

# PRICING STANDING CORN FOR SILAGE

Larry F. Tranel, Agriculture Agent  
University of Wisconsin-Extension, Iowa County

Corn silage is worth whatever someone is willing to pay for it. However, this solution obviously does little to give a fair price to the buyer or seller. Therefore, one can use the following methods to calculate approximate values for corn silage on a per ton basis.

1. The corn portion is usually about 50% of the total tonnage and ranges from 40% to 60%. One ton of corn silage contains about 6-8 bushels of corn. Multiply the current price of corn (\$3.25/bu. for example) x 7 bu./ton and then add \$6 per ton for remaining plant tissue, equals a price around \$29 per ton at 65 percent moisture. Note: If corn ears were immature when killed by frost or low yielding due to dry weather, use 5 or 6, rather than 7 as the factor (70-90 percent of normal value).

A typical custom rate charge is \$3-\$4 per ton but can range higher at 65 percent moisture to chop corn silage and blow it into a silo. Costs could be higher if hauling long distances. This charge subtracted from "delivered" value is \$25-\$26 per ton for "standing" corn silage.

2. Divide the price of hay by three. This formula is based on the assumption that the extra energy in corn silage is worth as much as the additional protein in hay (**not true in all years such as high corn price years**). It also assumes 3 lbs. of corn silage contains the same amount of dry matter as 1 lb. of hay. Thus, if hay is worth \$80 per ton, corn silage is worth about \$26.66 per ton ( $\$80 \div 3 = \$26.66$ ) using this method.

3. A third method is based on the amount of energy, protein, calcium and phosphorus in the corn silage. Using "FeedVal", a spreadsheet to determine feed values as compared to the price of dry shell corn and 44% soybean meal, the following table shows the value of corn silage at different prices of corn and soybean meal. Prices are based on corn silage at 65 percent moisture (35 percent dry matter). The range for each corn price is due to quality from fair, very good or excellent.

44% Soybean Meal is \$200-\$330 per ton and >	Corn Price is \$2.50	Corn Price is \$2.75	Corn Price is \$3.00	Corn Price is \$3.25	Corn Price is \$3.50
Corn Silage is Worth >>	\$27-\$29	\$29-\$32	\$32-\$35	\$35-\$38	\$37-\$40

As one can see, the value of corn silage ranges from \$25 per ton to \$40.00 per ton depending on which the corn price and which pricing mechanism is used. Thus, there is a wide price range from which the buyer and seller can bargain on a fair price.

## ESTIMATING CORN SILAGE YIELDS

There are several ways producers can use to estimate corn silage yields including the following:

1. In order to estimate values for corn silage sold by the acre, one must estimate yields per acre. To do this, determine row width and then cut plants from one row (1/1000th acre) utilizing the following table:

<u>Row Width</u>	<u>Row Length</u>
30"	17'5"
36"	14'6"
38"	13'9"
40"	13'1"

Next, weigh the amount of whole corn plants cut in pounds. Multiply the pounds of corn silage harvested by 1000 and then divide by 2000 lbs. per ton. This gives the estimated tons produced per acre. For example, if row width is 30 inches and 17'5" of row was cut that weighed 34 pounds, this would yield 17 tons of corn silage per acre ( $34 \times 1000 / 2000 = 17$  tons). Sample in several areas and average results.

2. Weigh a chopper wagon empty across scales. Then, weigh a typical load of chopped silage to calculate tons per load and count the loads.
3. Another option is to guess at the silage yield per acre. In good years, corn silage averages 15-17 tons per acre. In bad years, the yield may be down to 7 tons per acre. High producing fields can be well over 22 tons per acre. Thus, one can guess but room for error may be high.