

Species	When to Treat With Herbicide	Integrated Management Techniques	Monitoring	Considerations
Knapweed	<ul style="list-style-type: none"> Ideally during 1st year growth - Rosette stage before bolting After bolting, effectiveness of herbicides* is reduced but digging and pulling still works. 	<ul style="list-style-type: none"> Mechanically with weed digging, pulling or mowing. Herbicide application if the plant has not yet flowered. Clipping flower heads and disposing of stalks. Dig out 2 – 3 inches of taproot and shake the soil off. 	<ul style="list-style-type: none"> Repeat treatments if there is regrowth or new plants germinating after summer rains. 	<ul style="list-style-type: none"> Clipping Musk thistle and leaving roots is not advised. Treatments may take several years.
Musk Thistle				
Common Mullein				
Canada Thistle	<ul style="list-style-type: none"> When the plant is green and actively growing. 	<ul style="list-style-type: none"> Mechanically with clipping or mowing. Do not dig or pull Herbicide application after mechanical or throughout season 	<ul style="list-style-type: none"> Watch for new sprouts/growth all the time, especially if summer rains prevail. 	<ul style="list-style-type: none"> Treatments will take several years to starve the extensive root system.
Cheatgrass	<ul style="list-style-type: none"> Spring and/or Fall 	<ul style="list-style-type: none"> Small patches should be pulled systematically from one end to another. It may take time but can be effective. Remove all seed heads. Large patches require pre-emergent herbicide best applied by professional applicators. Mowing can reduce fire danger and suppress the infestations from spreading as quickly. Seeding in behind treatments with desirable species can be very effective. 	<ul style="list-style-type: none"> Cheatgrass can put out several generations of plants per season. Monitoring for new plants is important. 	<ul style="list-style-type: none"> Cheatgrass should not be watered while at any growth stage. Herbicides for broadleaf plants will not work on cheatgrass.

***Herbicides are potentially hazardous to you and the environment and should be used cautiously. Always read the label before purchasing and using them. Always calibrate your sprayer. All sprayers are not equal. The label of each herbicide should provide a recommended application rate per acre. For more information regarding weed management and sprayers, refer to the Larimer County Weed Management Reference Guide. Calibration will tell you how much herbicide to mix with water for a given area. If this is not done correctly, excessive or inadequate amounts of herbicide may be applied.**

Types of Herbicides

Contact herbicides kill the plant parts that are exposed to the herbicide.

Systemic herbicides are absorbed and translocated through the plant.

Pre-emergents are herbicides that kill germinating seedlings.

Herbicides have different formulations that target different types of plants. Some specifically target:

- Grasses
- Broadleaf species
- Woody species e.g. trees, shrubs
- Both grasses and broadleaf

If an herbicide is specific to a type of plant it is referred to as **selective**. If an herbicide will kill all types of plants it is considered **broad-spectrum** or **non-selective**.

Herbicides should all be used away from water including wells for drinking water. Very few herbicides are approved for aquatic use.

Caution should also be used around trees. Product labels will note if herbicides are safe or unsafe around trees.

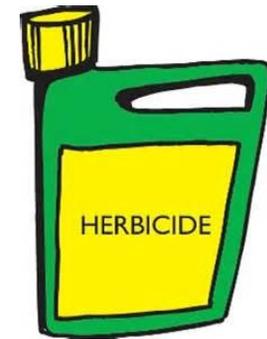
Herbicide Tips

- Most herbicides require **surfactants** such as liquid soap or other adjuvants to be added. This helps the herbicide adhere to the plant or break down waxy cuticles.
- **Ensure you have your target species correctly identified.**
- Follow all safety precautions to protect yourself. Check the label for safety guidelines
- Prohibit pets from rolling or passing through areas until the spray has dried.
- You do not need to douse a plant. It is often better to let the plant live for a while and transfer the herbicide to the roots. Use your herbicide sparingly.
- Repeat spraying as needed, e.g. 2-3 weeks keeping an eye on how the previously sprayed plants look. Are they hindered?

GVM Ecology

Quick Guide to Weed Treatments

2016



Herbicide or shovel for my noxious weeds?

Prepared in cooperation with the Larimer County Weed District