Spring Grass Management

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le have been through a tough winter in terms of available pasture growth. It's been a long time since I have seen so little growth during winter on rye, wheat, tall fescue, or orchardgrass. Many producers ran out of hay as the amount needed was greater than normally fed. Why so little growth? We had a few outbreaks of very cold weather but the main problem was just consistent cold temperatures and lots of cloudy weather from autumn right through winter so grasses made little growth. Normally, we get periods of warm sunny weather for several weeks at a time in winter but not this past winter. So, now we are going into the lush time of year when the problem often becomes surplus forage.

Wasted forage

Spring forage is normally high quality forage and it needs to be consumed by livestock or conserved for use at another time of year. It is too valuable to waste. Unfortunately, that is what often happens. Understocking of lush ryegrass, tall fescue, or orchardgrass pastures at this time of year can easily result in only 20 to 30% of the forage being utilized, the rest being trampled or growing stemmy and mature so it is left ungrazed. This wasted forage would have been wonderful to have had available in bales for cattle last winter.

Conserving surplus forage in spring

A practical means of reducing waste is to divide pastures with cheap electric fence and concentrate animals to graze a smaller area at one time. This should be started early enough before the grass is tall and mature. Ideally, dividing a pasture into 6 or 8 paddocks gives better control but even splitting a pasture into two or three areas can greatly reduce waste. As the fenced off areas continue to grow, they should be carefully watched

and when early boot stage (stem is elongated and the top is swollen) is reached, start cutting the first area for hay if the weather permits. Plants will continue to mature rapidly so as you continue to harvest additional pastures, they will probably be in early to mid bloom (seed heads are out of the swollen portion of the stem and some seedheads have emerged with pollen beginning to shed) which will produce high quality hay.

As plants continue to mature during spring, yield of hay per cutting increases but nutritive quality declines. When plants have matured seed and the seed are hard, protein and TDN (total digestible nutrient) levels have dropped significantly and the advantages of these high quality forages are lost. For instance, tall fescue hay harvested at hard seed stage will be low in digestible energy, with the TDN levels often below 50. This quality hay will not be adequate to supply the nutrient needs of a dry pregnant cow in winter without supplementation.

Advantages of conserving surplus forage in spring

Aside from reducing waste of valuable forage, there are some other advantages of a well managed spring conservation program:

- (1) If the surplus forage has been harvested at early maturity, the hay will be of high quality which can reduce or even eliminate the need for feed supplements next winter. Ryegrass hay harvested at boot stage will contain 14-15% crude protein and 66-67% TDN. Tall fescue and orchardgrass harvested at the same stage of maturity will be only slightly lower in nutritive quality.
- (2) Harvesting surplus forage of tall fescue as hay at early maturity will result in much more rapid regrowth than if it was not cut until hard seed stage. The reason for this is that the longer the plants

are uncut, the greater the shading of the basal part of the plants where new buds develop into tillers for leaf production. New tiller development is completely dependent on sunlight so when heavy shading occurs over a long period of time as is the case when tall fescue is not cut until late spring, then few buds develop into tillers. Thus, after cutting overmature hay the field often looks brown with few new leaves appearing for quite some time. In contrast, when cut for hay at boot stage there will be rapid development of new leaves and the field will soon be available for grazing or furnish another spring harvest of tall fescue.

(3) Cattle originally confined to a smaller area of pasture initially will be able to keep up with the grass and allow new leaves to develop, furnishing high quality grazing. Ryegrass alone or with arrowleaf clover, will continue productive later in the spring than if undergrazed as new buds continue to produce leaves. As ryegrass matures and dies, cattle can be moved on to bermudagrass pastures. Tall fescue can be maintained in a leafy state with fewer stems than in an understocked pasture. Obviously, as spring continues and growth slows down on tall fescue, cattle will need to be moved to areas from which hay was harvested. If they were harvested at an early stage, regrowth should be good and quality high.

Some final thoughts

The above outline is obviously an ideal that cannot always be followed. Rain and cool damp weather can delay harvesting surplus forage for hay. But, usually there are "windows" of favorable weather in which harvesting can be done on at least part of the spring surplus. Our grass crop is truly a "crop" and is too valuable to waste. It just might be needed next winter!