

To MOW or not to MOW

Mowing prairie grasslands – the good and the bad

By Rex Lockman and Dallas Mount

Do you mow your prairie grassland? People tend to mow for fire control, to control weeds, for aesthetics, to maintain or improve a grass stand, to exercise a new mower, for hay production, or to satisfy that farmer deep within.

Whatever your reasons, mowing native and non-native prairie grasses can have a dramatic impact on your land – some are good, but there are negative impacts, too.

Mowing grasses is similar to allowing grazing animals to eat the plants. Once in a while is fine; however, repeated mowing or mowing at the wrong time of year can have negative impacts on those grasses and the local prairie ecosystem.

Cautions of Mowing

Tall vegetation is very beneficial to many species of wildlife. These areas provide cover to escape from predators as well as hide their nests and young. Dense cover is also essential for thermal protection from harsh winter temperatures, snow, and wind. A variety of songbirds and upland game birds require dense and tall vegetated areas. Many small mammals such as rabbits also use these areas.

Squirrels and prairie dogs prefer shorter vegetation. These animals rely on being able to see predators from a long distance to provide time to escape. It is very interesting when people complain about squirrels and prairie dogs moving on to their property after they mow, because they have essentially invited these critters in.

Both tall and short vegetation areas occur naturally in Wyoming. Study the natural vegetation

in your area. Is it shorter than your boot or taller? Is it all one type or a combination of short and tall grasses? You should know which category your property falls into and that the wildlife present is there because of the natural surrounding habitat.

Repeated and poorly timed mowing will cause the taller growing plants to die out and encourage lower growing plants. In some instances, this change in plant composition is desired by the landowner, but not all prairie ecosystems have desirable low-statured plants, so weeds may begin to take over. If the land is to be used to support grazing animals, the taller stature plants are usually the better forage producers, and encouraging low-stature plants will decrease pasture productivity from a grazing standpoint.

Benefits of Mowing

Mowing can be a form of weed control. Some weeds can be eliminated by mowing the infested area several years in a row at the same time of year. This allows desirable plants a competitive edge; however, this can also have a negative effect if done at the wrong time or on the wrong weed because mowing





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will cause some weeds to increase. Know the weeds and know how they respond to mowing: ask at your local weed and pest control district office, University of Wyoming Cooperative Extension Service (UW CES) office, or conservation district for help identifying problem weeds and advice on correctly timed mowing.

Managing the dangers of fire is a concern with areas of tall vegetation. Mowing vegetation around buildings, driveways, or roadsides can reduce fuel loads for fires and help create a defensible space. Most of the time, mowing 100 feet out from buildings or other areas that need to be protected is sufficient. Even then, it is a good idea to wait until late June to mow. This will allow time for the birds that nest in this area to have their young out of the nest to escape the mower. And the vegetation is usually green up to this time of year, reducing the chance of fire.

Mowing can also promote plant health. In areas that naturally produce tall vegetation, either mowing or grazing them every third to fourth year to remove some of the old, dead material is a good idea. Removal of this material causes plants to generate new growing points, fill in bare ground, and remain healthier.

One strategy is to break the property into quarters. Mow one quarter a year for areas with tall vegetation. For areas with naturally short vegetation, mowing should only be necessary every five to seven years. Sometimes, vegetation removal will be handled for you by wildlife, or perhaps a neighbor could use some pasture for grazing animals once every few years. Just be careful not to over-graze or over-mow your pasture.

Many landowners believe grasses need to be grazed or mowed to reseed themselves. This is not true. Most of our prairie grasses are rhizomatous, meaning they reproduce by underground stems or rhizomes – much like an aspen tree. Mowing or grazing, when timed right, will stimulate some bunch-type grasses to spread out a bit more creating less bare ground in-between grass plants.

Timing of the Mow

Grasses have various stages of growth and are much more sensitive to mowing or grazing during some stages than others. When cool-season grasses begin to emerge in early spring, they are collecting sunlight and making energy to produce roots and seeds. Once the grasses have collected enough energy, they produce a seed head and elongate a seedstock producing the “flowering” part of the grass plant you see blowing in the wind, usually by midsummer.

Mowing grasses during the seed formation or seedstock elongation is especially harmful. It is not usually necessary to mow grasses during the early vegetative or low-growing energy collection stage; many people make the mistake of mowing at this sensitive time.

Waiting to mow desirable grasses until they produce seed heads and have begun to dry up will help maintain the health of the grasses. Usually, this occurs by mid to late June in eastern Wyoming and July in central to western Wyoming; however, not mowing the grasses at all is better for them in the long run, except for areas that have become filled with dead and decadent material. If you can easily see areas of soil when looking down at the ground from above, you have not built up enough litter to justify mowing.

Remember, you are affecting ecosystems with your land-management decisions. Learning about the various plants and animals that inhabit lands will make you appreciate all types of land appearances. Your piece of the prairie may not look well-manicured, but it is supporting wildlife, protecting the soil, capturing carbon dioxide, producing oxygen, and a part of this great ecosystem we call Wyoming. For more information on this topic, see UW CES publication MP-111.04, *Grass Growth Basics 1* (available at http://ces.uwyo.edu/PUBS/MP111_04.pdf), and the resources page on the *Barnyards & Backyards* Web site (<http://barnyardsandbackyards.com>).

Happy mowing ... or not!

Rex Lockman is a wildlife and range specialist with the Laramie County Conservation District. He can be reached at (307) 772-2600 or RLockman@lccdnet.org. Dallas Mount is a University of Wyoming Cooperative Extension Service educator serving Goshen, Laramie, and Platte counties. He can be reached at (307) 322-3667, or e-mail dmount@uwyo.edu.