Race for the Green

After a long Wyoming winter, isn’t it great to see the green of spring? Chances are that you and your livestock are gung-ho to hit the new green grass and stop feeding and eating hay respectively. But wait…there are a couple of very important things to keep in mind!

What does it take to get you going first thing in the morning? No matter how much of a morning person you are, chances are that you still need some time for systems to fire up and the gears to engage. In some ways, early springtime for rangeland or pasture grasses is like morning for us. It takes a little bit of time for grasses to get up and running in the spring, and this has important implications for grazing management.

We know that plants use stored carbohydrates (sugars and starches) for the energy needed to push the first few leaves above the ground after the spring warm-up. After that, the new green leaves are very important for supplying the energy (through photosynthesis) for additional growth. The bottom line is that the new green material is very important to the plant, and grazing needs to be managed so some of that green material goes to support plant growth. Removal of more than half of that green material can be damaging to plants. Damage can also occur if animals are allowed to repeatedly graze plants early in the year. Improper spring grazing management can lead to weakened plants, reduced production, death of individual plants, and weed problems.

Another thing to keep in mind regarding early grazing is that the supply of green grass is low and the demand is high. Imagine being a horse, cow, elk, or deer. All winter long, these critters have been eating dried up old grass or hay. Chances are good they are anxious to eat some nice green grass. Those who have been feeding hay all winter are looking forward to that chore coming to an end for the year. So, the race for the green is on – demand is high. But remember that early growth occurs slowly. If animals are out to pasture early in the spring, they should be spread out or moved rapidly through an area so that not all plants grazed early, or if they are, each plant is only grazed once.

Taking a few precautions when managing spring grazing can ensure pasture and rangeland plants remain in good condition. The benefits of keeping pastures and rangelands in good condition are numerous and in the best interest of all producers.

These green leaves have value to the plant, and grazing should be managed in a way that some green-leaf material remains to support growth needs.

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Early in the spring, when the supply of green grass is low but the demand is high, grazing managers should strive to have animals spread out or moved through an area quickly. Keep in mind that after consuming virtually no green grass all winter, grazing animals are attracted to areas that look lush and green in the spring. From a distance, it may look like there is more grass than is actually available.

Rangeland plants require the proper mix of conditions in order to begin growth in the spring. Two of the major factors that control the initiation of plant growth are temperature and precipitation. This photograph was taken in mid-June in eastern Wyoming. The lack of green growth was driven by shortages in soil moisture. Notice that anywhere there had been a little extra water, plants are green and actively growing. Everywhere else has remained fairly dormant. This is another example of how the supply of green grass in the spring may be limited.

The impacts of grazing on grasses are different depending on what stage of growth the plants are in when the grazing event occurs. It is believed that the boot stage is one of the most damaging times for grasses to be exposed to grazing. The boot stage is when a developing seed head is being elevated. This picture shows a crested wheatgrass plant coming out of the boot stage. Managing grazing to avoid livestock being in the same place at the same time every year helps reduce potential problems associated with grazing.

A useful way to determine when grazing should begin and end in a given pasture is to measure plant height. In Wyoming, this approach would be most applicable in irrigated pastures or otherwise productive areas. Recommendations for grass heights that indicate when grazing should begin and end vary by species. For most irrigated pasture grasses, grazing should not begin until there is around 6 inches of growth. Some producers use a grazing stick like the one shown in this photo.