

Quarter 3 Ag Industry Summary

Corn

Quarter three of the 2021 fiscal year marks the official end of the 2020 crop year and the beginning of 2021. USDA's September Quarterly Grain Stocks number officially marks the final carryout for 2020 at 1.24 billion bushels - the lowest since 2013. The final stocks to use ratio (how much is left compared to how much is used) was 8.34% - also the lowest since the 2012 crop year. It was, however, more than the trade expected, and more than the August USDA estimate, resulting in additional carry-in to the 2021 balance sheet. Further, the October World Supply and Demand Estimates (WASDE) report published by USDA raised the projected yield for 2021 by 0.2 bushel an acre. For reference, this is 0.1 bushel an acre less than the record U.S. yield, with central to eastern corn belt yields erasing drought stressed yields in the west.

On the demand side, USDA reduced estimated feed demand for corn by 50 million bushels from the prior month, although it remains 53 mbu higher than what was seen in the 2020 crop year. Food and seed usage for 2021 was increase by five mbu, while export projections were raised by 25 mbu. The additional demand softened the increase in projected 2021 carryout, which now stands at 1.5 billion bushels. At that level, the projected stocks to use ratio for 2021 would be the lowest since 2013 (2020 aside). USDA left the projected on-farm price at \$5.45 a bushel.

Looking ahead to the 2022 crop, USDA will not make any official WASDE projections until May of 2022. However, as part of the federal budgeting process, departments within USDA will make a separate longer-term forecast with one released in November and one in mid-February. Sharp rises in fertilizer and chemical costs (nearly 200% increases in some cases), and concerns about logistics and general availability by next spring are keeping December 2022 corn prices supported. Profitability analysis show that even with the current high input costs, corn holds a margin advantage over soybeans and spring wheat in most cases.

From a cash and/or storage position, September Grain Stocks report was informative if not surprising. At the end of the 2020 crop year, producers in Minnesota and North Dakota in particular, were holding a less than average portion of the state's stocks on-farm. Below is a table illustrating the September 1 on farm stocks as a bushel amount as well as a percentage of actual stocks in the state. Of note: to end the 2019 crop year in both Minnesota and North Dakota, both absolute bushels and the percentage of total bushels held on farm was higher than the 10-year average. By the end of the 2020 crop year, both categories in these states were well below the 10-year average. This means many producers sold heavily into the rising market, which should strengthen cash flow. It also shows why the basis is remaining historically strong in these areas despite harvest. Wisconsin on farm stocks showed a different pattern, but the state is also much heavier on corn for feed use.



	Bushels loca	ted On-Farn	n (1,000's)	% of State Stocks located On-Farm			
	2020	2021	10 yr ave	2020	2021	10 yr ave	
Minnesota	130,000	42,000	84,000	51.52%	38.85%	43.36%	
North Dakota	40,000	5,200	19,360	43.69%	18.94%	33.83%	
South Dakota	57,000	26,500	44,500	48.79%	41.53%	46.97%	
Wisconsin	40,000	36,650	21,000	43.40%	37.69%	45.87%	

Soybeans

As with corn, the end of August closed out the <u>books for the</u> 2020 crop year. The official ending carryout as seen in the September 30th release of USDA's Quarterly Grain Stocks report was 256 million bushels, the highest number since the October 2020 WASDE estimate, which stood at 290 mbu. The final carryout was the result of not only softer than expected export demand in the second half of the marketing year, but also a revision to 2020 production in the amount of an additional 80.8 million bushels. The larger than expected carryout to the 2020 crop was then carried over to the 2021 crop year books in the October 2021 WASDE report. Those additional bushels, plus a large 0.9 bushel per acre adjustment to the yield projection put the 2021 carryout estimate at 320 million bushels compared to just 180 million bushels in September.

Demand was revised slightly higher, adding 10 mbu to crush, which was inconsequential in light of the additional supplies. Further, export pace the first month of the 2021 marketing year was well below average and far below what is needed to meet USDA's projected export demand. While it is early in the marketing year, harvest and new available supplies out of South American typically arrive in February, leaving the U.S. export shipments heavily weighted to the front end of the marketing year. Chinese imports, which have been a major source of U.S. demand in the past, were also light; the country purchased the least amount of bushels in September as they have in seven years. Accordingly, export pace in the next four months will be watched very carefully.

In terms of available soybean space and producer's cash position as we end the 2020 marketing year, the Quarterly Grain Stocks report was similar to corn with both sheer bushel numbers percentage of on farm stocks below the 10-year average. Similarly, this would be indicative of more available space to hold grain in AgCounty's lending service area, as well as decent cash flow on the 2020 crop. It is also supportive of basis levels in the area.

	Bushels he	eld On-Far	m (1,000's)	% of Stocks located On-Farm			
	2020	2021	10 yr Ave	2020	2021	10 Yr Ave	
Minnesota	17,000	8,800	11,090	35.16%	31.20%	32.85%	
North Dakota	10,500	1,900	4,619	30.40%	26.57%	30.56%	
South Dakota	13,000	4,800	6,940	30.60%	27.19%	35.42%	
Wisconsin	2,900	1,000	2,151	19.35%	18.85%	22.55%	



Wheat

Different from corn and soybeans, wheat ended its marketing year back in June, meaning the September Quarterly Stocks report is a mid-year measure. However, USDA also issues its annual Small Grains Production report on September 30th, which finalizes all the class-by-class yield and production estimates for the 2021 crop year. Wheat stocks and balance sheets were both tighter than what the trade had anticipated, largely due to lower-than-expected winter wheat production.

The final all-class wheat yield for 2021 registered 44.3 bushel per acre per the Small Grains Summary. That number is 5.4 bushels less than 2020. Spring wheat specific yields were finalized at 32.6, higher than the lowest estimate made in July but still more than 13 bushels below trendline expectations. Durum suffered a similar fate, although its importance to U.S. balance sheets is minimal, and the crop is more important for North Dakota independently. Total U.S. carryout projections per the October World Supply and Demand Estimate report projected the 2021 all wheat carryout at 580 million bushels. This compares to an estimate of 615 mbu in September and 845 mbu to end the 2020 crop year. Aside from the lower than anticipated production, import pace through the first quarter was less than expected, leaving supplies curtailed. USDA also lowered projected feed usage as rising wheat prices make corn the more competitive feed grain. Exports were left unchanged from the September estimate, while the projected marketing year average price was raised by 10 cents to \$6.70. Note: at 580 mbu, U.S. wheat stocks would be the lowest since 2007 marketing year. It is important to realize that over that time, U.S. wheat consumption has also fallen, meaning the current projection stocks to use ratio of 28.49% is much looser than the 13.22% seen that year.

As for the Quarterly Stocks report issued September 30th, USDA pegged all class wheat stocks at 1.78 billion bushels after the first quarter of the marketing year. This was less than the 1.85 bbu the trade expected and well below the 2.158 bbu seen at the end of the first quarter of the 2020 marketing year. Durum stocks are the only wheat class listed separately; those came in at 46.9 mbu compared to 71 mbu at this time last year. No trade estimates are generally published for durum.

Due to the all class treatment by USDA in the Quarterly Stocks report, making a judgement on basis support in mixed class states like South Dakota is more difficult. However, the vast majority of wheat in Minnesota and North Dakota is Hard Red Spring, so it is appropriate to look at how much is in producer hands versus elevator hands. Durum is also included. Keep in mind North Dakota on average holds about 45% of all U.S. Durum Stocks, although that has trended lower over the past five years.

	Bushels held On-Farm (1,000's)			% of Stocks located On-Farm		
	2020	2021	10 yr Ave	2020	2021	10 Yr Ave
United States-All Class	705,050.00	419,190.00	642,180.00	32.66%	23.55%	29.61%
Minnesota	63,000.00	36,000.00	54,900.00	64.37%	48.02%	59.11%
North Dakota	225,000.00	99,000.00	199,600.00	72.89%	49.86%	69.68%



Durum-U.S.	43,500	21,000	45,096	61.61%	44.77%	59.40%
Durum - North Dakota	20000	12500	28187.5	79.89%	74.42%	81.63%

Sugarbeets

Producers of many crops in Minnesota and North Dakota saw lower yields this year due to the drought conditions. Sugarbeets, however, benefitted from late rains and an extended growing season as warm conditions pushed harvest back a week or so later than normal allowing beets to add tonnage they may not otherwise have been able to. USDA included sugarbeet and cane sugar production estimates in their October monthly Crop Production estimates. As with grains, these estimates will continue to fluctuate until the final Crop Production report is issued in mid-January. For this month, USDA estimated total planted sugarbeet area for 2021 at 1.150 million acres, with 650,000 of those located in the AgCountry lending service area. Yield estimates at this time are 31.0 tons of sugarbeets per acre, up from 30.1 tons estimated in September and 29.4 tons/acre as the final yield in 2020. Yield projections in Minnesota rose 1.5 tons compared to September estimates, now at 28.1 tons/acre while North Dakota yields jumped 1.9 tons/acre. Sugar content of these beets will be released by the processing cooperatives further into the processing season.

On the balance sheet, a couple of bookkeeping items were noted. Primarily, a later cane processing season has pushed production previously expected to be on the 2020 balance sheet back into October, meaning it is now accounted for as 2021 production. Further, USDA in late August raised the raw sugar tariff rate quota by 99,318 short tons and extended the entry period to October 31, 2021. More sugar entered the U.S. in September than was previously estimated, meaning 64,494 short tons of imported raw sugar previously expected to be on the 2021 books have been moved back to the 2020 books.

Accounting for those changes, plus the increase beet sugar production mentioned above and a smaller reduction in estimated cane sugar production means total supply for the 2021 crop year fell by 39,000 short tons of raw value (STRV). Exports were kept steady with September estimates, meaning projected ending stocks now stand at 1.627 million short tons of raw value. Stocks to Use projections fell just slightly from 13.5% to 13.2%

Dry Beans

Dry bean production in the 2021 season is anticipated to be sharply lower than in 2020 due to lower yields and lower planted and harvested area. USDA's most recent planted area estimate was published in the October Crop Production report with U.S. producers estimated to have planted 1.4 million acres of dry beans in 2021. This compares to 1.740 million acres in 2020. Further harvested area was estimated at 1.341 million acres, down from 1.676 million in 2020. North Dakota producers are estimated to have planted 665,000 acres of dry beans (down 150,000 acres from 2020) while Minnesota producers reduced planted area to 240,000 acres, down 35,000 from last year. Yields over all classes are projected at 1,686 pounds per acre, down from 1,966 pounds per acre in 2020. All class yields in North Dakota fell from 1,630 pounds per acre in 2020 to 930 pounds per acre in 2021, largely as the dry bean



areas coincided with the worst areas of drought. Minnesota dry bean yields also fell from 2,100 pounds per acre in 2020 to 1,950 pounds per acre, supported by the fact that far more Minnesota dry bean acres are under irrigation than in North Dakota.

The majority of dry bean acres were planted under contract with prices established in early 2021 at much higher prices than recently. Due to shorter production in our territory, its unlikely there are large quantities of unpriced beans in producer hands. That said, buyers were long ago aware. What is being sold has been reported at slightly softer values than a month ago at \$45-\$48/cwt for blacks and \$44-\$49/cwt for dark red kidneys. Other classes reported are pintos at \$45/cwt, which are higher than prices seen last winter. Contracts for 2022 production will likely be seen late January.

Ethanol

The outlook for ethanol markets has improved over the last quarter as all energy markets have seen sharp increases in price while inventory levels have fallen. Specifically, as we move into October, U.S. gasoline inventories per the Energy Information Administration have fallen to the second lowest level in five years. Further, U.S. gasoline prices are at their highest level in seven years for this time of year while corn prices are falling. That's leaving ethanol production margins at the best level in some time just as major hubs in Chicago and New York are reporting low inventories. These trends are anticipated to continue as all forms of energy are slow to be delivered to consumers due to a combination of low amounts in storage and backlogged logistical issues that have plagued many areas of the economy both in the U.S. and abroad.

Longer term challenges to this market remain white its reliance on political and environmental support has been unsteady at times.

Lean Hogs

Lean hog futures have had an eventful 3rd quarter, trading from elevated levels in August to a new low for the move in early September before gapping higher near the end of the month as traders reacted to USDA's Quarterly Hogs and Pigs inventory report that showed U.S. hog herd levels are not growing as was previously anticipated. All hog and pig inventory as of September 1 was estimated at 75.4 million head. This is up 1.3% from the Q2 number but still 3.9% less than this time last year, and well below the trade's expectations of 0.2% to 2.7% lower. Further, market hog inventory - which is arguably more influential to the front month lean hog contracts - was 4.1% less than this time last year, compared to expectations of 0.1% to 2.8% lower. The number of hogs in the heaviest reported weight category, 180 pounds and larger, was 6% below last year at this time, providing the impetus for hog prices to improve counter seasonally.

Looking further ahead, the June to August pig crop was also 6% less than what was seen June through August of 2020. This was due to fewer sows farrowed and also a decline in the number of pigs per litter, adding strength to the argument that the U.S. hog herd was seeing increased disease pressure from porcine reproductive and respiratory syndrome (PRRS) over that timeframe. Farrowing intentions going forward were lighter, down 1% for the furthest out category. This would imply fewer available animals even out through the third quarter of 2022.



Monthly Cold Storage reports from USDA reflect frozen pork stocks in the U.S. remaining at historically lower levels. In fact, as of September 1, frozen pork inventories are still down 1% from last year and down a whopping 24% from pre-covid levels. Reported retail prices of pork continue to rise as well. This is despite lower export shipments and a lack of demand from China, which was previously a boost to this market. Given projected farrowing levels and current meat demand outlook, it appears that hog prices will be soft, but still historically strong into 2022 with USDA's October WASDE report projecting an average national base price on hogs of \$61/cwt, up \$5 from last month but down from \$69.50/cwt currently projected for 2021.

Feeder Cattle/Fat Cattle

Cattle markets traded in a pattern similar to hogs, hitting new contract highs in late August before setting a new low for the move in mid-September. However, cattle markets lacked the impressive move higher to end the month of September and continue to trade near the bottom end of the quarters range. Some of this pressure is seasonal, with weaned calves in the Southern Plains continuing to be placed in lots. Calves in the Northern Plains were in many cases weaned earlier, which is also limiting some of the feedlot space in those locations at the moment. All that considered, the drought conditions have also forced herd reduction in some heavy beef production areas, limiting cow numbers and ultimately bring the industry to expect lower available supplies in to 2022.

USDA's October WASDE report reflected much the same, with total beef production in 2022 projected at 26.995 billion pounds compared to 27.832 billion pounds in 2021. Both numbers did increase from the September release of the report. USDA raised their projected price for steers in the five-state area in 2022 to \$129.00/cwt, up \$1 from last month's estimate and just short of \$8 higher than their estimated average price for 2021. Prices through the third quarter of 2022 are expected to be higher than what was seen in 2021, with the exception of Q3 2022 prices, which are estimated at \$126/cwt. That's \$1 dollar lower than the highest estimated \$127/cwt projected for the fourth quarter of 2021.

On the negative side, rising beef prices caused USDA to reduce total U.S. demand for beef in 2022 to 26,960 billion pounds, or 56.8 pounds per person. This represents a 1.8 lb/person reduction from 2021 estimates.

Dairy

Class III milk futures finished the quarter roughly \$0.07/cwt less than where they started the quarter but just over \$1.50 higher than the low set in first days of August. Financial stresses to producers were clearly evident with milk above feed margins under the Farm Service Agency's Dairy Margin Coverage program calculated as \$5.25/cwt in August of 2021. Margins every month of 2021 with the exception of January have been calculated at less than \$7.00/cwt.

USDA World Supply and Demand Estimates in October was mixed with USDA reducing production from previous estimated levels, but still showing an increase in milk supplies going into 2022. Estimated Supplies of Fat basis dairy were reduced from September's estimates but remain at the highest levels since at least 2019. Exports are improving and revised higher from September, but not enough to pull estimated carryouts below 2020 levels in the near future. As of October, projected carryout of 2021 fat-based supplies is estimated at 220.8 billion pounds and growing to 224.5 billion pounds in 2022.



On the skim basis side, it's a similar story but with less growth in ending stocks. This is due largely to the projected jump in exported skim products not seen in the fat-based products. Current projected ending supplies of skim-based products is 180 billion pounds for 2021 and rising to 182.2 billion pounds at the end of 2022.

Projected prices in this report were, however, strengthened. USDA is projecting 2021 Class III prices to average \$17.05/cwt, up from the \$16.65/cwt estimated in September. All milk price estimates for 2021 were raised to \$18.45/cwt from \$18.15/cwt previously. Projected average prices for 2022 were also raised from last month. On product prices, USDA raised the 2021 cheese price from \$1.64/pound to \$1.68/pound, although that remains below the \$1.75 and \$1.92 per pound for 2019 and 2020, respectively.