



Buying and Selling Corn Silage: What's A Fair Price in 2014?

By Greg Blonde, Agriculture Agent
UW-Extension, Waupaca County

Base price at 65% moisture..... \$_____ / ton

Option #1... 7-9x price of shell corn...\$3.25 x 8 = **\$26 / ton**

Option #2...cost + return...\$450 ÷ 15 ton/a + 10% = **\$33 / ton**

Option #3...1/4 to 1/3 price of baled hay...\$175 x 0.25 = **\$44 / ton**

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

Base Price (\$ / ton as fed) at 65% moisture						
% Moisture	\$26	\$30	\$34	\$38	\$42	\$46
71 %	\$22	\$25	\$28	\$32	\$35	\$38
69 %	\$23	\$27	\$30	\$34	\$37	\$41
67 %	\$25	\$28	\$32	\$36	\$40	\$43
65 %	\$26	\$30	\$34	\$38	\$42	\$46
63 %	\$27	\$32	\$36	\$40	\$44	\$49
61 %	\$29	\$33	\$38	\$42	\$47	\$51
59 %	\$30	\$35	\$40	\$45	\$49	\$54

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

Two “quick and dirty” ways to estimate corn silage yield are:

Based on Grain Yield...for stressed corn, about one ton of silage per acre can be obtained from each 5 bushels of grain per acre. For example, if you expect a grain yield of 50 bushels of grain per acre, you will get about 10 ton/acre of 30 percent dry matter silage. For corn yielding more than 100 bushels per acre, about one ton of silage per acre can be expected for each 7 to 8 bushels of grain per acre.

(over)

Based on Plant Height

If little or no grain is expected, a rough pre-harvest estimate of yield can be made by assuming that one ton of 30 percent dry matter silage can be obtained for each foot of plant height (excluding the tassel). On this basis, "waist-high" corn 3-4 feet tall will yield about 3 to 4 tons per acre of silage at 30 percent dry matter.

Sample Weight Method

A more accurate way to estimate yields is to weigh the corn plants from a portion of an acre (1/100th) in several spots of the field. 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
32.50 ft.	30"
28.75 ft.	36"
27.50 ft.	38"
26.25 ft.	40"

Next, weigh the amount of whole corn plant material cut in pounds. Divide the pounds harvested by 4. That's the estimated tons produced per acre. Follow this method for several areas and average the results.

For example – If the row width was 30" and 32.5 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 2013 custom rate guide to establish credit toward the final payment.

Pull-Type	With Kernel Processor		Without Kernel Processor	
	\$ / Acre	\$ / Hour	\$ / Acre	\$ / Hour
Chop Only	\$60	NA	\$50	\$115
Chop/Haul/Silo	\$100	\$250	NA	\$150
Self-Propelled	\$ / Acre	\$ / Hour	\$ / Acre	\$ / Hour
Chop Only	\$70	\$350	\$60	\$275
Chop/Haul/Pack	\$125	\$575	NA	NA

For a more in-depth analysis, including value of stover and/or nutrient removal, go to the UW-Extension Team Forage website at:

<http://fyi.uwex.edu/forage/files/2014/01/CornSilagePricingDecisionAidV2-1.xls>