
SEPTEMBER 2021

Shawano County Ag Newsletter

University of Madison Division of Extension



Extension
UNIVERSITY OF WISCONSIN-MADISON
SHAWANO COUNTY

Shawano County Extension
311 North Main Street
Shawano, WI 54166
(715) 526-6136

Hours:

Monday- Friday
8:00 AM - 4:30 PM

Facebook and Twitter:

@AgShawano

Website:

shawano.extension.wisc.edu

Hello All!

September brings cooler temperatures, children back in school....and corn silage season. In this newsletter you will find several pieces of information on corn silage. The Shawano County Forage Council is hosting dry down days, More details are included in this newsletter as well as the fact sheet: Maximizing Corn Silage Yield and Quality - 2021 Harvest Season.

Included as well is a fact sheet on pricing corn silage, If you prefer to use your smartphone there is a corn silage pricing app, You can download the app from the app store or google play store by searching Corn Silage Pricing App (icon is shown on the bottom of this page). The app allows you to look at pricing from both the buyer and seller's perspectives.

If you are buying or selling corn silage or other feed Extension has a website you can use to connect with buyers and sellers. The farmer to farmer site is free of charge to both buyers and sellers. Users can list or search for hay, alfalfa haylage, corn silage, high moisture corn, corn grain, or other forages (i.e., oats, peas, or Sorghum). Extension assumes no responsibility in the transaction of buying or selling the items listed on this website. All transactions and negotiations are handled directly between buyers and sellers. You can find the website at this link: <https://farmertofarmer.extension.wisc.edu/>

As always stay safe during this harvest season!

Kimberly Schmidt

Agriculture Educator

715-526-4871

email: kimberly.schmidt@wisc.edu



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Upcoming Events

Shawano County Forage Council Dry Downs in partnership with United Co-op and Seed Concepts

Dates: September 1 & September 8

- \$10 per sample
 - 2 free for Forage Council Members current on dues
(dues go to support local research projects in forage, scholarships for local students, sponsoring meetings for producers)
- Samples need to be dropped off by 10:00 AM at:
United Co-op 1212 Bay Lakes Road Shawano, WI
- Please include on the sample your:
 - Name, address, phone number or email
 - Hybrid, day length and planting date



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**WISCONSIN
BEEF QUALITY
ASSURANCE
CERTIFICATION**

ATTEND AN IN-
PERSON TRAINING OR
COMPLETE ONLINE AT:
www.bqa.org



Register for an in-person session

<https://tinyurl.com/2hr5karf>

July 20-Lancaster Sept 9-Sparta
Aug 26-Dodgeville Sept 11-River Falls
Sept 7-Monroe Sept 23-Bonduel
Sept 28-Darlington



Beef Quality Assurance (BQA) training offered at the Lumberyard in Bonduel on September 23 at 5:30 PM. Register here: <https://tinyurl.com/2hr5karf> or by calling the Shawano County Extension office: (715) 526-6136

Upcoming Events

Artificial Insemination Training

Instructors: Heather Schlessler: Extension Marathon County Agriculture Agent
Sandy Stuttgart: Extension Taylor County Agriculture Educator

This four partial day workshop is designed for educating beef and dairy producers about:

- The benefits of using Artificial Insemination instead of a bull
- The importance of proper heat detection and the tools available to help you detect heat
- Learning various estrous synchronization protocols to use in their

This course includes both classroom and on farm activities.

- Online: Sept 28th and 30th 7–9 pm
 - In person: October 7th 1–3 pm And October 8th 9 am–Noon at
 - Bach Farms
- W861 Co Rd A
Dorchester, WI 54425



ENROLLMENT LIMITED TO FIRST 15 PAID REGISTRANTS

Pre-registration required by September 13th

Register online: <http://bit.ly/AIOCT2021> Or make checks payable to Extension and mail to:

Attn: AI Program
Extension
212 River Drive, Suite 3
Wausau, WI 54403

Hay Market Report August 23, 2021

Data Compiled by: **Richard Halopka**, Clark County Extension Crops & Soils Agent

Published on: <https://fyi.extension.wisc.edu/forage/h-m-r/>

Hay Grade	Bale type	Price (\$/ton)		
		Average	Minimum	Maximum
Prime (> 151 RFV/RFQ)	Small Square	\$245.00	\$210.00	\$300.00
	Large Square	\$215.00	\$125.00	\$325.00
	Large Round	\$193.00	\$110.00	\$285.00
Grade 1 (125 to 150 RFV/RFQ)	Small Square	\$188.00	\$160.00	\$224.00
	Large Square	\$190.00	\$120.00	\$280.00
	Large Round	\$164.00	\$120.00	\$275.00
Grade 2 (103 to 124 RFV/RFQ)	Small Square	No Reported Sales		
	Large Square	\$162.00	\$100.00	\$275.00
	Large Round	\$144.00	\$100.00	\$225.00
Grade 3 (87 to 102 RFV/RFQ)	Small Square	No Reported Sales		
	Large Square	\$129.00	\$100.00	\$185.00
	Large Round	\$98.00	\$50.00	\$170.00

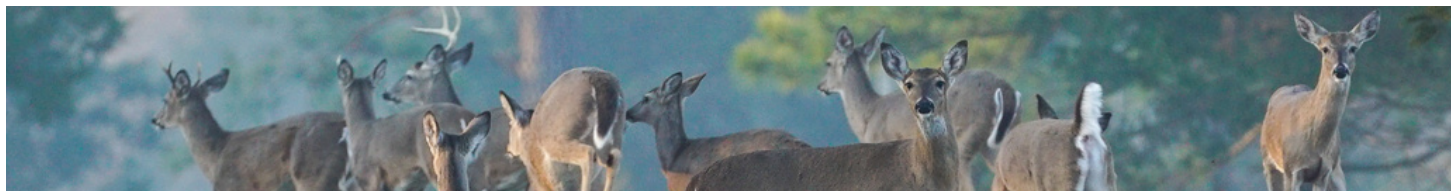
Demand and Sales Comments

Dairy quality hay continues to be in demand. The market was steady this past week. If located in a drought area, Central Wisconsin has a surplus of hay available, contact a trucker if looking for hay as many will haul to drought areas. If you need forage or have forage to sell or straw, connect to the Farmer-to-Farmer webpage at <http://farmertofarmer.uwex.edu/>. You may contact your local county agriculture educator if you need help placing an ad. There is no charge for the service.

Extension Podcasts

The Cutting Edge Podcast

Join UW-Madison Division of Extension as they search for new crops for Wisconsin growers, processors, and consumers. The strength of Wisconsin's agricultural economy is its diversity...something that doesn't just happen by chance. It is a product of the relentless drive of researchers and farmers to innovate, explore, and experiment. Join us for a glimpse into the exciting new research and development bringing new crops and diversity to Wisconsin.



Episode #23: Wildlife Plots

Join Eric Canania and Mark Rassmussen from the Wisconsin Department of Natural Resources and Jerry Clark from UW-Madison Division of Extension Chippewa County as they discuss the why and how to establish a wildlife food plot

Episode #24: Elderberry

Join Mike Breckel an elderberry farmer from Vernon County and Dr. David Handley, Fruit Crop Specialist from the University of Maine Cooperative Extension as they discuss production and marketing potential of elderberry.

Listen here: <https://cropsandsoils.extension.wisc.edu/programs/the-cutting-edge-podcast/>

AgriVision Podcast

The Farm Management AgriVision podcast is hosted by Katie Wantoch, Agriculture Agent with UW-Madison Division of Extension. She will be chatting with fellow UW Extension educators as they answer questions from farmers and share their knowledge and expertise on how farmers can improve their farm management skills.



AgriVision Episode 18 – It's time to have a long talk with Dad

Host Katie Wantoch and Jim Versweyveld, Agriculture Extension educator in Walworth County, discuss a female farmer who needs to have a conversation with her dad about her future and their family farm.

AgriVision Episode 19 – Short on hay

Host Katie Wantoch and Richard Halopka, Extension crops and soils educator in Clark County, discuss the advantages and disadvantages of a farmer purchasing locally grown hay or hay from western states.

Listen here: <https://farms.extension.wisc.edu/programs/agrivation-podcast/>

Dairy Situation and Outlook, August 19, 2021

Written by:

Bob Cropp, Professor Emeritus University of Wisconsin Cooperative Extension University of Wisconsin-Madison



Milk prices will trend lower in August. The August Class III price may end up near \$16.00. The Class III price has been declining since May when it was \$18.96. Lower cheese and dry whey prices brought the Class III price down. Cheddar barrels and 40-pound block cheese were on the decline since mid-July. By early August barrels had declined to \$1.3075 per pound and 40-blocks to \$1.6350. Dry whey which was as high as \$0.70 per pound in May was just \$0.475 early August. Prices in recent trades have been moving up and down but are now higher than early August. Today barrels were \$1.5050 per pound, blocks \$1.73 and dry whey \$0.52. The lower dry whey price since May takes about \$1 off the Class III price.

As things returned to more normal with people eating out, fans returning to stands of sporting events, conferences and other public events being in person the sale of butter and cheese improved. Compared to a year ago second quarter American cheese sales were 10.8% higher and other cheese was 5.4% higher. But fluid (beverage) milk is running below a year ago as people eat out more rather than at home meals. In June fluid milk sales were 6.7% below a year ago. There is a concern that with increase cases of the Delta virus reinstating the wearing of masks again that consumers may back off some on eating out and attending public events. That could hurt butter and cheese sales. But schools are scheduled for in person learning this fall which will be positive for fluid milk and dairy product sales.

Dairy exports continue to support milk prices. Exports for June compared to a year ago were 7% higher for nonfat dry milk/skim milk powder, 16% for whey products, 67% for butter, but cheese exports were 13% lower. Cheese exports through June were still 2% higher. The volume of exports through June were 13% higher and exports could end the year at a record high. U.S. butter, cheese and nonfat dry milk/skim milk powder prices remain substantially lower than foreign export prices. Also, milk production in Europe and New Zealand, two major exporters maybe no more than 1% higher than a year ago. Port congestion has and may continue to limit some exports.

Milk prices will get some support from government purchases. USDA has announced the purchase of cheese and fluid milk products for delivery the last three months of this year. This will be in addition to USDA's normal purchases of dairy products for school lunches and other food programs. Also, it has been announced that the SNAP program will be increased by 25% which could increase fluid milk and cheese sales.

How milk prices finish out the year and going into next year will depend upon the sale of dairy products, level of exports and the level of milk production. The growth in milk production needs to slow to support higher milk prices. USDA estimates July milk production to be 2.0 higher than a year ago. This is a lot of milk considering August milk production a year ago was up 1.9%. After increasing each month since July of 2020 cow numbers have declined two consecutive months with June down 6,000 and July 3,000. Adverse weather has slowed milk per cow. Compared to July a year ago milk per cow was up just 0.7%. Weather impacted milk per cow in California, Idaho and New Mexico where each state experienced 0.7% less milk per cow. California had the same number of cows resulting in 0.7% less milk, Idaho had 9,000 more cows resulting in just 0.8% more milk and New Mexico had 5,000 fewer cows resulting in 2.3% less milk. Milk production for the other top five states were: Wisconsin +4.6%, New York +2.8% and Texas +7.2%. Wisconsin had 21,000 more cows and milk per cow was up 2.9%. New York had added 4,000 cows and Texas 35,000 cows.

Strong milk production occurred some other states. The increase in milk production and the number of additional cows were South Dakota 17% with 21,000 cows, Indiana 5.7% with 9,000 cows, Michigan 4.3% with 17,000 cows, Iowa 4.3% with 10,000 cows, and Minnesota 4.2% with 17,000 cows.

With lower milk prices and higher feed costs milk production is likely to slow for the remainder of the year and going into next year. On August 3rd USDA Drought Monitor had drought affecting 47% of the cow inventory. Drought was affecting 64% of the alfalfa hay acreage and 37% of the corn production. With feed supplies tighter feed prices are going to be higher this fall and winter which will likely impact milk per cow and cow numbers as more lower producing cows are culled from the herd.

As of now it seems reasonable that Class III could be in the \$17's by September and for the rest of the year with low \$18's not ruled out for November and December. Class III futures currently only reach a high of \$17.50 in November. USDA lowered its price forecast from last month and has Class III averaging just \$16.55 for the year compared to \$18.16 last year.

Badger Crop Connect

Upcoming Webinars:

Starting @12:30 PM

CCA CEUs
available

Sept 8: Fall Manure Management

- Local Update
Kimberly Schmidt, Extension Shawano County Agriculture Educator
- Managing N Credits from Manure & Nitrification Inhibitors
Carrie Laboski, UW-Madison Extension Soil Specialist
- Cover Crops that Best Scavenge N for Water Quality
Jamie Patton, Senior Outreach Specialist, UW-Madison NPM Program

Sept 22: Winter Wheat and Soil Carbon

- Local Update
Mike Ballweg, Extension Sheboygan County Agriculture Educator
- Setting Up the Winter Wheat Crop for Success
Shawn Conley, UW-Madison Extension Soybean and Small Grain Specialist
- Are there Cropping Systems that Build Soil Carbon?
Randy Jackson, Professor, UW-Madison Agronomy Department

October 13th: Seed Trait Selection for Pest Management and Yield

October 27th: 2021-2022 Grain Marketing Outlook



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Register for the fall 2021 sessions:

<https://go.wisc.edu/bccfall2021>

Maximizing Corn Silage Yield and Quality - 2021 Harvest Season

Kevin Jarek – UW-Madison, Division of Extension, Crops and Soils Agent – Outagamie County

Jamie Patton– UW-Madison Wisconsin Nutrient and Pest Management Program Senior Outreach Specialist\

Kimberly Schmidt – UW-Madison, Division of Extension, Agriculture Educator – Shawano County

Corn silage is unique compared to other multicut forage systems, such as alfalfa, as there is only one opportunity to harvest the crop annually. Therefore, farmers, agronomists, and agricultural professionals must diligently monitor corn silage acres to identify the optimal harvest time to maximize forage yield and quality, as well as to ensure the proper moisture content for ensiling.

This year's growing conditions have been highly variable, resulting in significant differences in crop growth and maturity within and between fields. Therefore, it is important to regularly monitor whole plant moisture levels ahead of fall harvest in order to develop a harvest strategy.



Estimating Average Dry Down Per Day

The average corn silage dry down rate in Wisconsin in September is assumed to be 0.5 percent per day. This



rate of dry down is impacted by air temperature, wind speed, and relative humidity, as well as the hybrid, crop management, landscape position, and soil type. In dry conditions the daily dry down rate can be as high as 1 percent. The rate of dry down can also be impacted by ear development. Fields experiencing “tip back” or the lack of kernel development at the end of the ear, may dry down more quickly than the average dry down rate per day. In addition, fields with tip back may also be more susceptible to disease development in the unfilled portion of the corn ear

and so, these fields should be monitored for disease development ahead of harvest.

Moisture Testing

To monitor field moisture levels, divide the field into representative groups and sample three to five whole plants in two or more locations within each representative group. Representative areas are often separated by areas of different crop growth stages, hybrids, and/or dry down rates.

Whole plant samples should be collected at the planned chopping height. Collected samples should be placed in a sealed plastic bag, kept cool, and chopped and analyzed as soon as possible using NIR spectroscopy or dried using a Koster oven, microwave, or convection oven.

While NIR and convection oven moisture estimates can be used directly. Koster and microwave moisture results should be adjusted, as residual moisture may be left over in the sample after drying. It is recommended

to add at least 2 percent moisture to Koster and microwave sample results to more accurately estimate actual



field moisture contents. Additional residual moisture has been found in microwave and Koster dried samples when there is not a consistent dry down protocol being followed. Ideally, samples should be sent to a laboratory and compared to on-farm tests to determine the average residual moisture present.

Many local Forage Councils and Agricultural cooperatives host corn silage dry down events, where samples can be chopped and either analyzed on site or sent to a local laboratory for moisture determination. Local Extension offices can often provide information on local dry down events.

Moisture test results from many area silage dry down events are available on the UW-Madison, Division of Extension, Corn Silage Drydown website at: <https://fyi.extension.wisc.edu/silagedrydown/>. Using this information, farmers and agricultural professionals can compare current and historical results of corn silage samples based on location, hybrid maturity (short season vs. long season), and planting date (early or late)

Optimal Moisture Content at Harvest

Ideal corn silage moisture at harvest varies by forage storage structure. Harvesting corn silage at the proper moisture content will promote proper packing, good fermentation, reduce unwanted mold development, and limit seepage losses.

Silo Structure	Ideal Moisture Content at Harvest
Horizontal bunker/pile	65 to 70%
Bag	60 to 70%
Upright concrete stave	60 to 65%
Upright oxygen limiting	50 to 60%

Harvest Strategies for Fields with Uneven Moisture Contents

To harvest a field with uneven moisture contents, begin chopping when the majority of plants are at the correct moisture for the storage structure. If uneven plants are randomly scattered within a field, there should be minimal problems with fermentation, as the wetter and drier materials will be adequately mixed.

If a field contains large areas significantly wetter or drier than optimal, potential harvest options are based on row orientation. If a portion of the uneven area will be harvested with each pass of the chopper, mixing should occur and fermentation should continue with minimal problems. However, if the area is orientated to the rows so that the chopper does not move through wet and dry areas with each pass, then the areas should be segregated and harvested separately.

Harvest and Storage Management

Farms utilizing horizontal bunker silos and/or drive over piles should ensure the capacity of the packing tractors available matches the quantity of the forage being delivered to the storage site. Proper packing and fermentation will result in a final product that will remain stable until next year's harvest.

Practices detailing the entire process of corn silage harvest management can be viewed at the links below.



Predicting Harvest and Moisture Level <https://www.youtube.com/watch?v=nSk107L31bc&t=66s>

Equipment Settings and Safety - <https://www.youtube.com/watch?v=VocbEvDHqro>

Processing, Packing, Storage, & Safety - <https://www.youtube.com/watch?v=3-hNM8rgtns&t=41s>



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

August 2021

*Originally produced by Greg Blonde, Extension Agriculture Agent Emeritus
Updated by Ryan Sterry, UW-Madison Division of Extension Agriculture Agent
Reviewed by Joe Lauer, Extension Corn Agronomy Specialist, and Bill Halfman, Extension Agriculture Agent*

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/>