

Managing Drought-Stressed Pastures

DR. TERESA STECKLER



SIMPSON, ILL.

The rain that southern Illinois received on Monday was a definitely needed. Although the rain gauge said 1.2 inches, the region is still 10 inches or so behind normal annual rainfall amounts. Thus it would make sense that southern Illinois is experiencing conditions of a severe drought; as reported by the U.S. Drought Monitor (www.droughtmonitor.unl.edu). The dry conditions are not exclusive to Illinois, these abnormally dry conditions are also being observed in most of Arkansas and Missouri.

Therefore timely pasture management is critical in these areas. While little can be done to increase forage pasture growth in the short run, careful management now can minimize long term stand damage and help maintain forage yields when rains do come.

When drought comes and pasture forage is in short supply it is tempting to continue to graze until all the forage is gone. While this will provide a few more grazing days in the short term, it will delay regrowth and decrease forage yields when rains do come.

It is important to leave green, living leaf area for photosynthesis and more rapid regrowth. Where possible leave an appropriate stubble height to allow for carbohydrate storage and regrowth. For short grasses like bluegrass and ryegrass this is two inches. Taller grasses such as orchardgrass, bromegrass, timothy, and tall fescue the proper residual height is 4 inches. If all plant material is brown and dead, grazing will not harm the plants.

Avoid removing cattle from pastures and turning them back in each time there is a small amount of regrowth. In the short-term you will gain a couple of days of grazing, but this will have detrimental effects on the plants. Continuously removing regrowth removes root carbohydrates and will reduce the plants ability to regrow when rains resume; ultimately affecting long-term pasture yields.

A better pasture management strategy is to allow plants to regrow to appropriate heights before grazing. This allows replenishment of root reserves and will mean healthy plants and higher pasture yields. The appropriate regrowth height is 6 inches for bluegrass and ryegrass

and ten inches for orchardgrass, bromegrass, timothy and tall fescue.

Another management strategy for those practicing continuous grazing is dividing pastures into smaller paddocks and moving animals frequently from paddock to paddock. This system is the single best way to increase pasture yields. Employing rotational grazing and a good fertility program can easily double the available forage in a pasture, which would provide more grazing days and help reduce the impact of dry weather.

Already several cattlemen have related that they will begin feeding hay by the end of the month. It is important minimize damage to pastures. For those without adequate facilities there are three options. One is to establish a sacrifice paddock where feeding will take place. This will limit pasture damage to a particular area. Forage growth from this area will be minimal this year but will likely recover with minimal inputs next year. A second option is to rotate the pastures where feeding takes place. Leave the feed bunk or wagon in a paddock for only a day or two then move to another. This limits the amount of plant damage in any one paddock. A third option is to feed animals in alleys or lanes. In all cases make sure animals have adequate access to water.

It may now be time to consider alternative forage production. There are a number of warm-season annual grasses which can provide forage during dry weather. These include sorghum-sudan hybrids and several types of millets. These forages are typically planted in early June and provide forage within sixty days. Forage yields are in the 2 – 3 ton per acre and provide multiple grazings. These species do better in hot, dry weather than cool-season species and are a good choice for managing drought.

Also consider planting brassicas such as turnips for fall grazing. These crops provide high quality pasture and can be grazed multiple times beginning within 60 days of seeding. But the success of warm-season annuals and brassicas will depend on late summer rains.

Remember it's difficult to estimate how long it will take drought-damaged summer pastures to recover, in part because lingering drought effects won't disappear immediately with the onset of more typical precipitation patterns. Δ

DR. TERESA STECKLER: Extension Specialist, Commercial Agriculture, University of Illinois