

The purple haze. That is what it looks like in the late summer and early fall in the crop and rangeland throughout the county. I am, of course, speaking about cheatgrass. It goes by many names: downy brome, military grass, downy chess, and my personal favorite: brocco-grass. Cheatgrass (*bromus tectorum* L.) is increasingly a problem in both rangeland and cropland. It is a small winter annual that grows one to two feet tall and typically flowers in May or June.

This weed is a native of the Mediterranean region in southern Europe. It was originally used for thatch roofing (tectum is the Latin word for roof). It was introduced to the United States in the late 1800's as a packing material for shipping items. It was first identified in Denver, Colorado. The climate and region in this part of the country is pre-adapted to cheatgrass and, as we can see, it tends to thrive. It is estimated that it currently infests over 100 million acres in the western U.S. It has been found to reduce wheat yields by as much as 27%.

Cheatgrass is most detrimental when it emerges within six weeks of grain crops. One of the greatest economic impacts this weed can make are in winter wheat and alfalfa fields. This is because it reproduces before the crop is harvested, making it difficult to control. Cheatgrass matures early, leaving brown and dry grass in the high fire season of the year. It causes rapid depletion of the moisture in the soil, hindering the establishment of perennial grasses to compete with it. Awns (the long, stiff, hair-like extension of the seed heads) stick to humans and animals alike and thus transport the seed.

As cheatgrass matures, it becomes unpalatable for livestock and wildlife. Seed heads begin to droop and become brittle. In 1949, Aldo Leopold recognized how difficult cheatgrass is to deal with when he said, "to appreciate the predicament of a cow trying to eat mature cheat, try walking through it in low shoes. All field workers in cheat country wear high boots". Among the negative impacts he listed about cheatgrass were:

- Loss of valuable wheat grasses and bunch grasses
- Awns that cause mechanical damage in livestock
- Danger of wildfires with extremely dry and flammable cheatgrass lands
- Diminished quality of hay and alfalfa fields
- Difficulty of ducklings to travel from upland nesting sites to water areas

Control of cheatgrass varies depending on where it is found. I recommend an integrated method, which means you don't hang your hat on one method, but use a combination of methods. First and foremost, clean seed off of yourself and your animals, such as dogs, whenever you are in it. Also, pay attention to your vehicle. If possible, consider crop rotation as a strategy. I realize this can be difficult in alfalfa. Disking and other methods of soil disruption are not effective and can sometimes make the weed situation worse. Soil disruption, in conjunction with spraying and replanting desired plants can be effective to restore a site. Prescribed burns can actually increase cheatgrass production.

Chemicals that have been found to be effective in winter wheat are, Olympus Flex, Maverick, and Power Flex. In the Clearfield varieties, Beyond is labeled for cheatgrass. In alfalfa, consider using Select Max or Raptor. In Fallow, Dicamba and Glyphosate are effective. In peas and lentils, Raptor is labeled for cheatgrass. In CRP, rangelands, and pasture, consider Glyphosate, Journey, or Plateau. All of these have some pros and cons and I would encourage you to study carefully what you are using. I would also encourage you to READ THE LABEL CAREFULLY before you use any chemical substance. Labels will also have rate and application times listed.

We have many weeds that cause us concern here in the Golden Triangle of Montana. Cheatgrass is one of the most universal and economically significant. There are many publications available to you that discuss biology, control, and management. One of the most current and informative publication is called "Cheatgrass: Identification, Biology and Integrated Management". It is MontGuide MT200811AG from MSU Extension. It be obtained from your local Extension office, or online at:

<http://www.msuextension.org//publications/AgandNaturalResources/MT200811AG.pdf>

Please feel free to contact me about cheatgrass control or other information here at the Extension office at 466-2491.