

Managing Drought Stresses Pastures

by *Dennis Cosgrove*¹

Summer drought will likely mean reduced pasture and may increase producers' need for hay. Late summer and fall rains provide some late-season forage growth but proper management is important in order to make the most of this moisture.

The best way to benefit from the fall rains is to manage the grazing of pastures. Managed grazing will ensure livestock get the most out of the forage without harming the health of the plants.

It is tempting to let the cattle run the entire pasture when forage is short. However, this actually decreases plant health and forage production later. When cattle run all the pasture during a drought, they eat off most of the leaves, reducing the ability of the plant to catch sunlight. As a result, the plant's roots starve.

A similar mistake can be made in a rotational system if animals are turned back into a paddock for "a day or two of grazing" as soon as pastures show some regrowth, while this may provide some forage in the long run it is likely to be detrimental to the pastures.

Proper rotational grazing allows for a rest period for the pasture plants. If the plants are allowed to rest, the root system will stay healthy and the plants can build up energy reserves in the tiller base (grasses) and roots (legumes) for later growth. Under drought conditions when plants are rested and allowed to build up energy reserves, there will be compensatory growth by pasture plants when rainfall finally comes. Plants overgrazed during drought will grow slowly in comparison.

Allowing the plants to grow to an adequate height will ensure good root health before grazing. For bluegrass, this is 4 to 6 inches; for orchardgrass, brome grass and endophyte-free tall fescue, 8 to 10 inches. Rotational grazing will also allow good utilization and provide controlled rest for the plants between grazing.

After the plant's energy reserves are restored and tiller buds formed, pastures can be grazed to use available top growth without hurting plant health or spring growth. Leave at least a 4-inch stubble on orchardgrass and brome grass since new growth in the spring comes from the energy reserves in that part of the plant. Bluegrass, which has energy reserves in below-ground stems, will survive closer fall grazing.

Pastures that were severely overgrazed during the summer will benefit from resting until growth stops in fall. By resting drought-stressed pastures until mid to late October, energy reserves will increase since plants will catch sunlight and make sugars even when it is too cold for the plants to grow. Also during this time of year, grasses will develop new tiller buds necessary for next spring's forage production. With overgrazing in the fall, the pasture's growth potential next spring is jeopardized.

Resting the pastures in the fall may require holding the cattle in a relatively small area and feeding hay. Preferably, this area should be a section of pasture or hay land that will benefit from the manure produced.

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