I have had several calls lately with producers asking questions about cutting their wheat for hay or silage. Below is an article from K-State Research and Extension’s eUpdate that discusses the forage quality and pricing if you decide to go that route. As always, if you have a question, you can always contact us by calling the office at 620-793-1910 or emailing at aboor@ksu.edu.

Freezing conditions during April over some parts of Kansas potentially caused some damage in winter wheat, and with the passage of time, the level of damage is becoming more clear. As a result, producers facing reduced grain yields must soon decide whether to keep the wheat crop for grain or make a forage such as wheat hay or silage.

Comparing net returns to grain versus forage at this stage, however, requires market prices for wheat hay and silage, which aren’t always readily available. So how do you put a value on these forage products? This article updates a 2018 eUpdate article to provide some current estimates of wheat forage values as producers consider their options moving forward. The earlier article has more details on harvest concerns and relative feedstuff values.

It must also be mentioned that insured wheat growers should check first with their crop insurance agent before harvesting a forage crop to determine insurance requirements and document potential grain yield losses. Sometimes producers may be required to leave small areas of uncut wheat to provide a way to estimate grain yields. Insurance agents can also inform producers of any other restrictions which may apply.

Pricing wheat silage and wheat hay

The approach for pricing these wheat forage products will be to derive a silage or hay price using feed value comparisons to a feedstuff for which more reliable price information exists. A good candidate for a proxy feedstuff in Kansas is alfalfa hay, with prices reported weekly across the entire state and for a range of quality levels.

Alfalfa hay rated as “good” quality will have 58-60 percent total digestible nutrients (TDN) and 18-20 percent crude protein. According to USDA Ag Marketing Service reports, “fair/good” grinding alfalfa in southwest Kansas is currently selling for around $150-170 / ton, as a reference point. Wheat silage made from wheat at “early-head stage” maturity contains just over 15% Crude Protein and 73% TDN, on a dry matter basis.

Using an alfalfa hay price of $160/ton and the value of energy in alfalfa hay, a comparable wheat silage price based solely on energy would figure out to about $70 per ton as fed ($199/ton dry matter basis), assuming the silage is 35 percent dry matter. A similar calculation based solely on protein content would suggest a wheat silage price of about $50/ton as fed (about $143/ton dry matter basis). These
results, based on rather simplistic calculations, might be viewed as upper and lower bounds on wheat silage prices, from a feed value perspective.

For wheat hay, Watson, indicated that wheat hay harvested at the dough stage would have 56-62 percent TDN and 8-10 percent crude protein, on a dry matter basis. So, wheat hay has almost as high an energy content as alfalfa hay, but significantly lower protein. Wheat hay priced solely on energy, relative to alfalfa, would figure out to about $155 per ton as fed. However, a similar calculation based solely on protein content would suggest a wheat hay price of only about $69/ton as fed. This is a rather wide range and could be considered as upper and lower bounds on the wheat hay value.

Given this wide range, this same approach based on relative feeding values is also estimated with a comparison to forage sorghum hay, which is closer in nutrient content to wheat hay and may provide a more meaningful range of price estimates. Using a TDN value of 57% and a crude protein value of 8% for forage sorghum hay, along with an edge-of-the-field price of $110 ton, we get suggested wheat hay prices in the range of $110 to $124 per ton.

Ultimately, of course, market prices are determined by buyers and sellers. However, the discussion above provides a couple of perspectives on how interested parties might approach the problem.

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