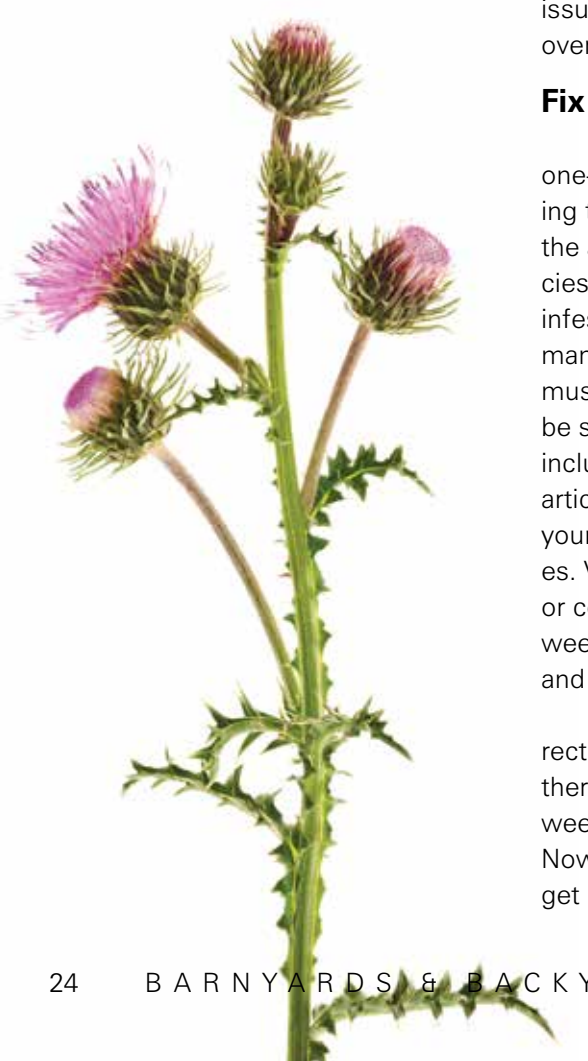
STRATEGIES TO DEFEAT WEEDS

Tackle land management issues first THEN implement control measures

Ashley Garrelts

Weed control, especially on smaller acreages, is a necessary evil for many landowners.

A good weed management plan involves using biological, mechanical, and chemical controls to be effective – it's called integrated weed management. Employing different control techniques combined with proper management is key to maintaining a weed-free property. Using only chemicals may not solve the weed problem and in some cases can cause a decline in the desirable plant species and create more bare ground for weedy plants to invade.



Instead of asking, "What chemical should I use?" perhaps "What types of controls are best suited to my goals for the land?" should be asked.

What caused the problem? Is the infestation a result of a single land disturbance such as construction, or is it a result of on-going management issues such as improper grazing, ATV overuse, etc.?

Fix Recurring Infestations

When weed infestations are from one-time land disturbances, eradicating those weeds and then reclaiming the area by planting desirable species may solve the issue. When weed infestations are a result of on-going management issues, management must change before weed issues can be solved. There are many resources, including past *Barnyards & Backyards* articles, that can help you assess your management and make changes. Visit barnyardsandbackyards.com or contact your local UW Extension or weed and pest control office for help and information.

Once you've evaluated and corrected why the weed problem is there in the first place, recurring weed infestations will be less likely. Now you can ask, "What can I do to get rid of my weeds?"

Evaluate the nature of the weed infestation: 1) species and type (annual-winter or summer; biennial; perennial – see Types of Weeds page 25); and 2) size of infestation.

Resources for Identification

Identify the weed. There are several resources. If you have no idea what the plant is, pull and take to your UW Extension, weed and pest control, or conservation district office (alternatively, you could email a picture to them if the image is sharp and clear) or you can purchase or borrow a copy of "Weeds of the West." See http://bit.ly/weedsofwest for ordering information. Sometimes, native plants will take advantage of disturbed areas and may not be considered weeds so won't be listed. This book will also

Weed identification, management

For help in identification and management of weeds, contact:

University of Wyoming Extension educators – See www.uwyo.edu/ces/county/ for county office contact information

Wyoming weed and pest control district offices – See www.wyoweed.org/addresses.html for contact information for an office in your area.


Foxtail barley

help you determine the plant's life cycle. Once the species and type has been identified, control plans can be crafted to target the weaknesses of the weed.

Consider the size of the infestation. Treatment is much easier when the infestation and the weeds themselves are small no matter what type of control chosen. The size of infestation will also help you calculate which combination of treatments will be most economical.

Control Them!

Treatment strategies could include any combination of mechanical, biological, or chemical control.

Mechanical control could entail chopping, pulling, or hoeing weeds, especially in small infestations. Immature or annual weeds are easier to pull than mature or perennial weeds that have more extensive root systems. As infestations grow in size, spending an entire week pulling weeds may not be as economical as opposed to a few hours spent when the infestation is small. If the infestation is large and the weed will be damaged by mechanical control, renting a large mower or plowing the land may be more time efficient. Biological control methods, such as using weed-specific insects or targeted grazing, may be another option. Biological control insects are used with large infestations because the insects need a large enough weed base to sustain their population. Targeted grazing can be used at any scale, and the effectiveness of this method depends on the type of weed, animal used, and timing. Young plants are more palatable to grazing livestock if you are trying to control weeds through a prescribed grazing plan.

The last option is often the "go to" when thinking of controlling weeds – chemical control. This method can be effective at any scale and chemicals are formulated for different types of weeds. A chemical control plan should include rate (make sure your sprayer is calibrated) and timing (usually before flowers and seeds emerge or in the fall when the perennials are pulling nutrients into their roots for winter).

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Combining Efforts

Integrated weed management – where a combination of these control options is used – will often yield the best results because the weeds are targeted in different ways. An example of how this could look is: goats graze weeds in the spring, owner could pull a few plants where the goats couldn't reach, like across a fence, and herbicides could be used in the fall or years following for spot treatments.

The Barnyards & Backyards Wyoming Rural Living Resources guide section "Weeds, ways to whip 'em" is a great resource to help create an effective weed management plan. Go to barnyardsandbackyards.com and click on the title under News for the Season.

TYPES OF WEEDS

- **Winter annual:** fall and winter germinating plants that complete entire life cycle in one year.
- **Summer annual:** spring and summer germinating plants that complete entire lifecycle in one year.
- **Biennial:** plants that spend the first year in a vegetative state storing nutrients in their roots and during their second year of life produce flowers and seeds to complete their life cycle.
- **Perennials:** plants that live for many years and have extensive root systems to store nutrients. They may produce flowers and seeds each year.