



Extension

UNIVERSITY OF WISCONSIN-MADISON

Buying and Selling Corn Silage: What's A Fair Price?

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Base price at 65% moisture..... \$_____ / ton
Option #1... 7-9x price of shell corn...\$5.20 x 8 = **\$41.60 / ton**
Option #2...cost + return...\$635 ÷ 18 ton/a + 10% = **\$35.60 / ton**
Option #3...1/4 - 1/3 price of average baled hay...\$165 x 0.25 = **\$41.25 / ton**

Adjusted price for moisture (see table below).....\$_____ / ton

Base Price (\$ / ton as fed) at 65% moisture						
% Moisture	\$32	\$36	\$40	\$44	\$48	\$52
71 %	\$26.51	\$29.83	\$33.14	\$36.46	\$39.77	\$43.09
69 %	\$28.34	\$31.89	\$35.43	\$38.97	\$42.51	\$46.06
67 %	\$30.17	\$33.94	\$37.71	\$41.19	\$45.26	\$49.03
65 %	\$32.00	\$36.00	\$40.00	\$44.00	\$48.00	\$52.00
63 %	\$33.38	\$38.06	\$42.29	\$46.51	\$50.74	\$54.97
61 %	\$35.66	\$40.11	\$44.57	\$49.03	\$53.49	\$57.94
59 %	\$37.49	\$42.17	\$46.86	\$51.54	\$56.23	\$60.91

Quality adjustment factor for maturity..... x _____ %
(Darby and Lauer, 2002)
... pre-tassel = **90%**
... silk = **80%**
... soft dough = **85%**
... early dent = **90%**
... 1/2 kernel milk line = **100%**
... black layer = **90%**

Adjusted price for moisture and quality..... = \$_____ / ton

Estimating Corn Silage Yield

Historically, formulas based on corn plant height and corn grain yield have been used to estimate silage yield. Current data using these methods on modern hybrids is lacking, making the accuracy of these methods unknown.

(over)

Sample Weight Method

A more accurate way to estimate yields is to weigh the corn plants from a portion of an acre in several representative spots of the field. When using this method, cut at the height you intend to chop at. To do this, determine row width, then cut corn plants in one row for a certain length according to row width in the following table:

Row Length	Row Width
69.70 ft.	15"
52.27 ft.	20"
47.52 ft.	22"
34.85 ft.	30"
29.04 ft.	36"
27.51 ft.	38"
26.14 ft.	40"

Next, weigh the amount of whole corn plant material cut in pounds. Divide the pounds harvested by 4. That's the estimated as fed tons produced per acre. Factoring in moisture adjustments can also increase accuracy. Follow this method for several areas and average the results.

For example – If the row width was 30" and 34.85 ft. or row was cut and weighed 64 lbs., this field would yield 16 tons of corn silage /acre (64 divided by 4 = 16 tons).

In order to obtain actual tons harvested, weigh each wagon load or count how many feet of silage went into a silo after settling. If you know the silo size, how many feet of silage was put up and what the moisture was, silo charts can be used to calculate tons stored. Dividing stored tons by acres harvested will give you yield per acre.

Finally, multiply your adjusted base price with yield and total acres to determine total value. If the buyer is responsible for harvesting, then use the following 2017 custom rate guide to establish credit toward the final payment.

	Pull-Type		Self-Propelled	
	\$ / Acre	\$ / Hour	\$ / Acre	\$ / Hour
Chop Only	\$44.60	\$106	\$76.80	\$401
Chop/Haul/Fill Upright Silo	\$71.10	\$133	\$130	\$494
Chop/Haul/Pack Bunker	NA	NA	\$143	\$675

https://www.nass.usda.gov/Statistics_by_State/Wisconsin/Publications/WI-CRate17.pdf

For a more in-depth analysis, including value of stover and/or nutrient removal, go to the UW Madison Division of Extension Corn Silage Pricing Aid webpage (Excel, Android App, Apple App): <https://stcroix.extension.wisc.edu/agriculture/corn-silage-pricing/>