

Buying or selling corn silage this summer?

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With talk of \$75-\$95 corn silage this summer, now is a good time to start thinking about your silage goals. Traditionally, corn silage is purchased on a 70/30 basis; that is 70% moisture and 30% DM.

Let's assume we're buying a field for \$75/ton. What happens when the corn silage is delivered at 28% DM, is the value still \$75/ton? What if it's delivered at 32% DM? Below is an equation that can be used to correct the purchase price for DM:

$$\frac{\text{Actual DM \%}}{30\% \text{ DM}} \times \$/\text{ton} = \text{Corrected } \$/\text{ton}$$

Examples:

So, at **28% DM**, the purchase price would be: $28/30 \times \$75/\text{ton} = \mathbf{\$70/\text{ton}}$

And, at **32% DM**, the purchase price would be: $32/30 \times \$75/\text{ton} = \mathbf{\$80/\text{ton}}$

It's important to remember that as corn matures (DM increases) and starch content increases, fiber quality declines. This trade-off between starch content and digestibility of forage will affect how the silage is incorporated into rations. It's also a prime example of why it's imperative to talk with your nutritionist about your silage goals before making a decision to harvest at a certain DM.

How we sample a field of corn silage for DM adjustment can also have us paying too much or charging too little for corn silage. Sample the field often for the best results. When we followed larger fields of corn silage, ones that took 10 or more hours to harvest, taking an hourly sample was the best way to estimate DM of the entire field. When fields are on the small side, or take less than 10 hours to harvest, sampling more frequently may be warranted. Taking 10 consecutive samples of truckloads dumped at the structure yielded better results on the smaller field (~23 acres). In the table below, you can see three fields of corn silage that we followed, and what the *extreme prices* would be based on sampling method at \$75/ton corn silage.

Average DM	23%	28%	30%				
Corrected \$/ton (assuming \$75/ton)	\$57.50	\$70	\$75				
Wet Tons Harvested	1406	673	989				
Acres Harvested	+/- 50	+/- 23	+/- 50				
	\$/ton						
	Min	Max	Min	Max	Min	Max	
Single Sample	\$45	\$69	\$63	\$82	\$62	\$88	
10 Consecutive Samples	\$53	\$61	\$68	\$73	\$71	\$78	
Hourly Samples	\$55	\$59	\$67	\$74	\$72	\$76	

To see more details regarding this work, visit: http://cestanislaus.ucanr.edu/Dairy_Science/UCCE_Silage_Day_2014/