

Winter Pasture Management

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Decisions made this winter, while pastures and hayfields are dormant, can make a big difference in forage quality during the spring, and the ability of that forage to survive if hot, dry weather hits this summer. When many of us think of the time to fertilize, the first thought is spring and fall. This is true if the pasture or hayfield needs nitrogen. Nitrogen is highly mobile in the soil, so applications are best made when plants are actively growing, and able to use that nitrogen before rains can leach it from the soil and out of the root zone. Many other nutrients, such as phosphorus and potassium, actually need some time to break down and become available before plants can use them. This makes winter an excellent time to make those types of applications. The same rain and snow events we tend to experience this time of year which would leach nitrogen, will help to break down broadcast applications of phosphorus and potassium, which have limited mobility in the soil. This allows those nutrients to move into the root zone, where they will be available in the spring when growth resumes and the plant begins to need them again. Agricultural lime requires a series of reactions in the soil before soil pH is reduced. A properly limed soil will improve the availability of nutrient, leading to less plant stress and healthier pastures. Remember though, there is no rule of thumb concerning how much lime or fertilizer will be needed in a given year, so make sure applications are based on soil test results.

There is a good rule of thumb for another important consideration though, and that is how much forage can be removed while the plant is dormant. The general guideline here is to take half and leave half. Removing more than 50% of plant material will result in stress on the plant. This will open the door to freeze damage, as well as disease and reduced growth in the spring. Make sure to keep an eye on pastures and move livestock as needed to prevent over grazing of dormant grasses. Before grazing a pasture, scout it using a grazing stick to see how much forage is available. This will help you determine how much available forage you have, how long you can graze it, and how much additional hay you may need. Measuring will also give you a better idea of where that halfway point is.

With wet weather, another important consideration is soil compaction. This can result (from) tractors or equipment moving over saturated ground, perhaps making those fertilizer and lime applications. The most significant source of soil compaction in pastures can come from hoof pressure when animals are allowed to graze over heavily saturated soils. Soil compaction leads to reduced root growth and lower rates of water infiltration, which can lead to increased runoff and erosion. Animal hooves on saturated ground can also crush plants and destroy roots, which will cause areas of reduced plant growth, leaving room for weeds to fill in those gaps. Not only that, but walking in those sticky, muddy situations is difficult for animals too. This increases their nutrient demands, which can in turn lead to feed and hay shortages. It is a good idea to limit pasture access when soils are saturated to help alleviate these issues.

Speaking of weeds, winter can be an excellent time to start scouting. Many of the common pasture weeds are winter annuals which grow as basal rosettes. These weeds begin their life cycle in the fall as a small basal rosette, which germinated by taking advantage of a weakened forage at the end of a harsh summer. They then enter dormancy during the colder months, and break dormancy in the spring, beginning to grow upright and flower. The best time to control these is in the fall before they get too big, but with the amount of rainy days this fall, there were few opportunities to spray. Control during the winter months is usually out of the question, since while the plant is dormant, there will be no, or limited, herbicide intake. Take this time to walk your pastures and look for these weeds. Mark problem areas with a flag, or make notes of paddocks where there are heavy infestations. When spring returns, these plants will begin to grow again, and an effective herbicide application can be

made if caught early enough. Check with your extension agent for help identifying weeds and choosing the right herbicide for the job.

