Cheatgrass is everywhere. Wildfires, habitat loss, and endangered species are just a few of the many topics people hear about when it comes to this invasive species. Easily seen when driving through most of Wyoming in June, the grass shows up as patches of purple to red color.

In certain areas of the state a much greater focus has been put onto this species than many other weeds in recent years because of the damage that can come from a cheatgrass invasion.

**Cheatgrass biology**

Cheatgrass, also known as downy brome, is a winter annual grass. Winter annuals germinate in fall and early spring and come to full maturity in early summer. This growth strategy “cheats” other more desirable plant species out of moisture, nutrients, and light allowing it to quickly replace more desirable, less competitive plants that come out of dormancy more slowly. Isolated cheatgrass patches generally start on south-facing slopes and then spread through its abundant seed production. This weed can quickly take over a landscape.

**Cheatgrass control**

An integrated weed management approach is the most successful way to control cheatgrass, just as with any other weed. Integrated management involves using multiple techniques to prevent the establishment of, stop the spread, and take out the existing cheatgrass. Control measures include prevention, physical weed control, biological control, and chemical control. The use of multiple control measures will greatly increase chances for success.

**Cheatgrass prevention**

Prevention is the best approach. Although this sounds like a no-brainer, prevention is harder to do if a landowner does not make a conscious effort. Prevention measures include feeding weed-free forage to livestock, buying weed-free seed, maintaining a healthy ecosystem, and working closely with neighbors to prevent a cheatgrass infestation.

**Physical/mechanical weed control**

This method works best in areas where a large population has not yet taken over. Physical control might be the oldest and cheapest form of weed control.

Pulling it out of the ground is the main method of physical control. Spring is a great time to do this, when the soil is moist. Cheatgrass has a pretty weak root system so is one of the easier grasses to pull. Properly identify the plants in your area to ensure you don’t pull desirable grasses. Bear in mind hand pulling disturbs the soil and can lead to additional flushes and no progress in fighting the seedbank.

If hand pulling all of the cheatgrass does not sound like fun, mowing the cheatgrass before it goes to seed can help slow its spread. Timing is key when using mowing as a control method because any seed production will result in a failure. This timing can vary by year, so contact your local extension or weed and pest district for updated suggestions.
Biological control

Biological control refers to the use of natural enemies to reduce a plant population. Currently, the only proven method of biocontrol has been intensive grazing in late fall through mid-May. Effective grazers include cattle, sheep, goats, and horses. Intensive grazing requires a large amount of work, due to having to move livestock and fencing frequently. When done properly, the spread of cheatgrass can be stopped, and over time the cheatgrass in an area can be eliminated. This is assuming grazing is nearly 100 percent effective at controlling new seed production.

Chemical control

Cheatgrass is the most-studied invasive annual grass in the western states, and new chemicals are being researched to control this species. There are few options for effective chemical control in spring on a range and pasture setting, and they can be challenging because of the timing needed for application.

Glyphosate is the most common herbicide to use for cheatgrass control in the spring. Glyphosate is a non-selective herbicide applied after spring cheatgrass emergence but before the cool-season natives break dormancy. The window of opportunity often has passed before one can safely spray, and there is a high risk of non-target injury (killing or injuring beneficial plants such as native grasses). Additional flushes in the spring may occur and result in poor to total failure in control. Utilizing a residual herbicide in conjunction can work better to control any additional flushes.

Glyphosate has little-to-no ground residual (plants that germinate after spraying are not affected), so it must be applied multiple years for long-term control. In crops, there are a wide variety of herbicide options to control cheatgrass and not injure the crop, but the timing varies significantly and control can be expensive. Consult your local weed and pest office or crop adviser when looking for chemical control recommendations in crops.

While each approach to treat cheatgrass can be effective, none are a silver bullet. As in all weed treatments, using a variety of control methods is the key to controlling cheatgrass. You are not alone in this fight. Eleven Wyoming counties have declared cheatgrass a noxious species and may have programs available to help fight this weed.

For more information on cheatgrass management, the University of Wyoming has a great publication on cheatgrass management at bit.ly/managecheatgrass.

Jess Butler is fighting the battle against cheatgrass in Converse County. He is the assistant supervisor at the Converse County Weed and Pest Control District. He can be reached at (307) 358-2775 or at ccwp@qwestoffice.net.