

Fluctuating Temperatures Means Extra Vigilance



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Many of us have received some decent rains the past few weeks. But a major problem still looms over producers' heads – much of that rain and snow came quickly and never had time to soak into the ground so there

is little moisture in the subsoil. Lack of subsoil moisture and overgrazing last year must be taken into consideration when planning how pastures will be managed this spring.

Plants in drought-stricken pastures, in many cases, are very short with little to no leaf area. This lack of leaf area will be a major issue this spring. Normally, when leaf area is adequate, plants are able to grow and produce nutrients by harvesting sunlight via photosynthesis. Adequate leaf area allows plants to supply sufficient nutrients for growth and store extra nutrients in the crown and roots.

However, when there are few leaves – thus, leaf area – growth is supported by whatever the leaves can supply plus some of the reserves that were stored earlier. When leaves are continuously removed, there is not enough photosynthesis to feed root growth. The lack of root growth reduces the supply of water to leaves. Grass that is grazed every day doesn't develop roots as deep as grass of the same species allowed to grow uncut for a month.

Fast forward to this spring. Already these grass plants in pastures are weak with reduced vigor from the drought and overgrazing. There is little leaf area and little reserves from last year. Thus this spring pasture grass plants will need to grow new leaves as well as replace the lost nutrient reserves. If these reserves are not replaced the plants are at risk of running out of reserves and not surviving. This situation, in

turn, will reduce forage production, increase root death loss, reduce plant reproduction and change species composition in pastures.

It is highly recommended that cattlemen manage pastures coming off drought differently compared to normal moisture years. If overgrazing and/or drought during the past year have reduced plant vigor, drought recovery management should include delaying the start of the spring grazing season so plants can increase leaf area and also use longer recovery periods between grazing. The deferment and longer recovery periods will allow the grasses to develop more leaves and ideally reach a point where some of their depleted energy reserves can begin to be restored. A two-week delay from the normal turn-out date can result in a 10 to 20 percent increase in herbage production.

Many producers began feeding hay last July and may find it difficult to delay spring turn-out due to low hay supplies. Other common recommendations for the year after drought include: reducing stocking rates, using rotational grazing, and/or using alternative forages. Alternative forages could include planting annual pastures such as spring-seeded oats, summer-seeded sorghums, sudans, millets or fall-seeded oats and turnips.

Regardless of the amount of precipitation received thus far, subsoil moisture levels are still extremely dry. Last year's drought combined with over grazing has left pasture plants with little nutrient reserves for new spring growth and poor root growth. Pasture recovery from the drought will be slow. Pasture plants need time to recover – grow and store needed nutrients – before allowing cattle to graze. Also keep in mind that grazing management now is critical for future pasture health. Δ

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