Dear Paradise Hills Homeowners:

Please note: this message is being delivered to all current Paradise Hills property owners:

Many of you have been working hard to control the noxious weeds on your properties over the years by mowing and bagging, hand pulling and spraying, or overall spraying. As we walk throughout the neighborhood it is clear that many of you have been diligent about this effort, and understand that it is the responsibility of every property owner to comply with both Jefferson County's noxious weed regulations and the same requirements found in the Paradise Hills Covenants. In addition, you understand that we all have a responsibility to each other to maintain weed-free lots so as not to completely undermine the efforts and expenses expended by our neighbors. This past fall of 2017 it also became obvious, as we surveyed our neighborhood, that there were a very significant percentage of Paradise Hills owners who had not controlled their weeds.

It is now August, and the thistles are blooming! So please, before it is too late and the thistles go to seed and begin blowing about, we feel it is time to remind everyone forcefully that this is both a legal requirement and a heartfelt request from your community to please fulfill your responsibilities as a Jeffco resident and Paradise Hills homeowner. Living in a beautiful mountain environment is a privilege, and one that requires both responsibility and effort.

In August (right now!):

- You can mow your entire property if that is your choice for weed control. After about three years of everyone in an area doing this consistently the weeds will be greatly reduced, however the mowing can cause erosion and bare spots on steep slopes. To further improve the weed control and reduce erosion problems, reseeding the mowed areas with suitable mountain grass mix every year will help the native grasses compete with, and overcome, the invasive weeds. This mix is available for purchase at Jefferson County, or at landscape supply companies.

- If you prefer not to mow and want to maintain your long mountain grasses, weed free, you can cut the weeds by hand before they go to seed, and then hand spray the remaining plant individually with an appropriate chemical for the weeds you are trying to eradicate. Please remember that "Roundup" kills grass and often does not kill some of the tougher weeds. Many products kill both grass and weeds, and these will leave your entire yard with dead areas that will repopulate with new weeds, as there will no grass to compete with them. Be careful to buy the correct product! A half and half mixture of broadleaf weed killer and brush killer in a

backpack sprayer has proven to be very effective on individual thistles which are first cut, and then the remaining plant is sprayed. Used carefully, this method will preserve the grass and eliminate the weeds. Reseeding all bare spots that result from eliminating the weed patches is also critical to this method.

- There are companies that will come spray your whole property for weeds. This will kill the weeds, but will also kill many of the broadleaf wildflowers. It may be a good option for people who cannot manage the individual cutting and spraying method, and still want to have longer grasses.

- There are also some excellent sprays that precisely target bindweed and knapweed, two of the toughest weeds to eradicate while not damaging the grass they are in.

If you want more information on the weed killers you can use for precise hand spraying (none of these should be used as an overall broadcast spray) please write to us at pdeardorff@tkparch.com, or kkeating@tkparch.com.

We are including a few of the weed information sheets available on the CARE website at www.CareJeffco.org. These have excellent, expert information on how to best eradicate your weeds.

Please note that only mowing a portion of your property just around the house is ineffective and results in all the un-mowed portions spreading seeds into your mowed yard, and the yards of all your neighbors. You must mow ALL the areas of your property with weeds on them, usually more than once a season, to control weeds with mowing.

A letter explaining Jefferson County's weed requirements was sent to all homeowners in 2015. It is re-sent along with this letter for your information.

We would love to have 100% voluntary compliance with the regulations and covenants, but absent that, the HOA Board will levy fines for non-compliance with the covenants governing weed control. Please encourage your friends and neighbors to work with you to eliminate our noxious weeds!

Thank you,

Paradise Hills HOA Board
and Architectural Control Committee

This is the letter sent to all property owners in 2015:

Weed control

Jefferson County is currently notifying and warning residents in the County of the requirement (under Colorado Revised Statute Sections 35-5.5-101) for property owners to control noxious weeds. Several of our homeowners have received the letter. Paradise Hills has several weeds that fall onto the Control Lists, the most prevalent being Canada Thistle, Musk Thistle, Diffuse Knapweed, Dalmatian Toadflax and Myrtle Spurge. The County has notified the PHHOA Board that it may start enforcing penalties for failure to control these pests and had set September 15 as the deadline for action in the letters that it has sent out to individual county residents on this topic.

- Under our covenants, every owner and resident is required to control weeds. As your board, we are asking every owner and resident to take the steps necessary to treat these infestations as you find them on your property.

- Additionally, your HOA Board is reviewing what we may be able to do under covenant enforcement regarding these issues.

- Jeffco has a Website devoted to this topic at: http://jeffco.us/weed and Alicia Doran is the Weed and Pest Management Specialist at the County (303) 271-5989, adoran@jeffco.us.

- There are many companies who can assist with weed control. The following are suggested as being familiar with Paradise Hills:

  Mowing;
  Gary May; Mountain Property Services; 303-526-0768

  Spraying:
  LAM tree Service; 303-674-8733

  New company from Genesee:
  Wicked Whackers; contact Joe; 303 304-9997

Thank you for your attention. Please contact one of your Board Members or the ARC if you have any questions.

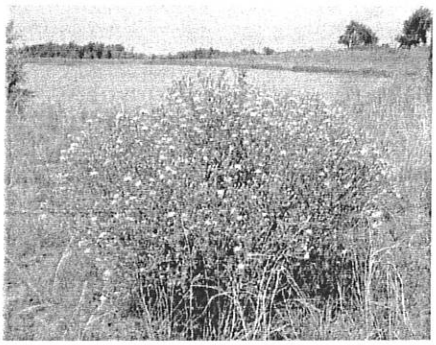
Diffuse knapweed

Colorado Department of Agriculture

305 Interlocken Pkwy
Broomfield, CO 80021

(303) 869-9030
weeds@state.co.us

Diffuse knapweed Identification and Management



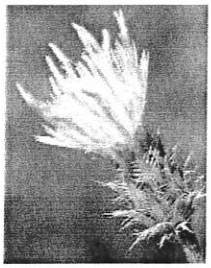
Identification and Impacts

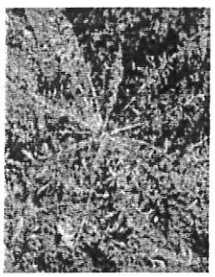
Diffuse knapweed (*Centaurea diffusa*) is a non-native biennial forb that reproduces solely by seed. A biennial is a plant that completes its lifecycle within two years. During the first year of growth, diffuse knapweed appears as a rosette in spring or fall. During the second year in mid to late spring – the stem bolts, flowers, sets seed, and the plant dies. Once the plant dries up, it breaks off at ground level and becomes a tumbleweed which disperses the still viable seeds over long distances. A prolific seed producer, diffuse knapweed can produce up to 18,000 seeds per plant. Therefore, the key to managing this plant is to prevent seed production. Diffuse knapweed can grow 1 to 3 feet tall, and is diffusely branched above ground. This gives the plant a ball-shaped appearance and tumble-weed mobility when broken off. Leaves are small, and are reduced in size near the flowering heads. Flowers are mostly white, sometimes purple, urn-shaped, and are located on each branch tip. Bracts that enclose the flowerheads are divided like the teeth of a comb, and are tipped with a distinct slender spine. Upon drying, the bracts become rough, rendering them injurious to the touch. Flowers bloom July through August. Seed set usually occurs by mid-August.

Diffuse knapweed tends to invade disturbed, overgrazed areas. Other habitats may also include rangeland, roadsides, riparian areas, and trails. It is a tough competitor on dry sites and rapidly invades and dominates disturbed areas. Once established, diffuse knapweed outcompetes and reduces the quantity of desirable native species such as perennial grasses. As a result, biodiversity and land values are reduced, and soil erosion is increased.

The key to effective control of Diffuse knapweed is to prevent the plant from flowering and going to seed. An integrated weed management approach dealing with Diffuse knapweed is highly recommended. There are many options of mechanical, chemical, and biological controls, available. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

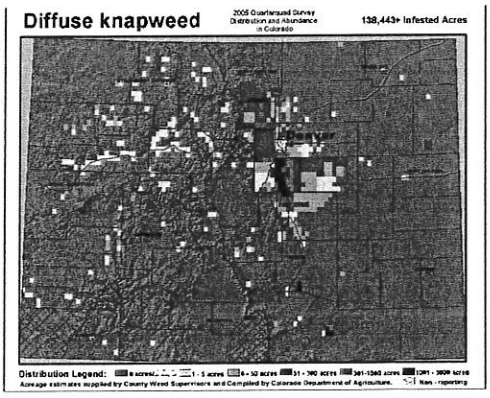
Diffuse knapweed is designated as a "List B" species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information, visit www.colorado.gov/ag/csd and click on the Noxious Weed Program link or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division at 303-239-4100.





Key ID Points

1. Floral bracts have yellow spines with teeth appearing as a comb and a distrinct terminal spinte.
2. Flowers are white or lavender.
3. Seedlings have finely divided leaves



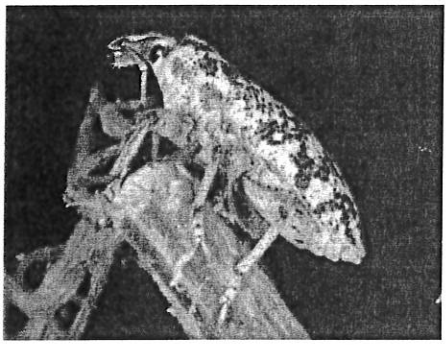
Plant photo, top © Kelly Uhing. Infestation map above, Crystal Andrews. Flower photo © Cindy Roche. Rosette and leaf photos © Dale Swenarton.

Updated on: 07/2015

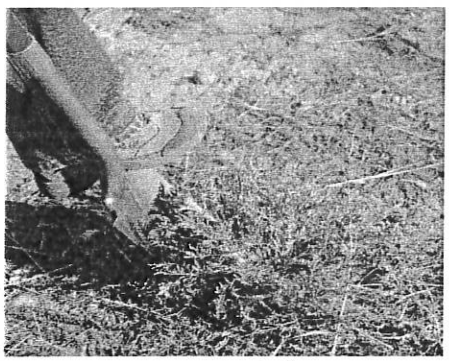
Centaurea diffusa

Diffuse knapweed

CULTURAL
Establishment of selected grasses can be an effective cultural control of diffuse knapweed. 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
The seedhead weevil (*Larinus minutus*) and the root weevil fly (*Cyphocleonus achates*) provide fair to good control when used in combination with each other. Expect to wait at least 3 to 5 years for the insects to establish and achieve optimum results. This is an option for large infestations. To obtain the insects, contact the Colorado Department of Agriculture, 970-464-7916.



MECHANICAL
Any mechanical or physical method that severs the root below the soil surface will kill diffuse knapweed. Mowing or chopping is most effective when diffuse knapweed plants are at full-bloom. Be sure to properly dispose of the flowering cut plants, since seeds can mature and become viable after the plant has been cut down.

Integrated Weed Management:

Diffuse knapweed is best controlled in the rosette stage. It is imperative to prevent seed production. Do not allow diffuse knapweed flowers to appear. Management must be persistent in order to deplete the seed bank in the soil.

HERBICIDES : The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow the label directions. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. **The herbicide label is the LAW!**

Herbicide	Rate	Application Timing
Aminocyclopyrachlor + chlorsulfuron (Perspective)*	4.75-8 oz. product/acre + 0.25% non-ionic surfactant	Pre-emergence or from seedling to mid-rosette stage. IMPORTANT: Applications greater than 5.5 oz. product/acre exceeds the threshold for selectivity. DO NOT treat in the root zone of desirable trees and shrubs. Not for use on grazed or feed forage.
Aminopyralid* (Milestone)	5-7 oz./acre + 0.25% non-ionic surfactant	Spring at rosette to early bolt stage and/or in the fall to rosettes. Add 1 qt./acre 2,4-D or 3 oz. Perspective when treating in the bolting to flowering growth stages.
Clopyralid (Transline)	0.67-1.33 pints/acre + 0.25% non-ionic surfactant	Apply to spring/fall rosettes before flowering stalk lengthens. Add 1 qt./acre 2,4-D when treating in the bolting to flowering growth stages.
Note: *Not permitted for use in the San Luis Valley.		
Additional herbicide recommendations for this and other species can be found at: www.colorado.gov/agconservation/CSUHerbicideRecommendations.pdf		

Colorado State University

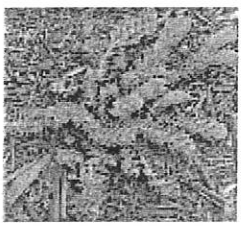
CO CDA

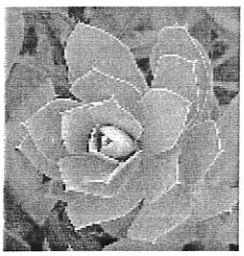
Myrtle spurge

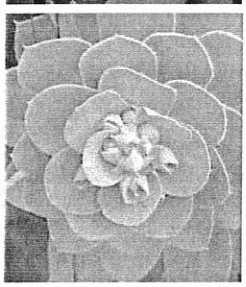
Colorado Department of Agriculture

305 Interlocken Pkwy
Broomfield, CO 80021

(303) 869-9030
weeds@state.co.us







Key ID Points

1. Low growing plant with blue-green, waxy leaves.
2. Flowers are yellow-green petal like bracts that appear from March to May.

Updated on: 7/2015

Myrtle spurge Identification and Management

Identification and Impacts

Myrtle spurge *(Euphorbia myrsinites)* is a low growing perennial with trailing fleshy stems. The leaves are fleshy, blue-green and alternate. Flowers are inconspicuous with yellow-green, petal-like bracts that appear from March to May. Myrtle spurge spreads by seed and plants are capable of projecting seeds up to 15 feet. The plant grows from a taproot, with new stems emerging in early spring and dying back in the winter. Plants can grow up to 8-12 inches high and 12-18 inches in width.

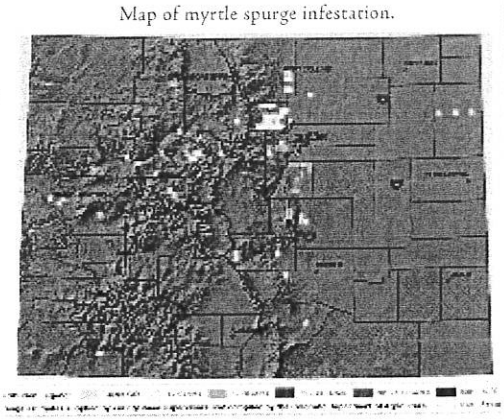
Myrtle spurge contains a toxic, milky sap which can cause severe skin irritations, including blistering. This plant is poisonous if ingested; causing nausea, vomiting and diarrhea. Wearing gloves, long sleeves, shoes, and eye protection is highly recommended when in contact with myrtle spurge, as all plant parts are considered poisonous.

Myrtle spurge is an invasive ornamental that is native to Eurasia. It is popular with xeriscapes and rock gardens, preferring sunny to partly sunny areas and well drained soils. Myrtle spurge rapidly escapes gardens and invades sensitive ecosystems, out competing native vegetation and reducing wildlife forage. Alternatives to planting myrtle spurge include native plants such as sulphur flower (*Erigonum umbellatum*), Kinnikinnick *(arctostaphylos uvursi)*, or creeping mahonia (*Mahonia repens*). The soil seed reserve of myrtle spurge is estimated to be eight years. The site must be monitored for at least nine years after the last flowering adult plants have been eliminated and treatments repeated when necessary.

The key to effective control of myrtle spurge is to remove plants prior to seed set and to detect and remove new populations in natural areas early on. Small areas can be easily removed by mechanical means but should be done early to prevent triggering seed launching. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Myrtle spurge is designated as a "List A" species in the Colorado Noxious Weed Act. It is designated for statewide eradication. For more information visit www.colorado.gov/ag/weeds and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

Map of myrtle spurge infestation.

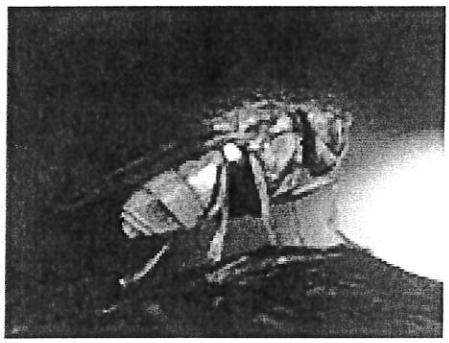


Photos © Kelly Uhing, Colorado Department of Agriculture and (above) Crystal Andrews, Colorado Department of Agriculture

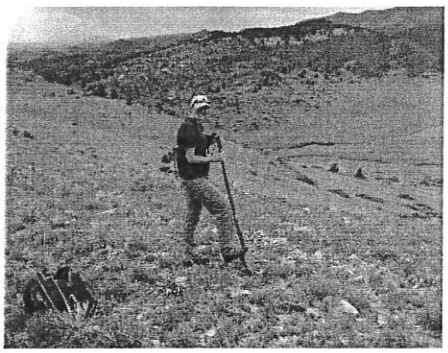
Euphorbia myrsinites

Myrtle spurge

CULTURAL
Keeping desirable vegetation healthy and thick will help keep invaders out. Prevent the establishment of new infestations by minimizing disturbance and seed dispersal. Survey your land regularly to detect new invaders and eradicate any new populations quickly.



BIOLOGICAL
Biocontrol is not an approved method of contol for State List A species. Eradication as the management objective for all List A species. For more information on insect biocontrol in Colorado, please contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916



MECHANICAL
Hand pull or dig when soil is moist. Make certain to pull all the roots and wear rubber gloves and eye protection to protect yourself from the toxic milky sap. Treatment follow up is important to check root fragment resprouts that will occure when the tap root is severed too shallow.

Integrated Weed Management:

Since Myrtle spurge spreads mainly by seed, it is very important to prevent seed production and deplete the seed bank. Remove mature plants prior to setting seed and seedlings whenever present.

Populations can be managed mechanically and by spot treatment of herbicides. It is important to be persistent with follow up treatments for many years.

HERBICIDES

NOTE: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on equipment with an output of 30 gal/acre. Please read label for exact rates. **Always read, understand, and follow the label directions. The herbicide label is the LAW!**

Herbicide	Rate	Application Timing
2,4-D ester	2 qt./acre + 1% v/v methylated seed oil	Use a 2,4-D ester formulation that has a 4.0 lbs. active ingredient/acre. Apply during spring or during fall regrowth.
Dicamba + 2,4-D	1 pint/acre dicamba + 2-3 pints/acre 2,4-D (amine or ester)	Use a 2,4-D formulation that has a 4 lbs. active ingredient/gallon. Apply during spring or during fall regrowth.
Picloram (Tordon/Picloram 22K - Restricted use pesticide) + 2,4-D	20 oz./acre + 2-3 pints/acre 2,4-D (amine or ester)	Apply at flowering growth stage during spring or to fall regrowth. DO NOT use near trees, desirable shrubs, water, or high water table.
Additional herbicide recommendations for other species can be found at: www.colorado.gov/agconservation/CSUHerbicideRecommendations.pdf		

Colorado State University

CO CDA

Canada Thistle Identification and Management

List B

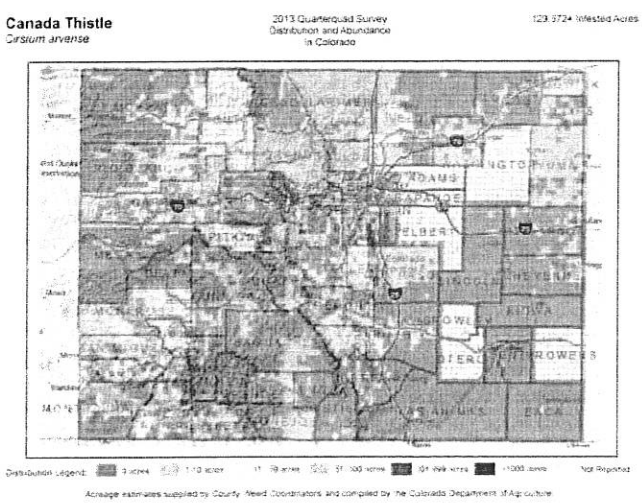
Canada thistle (*Cirsium arvense*) is a non-native, deep-rooted perennial that spreads by seeds and aggressive creeping, horizontal roots called rhizomes. Canada thistle can grow 2 to 4 feet in height. The leaves are oblong, spiny, bright green, and slightly hairy on the undersurface. Unlike other noxious biennial thistles which have a solitary flower at the end of each stem, Canada thistle flowers occur in small clusters of 1 to 5 flowers. They are about 1 cm in diameter, tubular shaped, and vary from white to purple in color.

Canada thistle emerges from its root system from late April through May. It flowers in late spring and throughout the summer. It produces about 1,000 to 1,500 seeds per plant that can be wind dispersed. Seeds survive in the soil for up to 20 years. Additionally, Canada thistle reproduces vegetatively through its root system, and quickly form dense stands. Each fragmented piece of root, 0.25 inch or larger, is capable of forming new plants. The key to controlling Canada thistle is to eliminate seed production and to reduce the plant's nutrient reserves in its root system through persistent, long-term management.

Canada thistle is one of the most troublesome noxious weeds in the U.S. It can infest diverse land types, ranging from roadsides, ditch banks, riparian zones, meadows, pastures, irrigated cropland, to the most productive dryland cropland. Large infestations significantly reduce crop and cattle forage production and native plant species. It is a host plant to several agricultural pests and diseases. Canada thistle prefers moist soils, but it can be found in a variety of soil types. It has been found at elevations up to 12,000 feet.

Effective Canada thistle control requires a combination of methods. Prevention is the most important strategy. Maintain healthy pastures and rangelands, and continually monitor your property for new infestations. Established plants need to be continually stressed. Management options become limited once plants begin to produce seeds. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

2013 Quarter Quad Survey



Canada thistle is designated as a "List B" species as described in the Colorado Noxious Weed Act. It is required to be either eliminated, contained, or suppressed depending on the local infestations. For more information visit www.colorado.gov/ag/weeds and click on the Noxious Weed Program link or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, (303) 869-9030.

Key ID Points

1. Cluster of 1-5 white to purple flowers on a stem.
2. Floral bracts are spineless.
3. Small flowers that are 1 cm in diameter.
4. Perennial, rhizomatous plant with spiny, oblong, green leaves.

Canada thistle

Cirsium arvense

List B

Canada thistle

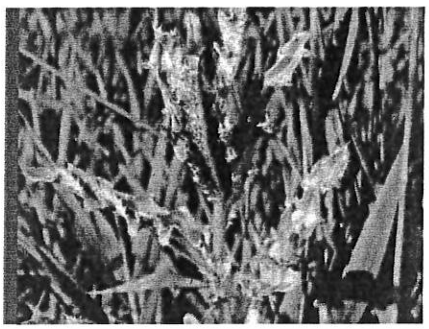
Cirsium arvense

Integrated Weed Management Recommendations

Integrated weed management is imperative for effective Canada thistle control. This weed needs to be continually stressed, forcing it to exhaust root nutrient stores, and eventually die. Mowing or grazing can be followed up with herbicide application. Avoid hand-pulling and tilling which can stimulate the growth of new plants.

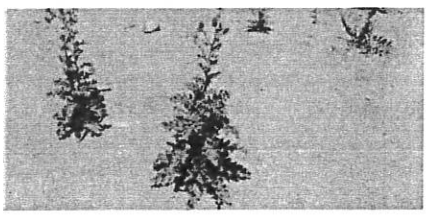
CULTURAL

Prevention is the best control strategy. Maintain healthy pastures , riparian areas, and rangelands. Prevent bare ground caused by overgrazing, and continually monitor your property for new infestations. Establishment of select grasses can be an effective control.



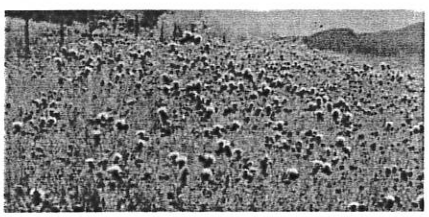
BIOLOGICAL

Cattle, goats, and sheep will graze on Canada thistle when plants are young and succulent in the spring. Follow up grazing with a fall herbicide application. Insects are available, and provide limited control. Currently, collection and distribution methods for Canada thistle rust (*Puccinia punctiformis*) are being refined. For more information on Canada thistle biocontrol, contact the Colorado Department of Agriculture - Palisade Insectary at (970) 464-7916.



MECHANICAL

Due to Canada thistle's extensive root system, hand-pulling and tilling create root fragments and stimulate the growth of new plants. Mowing can be effective if done every 10 to 21 days throughout the growing season. Combining mowing with herbicides will further enhance Canada thistle control.



CHEMICAL

The table below includes recommendations for herbicides that can be applied to rangeland and some pastures. Treatments may be necessary for an additional 1 to 3 years because of root nutrient stores. Always read, understand, and follow the label directions.

Herbicide	Rate	Application Timing
Aminopyralid* (Milestone)	5-7 oz. product/acre + 0.25% v/v non-ionic surfactant OR 1 teaspoon product/gal water + 0.32 oz./gal water	Apply in spring at the pre-bud growth stage until flowering and/or to fall regrowth. Can also add chlorsulfuron (Telar) at 1 oz./acre to the mix.
Clopyralid + Triclopyr (Prescott; Redeem; others)	3 pints product/acre + 0.25% v/v non-ionic surfactant OR 1.25 oz. product/gal water + 0.32 oz./gal water	Apply until flowering and/or fall regrowth.
Aminocyclopyrachlor + chlorsulfuron (Perspective)*	5.5 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply to spring rosette to flower bud growth stage; or fall. IMPORTANT: Applications greater than 5.5 oz. product/acre exceeds the threshold for selectivity. DO NOT treat in the root zone of desirable trees and shrubs. Not for use on grazed or feed forage.
Note: *Product not permitted for use in the San Luis Valley.		
Additional herbicide recommendations for this and other species can be found at: www.colorado.gov/agconservation/CSUHerbicideRecommendations.pdf		

Colorado Department of Agriculture - Conservation Services
305 Interlocken Parkway
Broomfield, CO 80021
(303) 869-9030
www.colorado.gov/ag/weeds

Updated: 07/2015