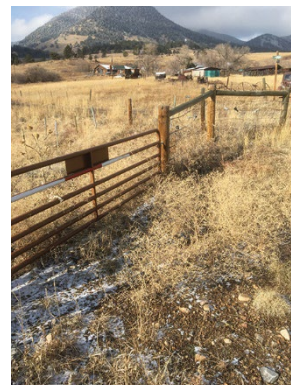




Diffuse Knapweed

Centaurea diffusa



Diffuse knapweed

General	Family: Sunflower (Asteraceae) Native to Eurasia Colorado List B - Control required
Common names	Tumble knapweed
Habitat	Herbaceous biennial to short lived perennial Dead plants break off near the ground and tumble Found in disturbed areas, overgrazed pastures and rangelands, roadsides, rights-of way, and gravel pits Prefers dry, light, porous soils. Intolerant of shade and flooding

PLANT

Vegetation	Grayish green Contains chemicals that may irritate skin; contains chemicals that may inhibit other plants Mature plants are 1-2 feet tall with numerous single flower-heads at the tips of shoots
Roots	Taproot
Flower	June - September White and sometimes light purple Small - 1/4 inch wide and 3/4 inch long Bracts are comb-like and tipped with a spine Sometimes bracts are dark tipped but can be told apart from Spotted knapweed by the long terminal spine
Seed	15,000+ seeds per plant Seed may stay dormant in soil for more than 6 years Seed spread by plants as they break off at the base and tumble
Seedling	Rosettes formed the first year and bolt early in May to June of the next year
Reproduction	Seed

CONTROL -- CHEMICAL

Timing	Herbicide	Notes
Spring or Fall - Rosette	2,4-D (various) (as a part of tank mix) 2,4-D + Dicamba (various) Aminopyralid (Milestone) Clopyralid (Transline); Clopyralid + 2,4D (Curtail); Clopyralid + triclopyr (Redeem) Dicamba (various) Glyphosate (various) Picloram (Tordon) Restricted Use	Use of a surfactant is recommended for most herbicides to help increase contact with the vegetation and to facilitate herbicide uptake. Refer to the specific label for the appropriate type of surfactant. Treating at the rosette and early bolt stage stops biennial weeds from using resources that desirable plants need to prosper. Refer to the individual label for allowed sites, specific timing, and restrictions about grazing and haying.
Spring to Early Summer Rosette to Early bolting	Aminopyralid (Milestone) Aminocyclopyrachlor + chloresulfuron (Perspective) Clopyralid (Transline); Clopyralid + 2,4-D (Curtail); Clopyralid + triclopyr (Redeem) Glyphosate (various) Picloram (Tordon) Restricted Use	Formulations of more than one active ingredient are available. For established populations, control will take a few years so treatment will need to be repeated.

CONTROL -- NON-CHEMICAL

Technique	Timing	Method
Biological		<i>Agapeta zoegana</i> : root boring moth* <i>Cyphocleonus achates</i> , root weevil* <i>Larinus minutus</i> , seed-head weevil* <i>Sphenoptera jugoslavica</i> , root borer* *Not a control option in eradication zones or when site is under enforcement
Burning	Spring Rosette	Follow up with additional treatment. Burning may not be allowed so check with your local fire protection district for current restrictions.
Cultivation	Spring to Fall Rosettes and young plants 3-6 inches tall	May need to be repeated throughout the season and on an annual basis until the seedbank is exhausted. May allow more seeds to germinate due to disturbance.
Grazing	Early spring prior to bud stage	Sheep, goats, and cattle will eat
Mowing	N/A	Not effective. Plants will regrow from crown and produce as many seeds as unmown plants.
Prevention	Anytime	Maintain the health of the site by encouraging native vegetation.
Removal	Spring to Early Summer Rosette to Bolting	Remove rosettes and young plants before they are more than 5-8 inches tall (before flower buds form). Remove at least the top couple inches of the taproot.
	Summer Flowering	Remove plants with flower heads, bag, and dispose of in the trash or landfill. Sever root at least a couple inches below the soil. Plants without flower buds do not need to be put in the trash.
	Fall - Rosette	Remove rosettes and at least the top couple inches of the taproot.
	Pulling when plants are small results in less bulk and makes disposal easier. Pulling will disturb the soil so it may contribute to more of the seedbank germinating.	

Use all chemicals according to the manufacturer's label. The label will provide specific instructions including allowed sites, application methods, rates, storage, re-entry requirements and personal protective equipment. No specific recommendation or endorsement is made or implied by listing the above methods or products.
7/2023

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Chemical					Rosettes and early-bolt stage				Rosettes			
Rosette Removal				Remove the top few inches of the root					Remove the top few inches of the root			
Plant Removal				Plants with flowers need to be bagged and put into the trash Remove the top few inches of the root								
Flower Removal						Bag flowers and put into the trash						
Cultivation				Plants without flowers					Rosettes			