

## **CONTROL**

#### **Hand Pulling**

Hand pulling is only effective on small infestations if done consistently and persistently throughout the growing season and for multiple years. Be sure to wear gloves.

### Mowing

Mowing is an inconsistent method of control for Canada thistle, depending on the conditions present at the site. In some instances mowing two to three times annually for a period of three or more years can eliminate an infestation of Canada thistle, in other situations the same regime will only accomplish a reduced seed crop. When combined with cultural and chemical controls, it is more effective.

### **Biological control**

N/A

### Grazing

Grazing is not a recommended method of control because livestock tend to avoid it because of its spiny stems and leaves.

Ideal Timing for Treatment Options					
Spring	Summer	Fall			
Hand Pulling					
Mowing + Herbicide					
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<sup>\*</sup> Consult label for more specific timing of herbicide use. Some may even extend towards winter.

#### Herbicide

The herbicide chart on the back lists approved controls for Canada thistle. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.







# Canada Thistle Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Perennial	Horizontal and vertical	Alternate, wavy, lance- shaped, lobed, spine-tipped and lack stalks. Upper leaves smaller than lower leaves.	1 to 4 feet tall, lack spines, erect, ridged, branched, and slightly hairy.		Long, flattened seeds with tufts of white hairs.

### Herbicides for Canada Thistle, Cirsium arvense

Active Ingredient Rate		Efficacy	Comments		
Aminocyclopyrachlor + Chlorosulfuron			This is a nonselective herbicide; care must be taken to avoid application onto non-target and native species.		
Chlorosulfuron	1.5 oz/acre	Apply postemergence to thistles in bud-bloom stage or fall rosettes	Foliar best on seedlings and saplings. Habitat is okay for riparian use. Though non-target species may be killed or injured through root transfer.		
Clopyralid + 2,4-D amine	1.5 qt. + 1.5 qt /acre	Apply to actively growing thistle after most basal leaves emerge	Crop rotation restrictions while using product, up to 4 years potential harm, refer to label for transferring livestock back into broadleaf crop areas		
Dicamba	Any time during growing season; uptake through foliage and root system		May mix with glyphosate in the fall. Avoid drift to sensitive crops. Dicamba will damage clovers in pastureland.		
Diflufenzopyr + dicamba	1 oz/acre	Spring to rosettes	Add nonionic surfactant or methylated seed oil to spray mix.		
Aminopyralid	5-7 fl oz/acre	Apply in spring to plants in prebud stage	Do not exceed 7 fl oz/a per year. Desirable broadleaf plants will be seriously injured, do not allow drift.		
Glyphosate	10-33% solution, 5-10 gallons/ acre	Apply to growing thistle after the bud growth stage.	Glyphosate is nonselective and will kill any vegetation it comes in contact with. Spray for uniform coverage, not for runoff.		
Picloram	1 pint/acre	Apply to growing thistle after most leaves emerge but before bud stage.	Do not apply to shallow groundwater areas. Avoid desirable broadleaf plants.		

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.

