

## Forage 365 and Hay Stocks

Andrew P. Griffith

Summer can bring struggles, hardship, and indecision to cattle operations in the Southeastern United States. There is always a chance for drought which means forage production essentially disappears and an additional cutting of hay is a nonfactor. Alternatively, it may rain frequently and the chance of rain in the forecast keeps producers out of the hay field for the next cutting.

Hay is treated as the lifeblood of many cattle operations, because this is where many producers place their focus. On that note, the hay stocks report was released in early May and it indicated U.S. hay stocks as of May 1, 2017 were down 3 percent compared to one year ago to 24.4 million tons. Hay stocks in Tennessee were down 12.7 percent to 480,000 tons compared to last year while the biggest decline in hay stocks occurred in the Northern Plains and Western states. Many would view the reduction in hay stocks as negative, but it could be what initiates alternative management styles.

Many cattle producers spend a large part of spring and summer harvesting hay to then turn around and spend 120 to 150 days feeding it. Thus, those producers are concerned with producing enough hay to feed from late fall through early spring. Hay is a necessary evil in the beef cattle business, and it is a type of insurance everyone should invest in to some extent. However, it would be prudent for cattle producers to attempt to reduce their need for and use of high input low value products such as hay.

The question then becomes how can a producer reduce the need for hay and reduce forage risks associated with drought, other weather events, or natural disasters? There is not a silver bullet answer but rather a mix of management practices to be utilized. In collaboration with Dr. Gary Bates, a fellow who has been known to take jabs at me in his writings, three management practices key to overcoming forage risk associated with drought are key. At the same time, these management practices can reduce hay usage.

The first practice is managing soil fertility. If soil pH is not in the 6.0 to 6.5 range then soil nutrient availability is inhibited. If soil pH is in good shape then nitrogen, phosphorus, and potash are all needed to promote forage growth. It is important to have a good stand of forage to outcompete weed species. A study in Kentucky showed forage production could be increased 35 percent by applying 30 units of nitrogen, 8.7 units of phosphorus, and 25 units of potassium in the spring compared to no fertilization. There is a cost to applying fertilizer, but no fertilization means a lower stocking rate is necessary.

The second practice is grazing management (i.e. rotational grazing, intensive grazing, etc.). Rotational grazing generally increases forage production, forage utilization, and forage quality which are all positive for grazing animals. For a herd of 30 cows and the assumption rotational grazing increases the number of grazing days by 30 days (e.g. reduces hay feeding from 150 days to 120 days) then a producer can expect a savings of \$45.15 per cow or \$1,354 for the herd.

The third practice is the institution of a warm season perennial. A warm season perennial has two major positive impacts: increases forage availability in the summer and reduces grazing pressure on fescue pasture. If a quarter of a producer's acreage was converted to a warm season perennial then there is a strong possibility it can reduce the number of days hay is fed. If it reduces hay feeding by 30 to 60 days then a producer can expect to save between \$590 and \$1,944 for a 30 cow herd due to reduced hay feeding.

A fourth practice not vetted by Dr. Bates that just became available to producers in Tennessee a couple of years ago is Pasture, Rangeland and Forage Insurance. This is a program producers should consider. It uses a rainfall index on a grid system to determine if an indemnity payment is to be paid to producers purchasing the insurance. In essence, if rainfall for the grid is below average over a two month period then an indemnity is paid.

None of these management practices are full proof every year, but the averages definitely work in the favor of consistently applying these practices. If a drought persists for 6 months then these practices will soften the blow, but it will still be devastating to producers. The key is for producers to utilize practices known to be beneficial for forage production and grazing cattle as well as have some hay in the barn as another insurance policy.