Get control of 
A weed warrior’s season

Weed control can be frustrating – time, money, and sweat thrown at a problem that doesn’t seem to get any better.

There is a recipe for success, and that “recipe” is better now than ever. This “recipe” will be outlined in the next several issues of Barnyards & Backyards. This spring, let’s start to get control of weeds.

Equipment and Resources

• *Weeds of the West* is a comprehensive book that shows and describes important weed species in the western United States. It is available through local weed and pest control districts or the University of Wyoming Cooperative Extension Service (UW CES). Wyoming weed and pest district addresses are at http://www.wyoweed.org/wp_dist.html. County CES office information is available at http://www.uwyo.edu/UWces/Counties.asp

• *Weed Management Handbook, 2006-2007* is a quick and ready reference of weed control practices used in Wyoming, Montana, and Utah. It is available free at https://uwadmnweb.uwyo.edu/UWCES/WeedManagementHandbook.asp. A book may be obtained for $15 by e-mailing the College of Agriculture’s Resource Center at bixbyd@uwyo.edu, calling the center at (307) 766-2115, or writing to the University of Wyoming, College of Agriculture, Department 3313, 1000 E. University Ave., Laramie, WY 82071.

• *UW Wyoming Weed Identification Site: Identifying Weeds by their Photos* at http://www.uwyo.edu/CES/WYOWEED/NewWYOweedSite/WeedsByLeafs.htm

• A “backpack sprayer” – these simple, rugged sprayers should be standard equipment for every weed warrior and are available through local feed and hardware stores and local weed and pest control offices. Calibrate the backpack so you know how many gallons per acre it will treat under your spraying conditions. Contact your local weed and pest district office, a local CES office, or visit this Web site http://www.team.ars.usda.gov/herbicidemanual.pdf, pages 22-24, for calibration procedures.
Local weed and pest districts can offer treatment recommendations and tips on weed identification, spray equipment calibration, and biocontrol options. They have equipment for loan and rent. They are there to help you, the landowner. Use them!

**Weed Control Basics**

There are four basic processes involved in weed control:

**Education** – Learn to identify weeds and their life history and habits. Learn about herbicides, biocontrol, and weed science.

**Prevention** – Prevent weeds from coming onto your place and establishing (i.e., feed certified "weed-free" forage wherever possible) and avoid tracking in weed seed by vehicles, pets, or other means. Catch tumbling weeds in winter with temporary snow fences then bag and dispose of or burn them. Minimize bare or disturbed ground areas with proper livestock management, and contain vehicles to roadways.

**Control** – Mechanical (mowing, cultivating, and digging up), chemical (herbicides), biological (using natural insect predators), and cultural (see Competition, below) practices can effectively be used. Many weed species respond well to a combination of two or more control methods. Some hard-to-control perennial weeds can only initially be controlled with herbicides.

**Competition** – Using competitive, adapted, and desirable plants to outcompete future weeds after initial control is the real key to long-term success.

**Spring Weed Control**

The main focus this time of the year is annual weeds (plants that germinate, flower, set seed, and die in one year – a one-year lifecycle) and early biennial weeds (those plants that germinate, produce a plant the first year, then come up the second year, flowers make seed then die – a two-year lifecycle).

When treating annual or biennial weeds, there are three things to remember. You are trying to control:

1. The weed that can be seen (germinated plant).
2. The "seed bank" (dormant seed from previous generations) in the soil, which can remain viable for several years, and
3. New weed seed from coming into an area.

The goal is to keep these plants from producing seed for several generations (several years). Treat these weeds before they go to seed for several years, thereby wearing out the seed bank in the soil.

Annual/biennial weed species often germinate at different times during the spring, so keep a close eye on weeds, and treat each species before it makes seed! This will entail several treatments during the spring. When starting treatment of annual/biennial
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weeds, start a “control clock” – in other words the number of years it will take to wear out the seed bank and get control of the weeds. If a generation is missed or a bunch of seeds are imported into the treatment area, the “control clock” is reset to day one! This simple fact is the number one reason many annual/biennial weed-control efforts fail.

Chemical control is often the most effective means for spring weed control. Contact a local weed and pest district office for specific recommendations. Mechanical control can be effective on annual and biennial weeds. Mowing often close to the ground can prevent seed production in many species. Hoeing or pulling weeds can also be effective; however, avoid rototilling, as this can bring another seed bank into the germination zone (top 2 inches of the soil).

Many perennial noxious weeds have spreading, reproductive root stock that, when chopped up in cultivation, generate new plants! Canada thistle, Russian knapweed, and field bindweed are three examples of weeds that will take to wear out the seed bank and get control of the weeds.

After this initial season of successful control measures is employed, it is time to implement competition! Plant highly competitive, adapted, and desirable plants in bare-ground treatment areas. Grasses are often a good choice as many species fit the above criteria and, after they are established, broadleaf weeds can be spot treated using a broadleaf selective herbicide. See a county weed and pest and/or CES office for specific herbicide(s) and competitive plant(s) recommendations.

Conclusion

Let’s educate ourselves about weeds and weed science, prevent future weed problems, and control the weeds we have EVERY YEAR until good control is reached.

Start to establish competition with desirable, adapted, and competitive plants to prevent future weed infestations. Weed control for those hard-to-control noxious weeds will be addressed in upcoming issues of Barnyards & Backyards. Noxious weeds are those plants that are exotic (come from another continent), invasive, AND harm the environment. This is important to remember as these weeds are rapidly destroying many native ecosystems. We all must fight this scourge of noxious weeds to help preserve our wonderful Wyoming!