

Sheep Grazer Learns Importance of Legumes

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I began as a grazier raising pastured poultry in Bloomington, Indiana. For the past five years, I have raised Katahdin sheep in southeastern Ohio. I hosted the May 2003 pasture walk for the Athens County, Ohio, Grazing Council, showing about 20 area grass farmers my pasture-lambing flock of 50 ewes and discussing my rotational grazing system. The timing was interesting, because as I prepared for the pasture walk I realized that the year before, 2002, was both a highly successful grazing year for me and an extremely humbling one.

First, a bit of detail about pasture-lambing, which I think offers advantages in flock health and human labor over barn lambing. I lamb in mid-April, which is the ideal time in southern Ohio for lambing outside. April is actually the driest month in our area. Lambing then also means ewes will have been able to graze for about a month, permitting a transition from feeding average-quality round bales of hay in the field. Generally, I feed up to a pound of grain during the final month of gestation for extra energy. The new grass provides protein and gradually becomes the entire diet.

Ewes are set stocked for about a month during lambing. Most ewes will pick a spot in the pasture to have their lambs-ideally slightly away from the confusion of the main flock. Pasture-lambing is timed to coincide with the onset of heavy spring grass growth. It requires less labor on the part of the shepherd, because the ewes feed and water themselves in the field.

However, decent fences and a livestock guard dog or other guardian animal is recommended to prevent losses from coyotes or feral dogs. Also, while pasture-lambing is natural, it may take a few years to select for sheep that are good mothers on pasture where they are responsible for their lambs. My culling rate based on maternal factors was high for the first three years, which I attribute to having bought most of my stock from barn-lambing flocks.

Another aspect of pasture-lambing is that if lambs are to be worked (tagged, docked and banded), they must be caught within 12 to 24 hours of birth, or they can be hard to run down! I also take birth weights with a portable electronic scale. I score ewes every year based on how well they stay with their lambs and their behavior when their lambs are handled. Ideally a ewe will stay in one spot with her lambs for two days and will not run away when the lambs are being worked. But this behavior varies a bit from year to year.

The pasture base is naturalized Kentucky 31 fescue, most of which in southern Ohio contains the fungus that makes the grass hardier but depresses animal performance. I had satisfying per-acre production in 2002 (52 ewes and 93 lambs on 14 acres) but disappointing individual gains. A fall drought was partly to blame, but at least half of this performance drop was due to the effects of the fescue-or, rather, my poor management of the fescue.

Lower stocking rates in previous years permitted lax grazing, which was not good for the pasture but allowed individual animals to selectively graze. My clover content was far too low, but with lower animal numbers the lambs could select for clover, bluegrass, plantain, naturalized hop clover, and lespedeza.

My most important realization after five years of practicing controlled grazing is that managing for increased white clover content is vital. The fescue must be grazed or mowed to two inches and then allowed to recover. The short defoliation encourages other species to grow or to move into the pasture to dilute the effects of the fungus. During the winter of 2002-2003, I frost-seeded Will ladino and Huia medium-leafed New Zealand white clover, as well as Legend lespedeza.

My best clover in 2003 is in a fescue field that was grazed short twice and mowed twice between March 17 and the end of May. Grazing began when the fescue was only two inches tall. The two hard early spring grazings set back the fescue, permitting legume content to increase to about 30 percent. By late June, the fescue was as strong as ever, but legumes were established and in less danger of being shaded out. In early July, the lespedeza started coming on.

In another effort to reduce the effects of the fescue endophyte, I added ten percent high-grade kelp meal to my mineral ration. Recent studies in Mississippi have shown that kelp helps animals overcome effects of the fungus and boosts their immune system. I also increased the phosphorus level of the mineral, as another study showed that lambs grazing fungus-infected Kentucky 31 had lowered phosphorus uptake.

It is important to keep in mind the virtues of fescue, such as drought resistance, winter stockpiling capability, and ability to overcome abuse. In fact, the grass must be strategically abused in order to encourage other pasture species. Although I have always tried to control the top growth of fescue to favor clover, it has become clear that weakening the roots of grasses at times may be as necessary. Missouri grazing researcher Jim Gerrish has pointed out that fall grazing and even light disking in autumn increase clover seedling success the next spring. If grass was stockpiled the previous fall for winter grazing, hard grazing in the spring will help clover, which starts growing later than grasses.

Manage for clover! Clover concentrates minerals and protein, does not toughen in the heat, as do other perennials, and is highly digestible. In addition to getting its share of light, clover appreciates lime and phosphorus. But until a grazier has enough animals to use the extra forage, fertility improvements should take a back seat to grazing and perhaps mowing. This year I have decent stands of white clover in one fescue field that has not been limed for at least a decade and probably longer. Controlling the fescue encouraged clover, frost seeding, and giving the field 200 pounds per acre of 9-23-30 fertilizer last year.

As I enter my sixth year of management-intensive grazing, I am certain that white clover is the best, most easily established, and forgiving legume for my hardpan clay soils. I wonder what would happen if the excellent grazing classes taught by the Natural Resources Conservation Service were focused strictly around the theme of "Manage for Clover". It might be an excellent focal point. If a grazier can focus on clover, it can make many pieces of the grazing puzzle fall into place.



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