

## Pasture Management Tips

Small parcels of land less than 100 acres continue to be a land management challenge. Often people that move into the valley have never cared for more than a residential lot. They tell me that they have moved to the Flathead to “live the Montana Dream.” Often this means, to them, owning horses and/or cattle. What I’d like to address is that there is a discrepancy between what is allowed by law and what are good land stewardship practices.

Flathead County zoning department states that certain residential areas are approved to have two horses per acre. Real estate agents use this to sell property. “sure you can put 10 horses on this five-acre piece of ground. Why not?” When the five acre *ranchette* becomes a dry lot filled with weeds, the resident doesn’t always know what happened. Montana State University range specialist, Jeff Mosely, said that with the rainfall in the Flathead, the stocking rate should be one animal unit per 10 acres. An animal unit is a 1,000 lb. cow-calf pair. A horse is considered 1.5 animal units. A horse rarely stops grazing while cows lay down to ruminate several times a day. Stocking rates can be adapted depending on a land owner’s willingness to use alternative methods such as using a dry lot, rotational grazing, irrigation and assorted grass varieties.

Understanding the physiology of grass and the impact of over grazing is critical to good management. Grasses do not store all of their carbohydrates (energy) in their roots like other plants. The grass stores most of its carbohydrates in the lower 2-3” of the blade. Livestock prefer eating this lower portion because it is sweeter to the taste and more palatable. Once this area of the plant is removed, there is no energy to regrow the plant. Additionally, roots grow in proportion to the top growth. Grass that has been eaten to about ¼”, have about ½” roots. Grasses that have been allowed to grow to 8-10” have about 12” roots. It’s easy to visualize how over grazed grass is easily pulled from the ground when the roots are barely holding on. Scalped grass also succumbs to drought quickly. Open areas of soil that occur when grass dies or is pulled out, is fertile ground for weed seeds to blow in and become established. Another trait often unrecognized is that our traditional cool season pasture grasses lose their roots after the solstice of June 21 each year. Farmers often call it the “summer slump”. The grass just doesn’t grow. This is due to their preference for cool weather and that they don’t have an active root system. This is the time that the grass needs to rest and recover and not be under pressure by livestock.

Livestock do not eat most of Montana’s noxious weeds. Some are actually poisonous to livestock. When these weeds find an over grazed pasture it is a perfect setting to flourish since the competition for water and nutrients has been eliminated. Jed Fisher, Flathead County Weeds and Parks, says that a high percentage of their calls come from poorly managed livestock facilities. The weeds contain tannins and other compounds that taste bitter to the animal. When left with no other food source, livestock will eventually eat the noxious weed and can become seriously ill or die.

Pasture grass must be allowed to get to 10” or so in the spring before livestock are put on it. When the ground is soft from winter snow melting and early season rains, it is easily compacted by hooves. The grass can be removed by the roots and the carbohydrate stores eliminated. There is no time for the blades of grass to grow and photosynthesize the carbohydrates necessary for survival. I’ve seen pastures made completely useless in less than 2 years by putting livestock on too early. The fall is an important time to be careful of overgrazing also. As mentioned, if the top growth of the grass is too short, there will not be enough roots to survive the winter and no carbohydrates for spring growth.

There is no time of year that over grazing is acceptable. The use of a dry lot to allow pastures to rest is necessary on most farms of limited acreage. The use of electric fence to keep animals rotating through an area can be helpful.

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