

## **Conserving Pasture Production During a Drought**

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"Leave a little leaf." "The first bite doesn't hurt but all the rest do." "Pasture is a perennial crop, manage the root system." Keep these principles in mind when managing pastures at all times but especially during a drought! All the principles of good pasture management will be rewarded during a drought, not by avoiding the drought but by keeping the effects less severe than they could be. Grazing management must be adjusted quickly to drought conditions but species and plant health will also have a major impact on the production.

Plants that are healthy because of good soil fertility programs and good rest periods preserving root reserves will be ready to respond quickly once the rains return. Nitrogen, especially, will need to be applied in conjunction with moisture to be of benefit. Natural fertility or applications of phosphorus and potash will help to keep root systems healthy.

Healthy plants provide a more complete canopy which will reduce soil evaporation and keep the soil from drying out as quickly.

Subdividing fields will help you to manage the pastures better. Grazing management is really "harvest management" of the forage you have produced. In a continuous graze system 70% of the forage produced is wasted, in a rotational system this is reduced to 45% and in a strip grazing system only 30% or less of the material is wasted. Otherwise cattle tramp on, lie on and foul on too much material. If you can keep their heads all pointed in one direction and moving systematically across the field then you can greatly reduce these losses. We don't tramp fields with haybines so why do we allow livestock to do even worse? Smaller fields address all the principles listed at the first of the article. You can restrict livestock from a section allowing it time to rest and to regrow. You can prevent livestock from regrazing and thus overgrazing forages. In this manner you will allow the plant to refill the root reserve system. Plants that have a larger leaf area left after grazing can rebound more quickly. It provides more area for photosynthesis and helps to maintain a larger root system. Seven days of overgrazing can delay regrowth by 2 weeks. You can never afford that delay but especially during a drought it is too expensive!

You have likely already faced the question of whether to leave fields for pasture or take them for hay. If you are grazing taller pastures tramping can be reduced by keeping the fields small. Livestock can effectively graze these if their movements are confined. The next decisions will be when to return to a pasture. Ben Bartlett of Michigan State University advised that "if pastures are less than 6 inches (30 cm) high and have less than 30 days regrowth try not to regraze as they have the potential for more growth with rain. If the regrowth period has been over 30 days they should be grazed to remove the growth and to restart the buds so that regrowth may occur."

Supplementing pastures may be necessary to keep animals from overgrazing. This will mean moving them onto a "sacrifice" pasture and feeding. Livestock will usually prefer pasture so will keep regrazing and weakening pastures rather than accepting the supplemental feed if they still have access. During our last major drought, producers found that they fed less supplemental feed

and had better gains if they supplemented early before livestock condition was affected and before pastures were weakened. Neither have to be adversely affected, but you will have to take control of the situation. Information on supplementation can be supplied by your local Livestock Advisors. Balanced rations are the most efficient method of feeding.

Pastures can be extended by bringing other crops into the rotation. Second cut hay is often used to lengthen the rest period. Other crops such as cereals, sorghums, kale, annual ryegrass or others can also be grazed during summer slumps to give an extended break to the main pastures.

Half of the forage is produced in the first 60 days of the season with the other half occurring throughout the rest of the season. This is concerning this year as the drought did occur early. We will need to make some decisions concerning feed supplies. Decide what you are going to do. Don't be backed into decisions by trying to respond when it is too late.

Careful attention to grazing management will allow you to realize the maximum production from your pastures without sacrificing next years production to salvage this year. Rest the root systems, do not overgraze and leave enough ground cover that recovery can be quick once the rains return. Good grazing management will allow you to grow and harvest the production of the field more effectively. We cannot afford to waste any pasture potential this year.