TIMING
Milestone	5-7 ounces/acre or 1 teaspoon/gal water	Spring at pre-bud growth stage and/or in the fall to plant regrowth Add non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Telar DF	1-3 ounces/acre or 0.50 grams/1gal water	Apply in the spring during bud to bloom stage and/or to fall regrowth. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.
Redeem R&P	3 pints/acre or 1.25 oz/gal water	Apply from rosette to bud stage when all plants have emerged. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.
Tordon 22K <i>*This is a Restricted Use Pesticide*</i>	1 qt/acre or 1.0 oz/gal water	Spring - early bud stage and/or fall regrowth. DO NOT apply near or under trees or where soils have rapid permeability or where water level is high. Add a non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.