

Winter Grain Market Outlook

Ben Brown, State Specialist
Agricultural Business and Policy Extension

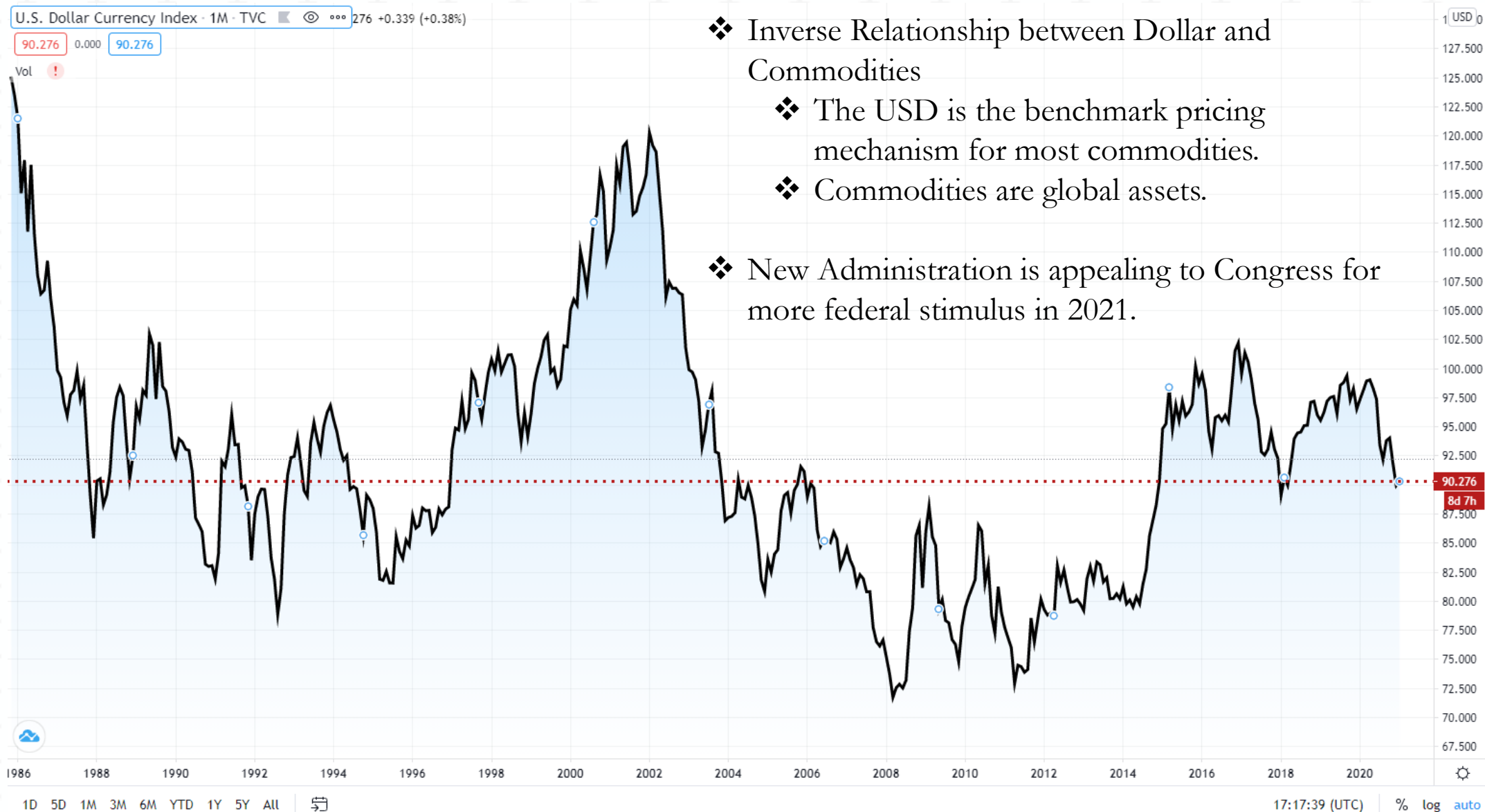


College of Agriculture,
Food & Natural Resources
University of Missouri

Outline

- ❖ Economic Drivers
- ❖ The things that I just don't know...
- ❖ January WASDE Key Points
- ❖ Demand Fundamentals
- ❖ 2021 Acreage
- ❖ Wrap-up

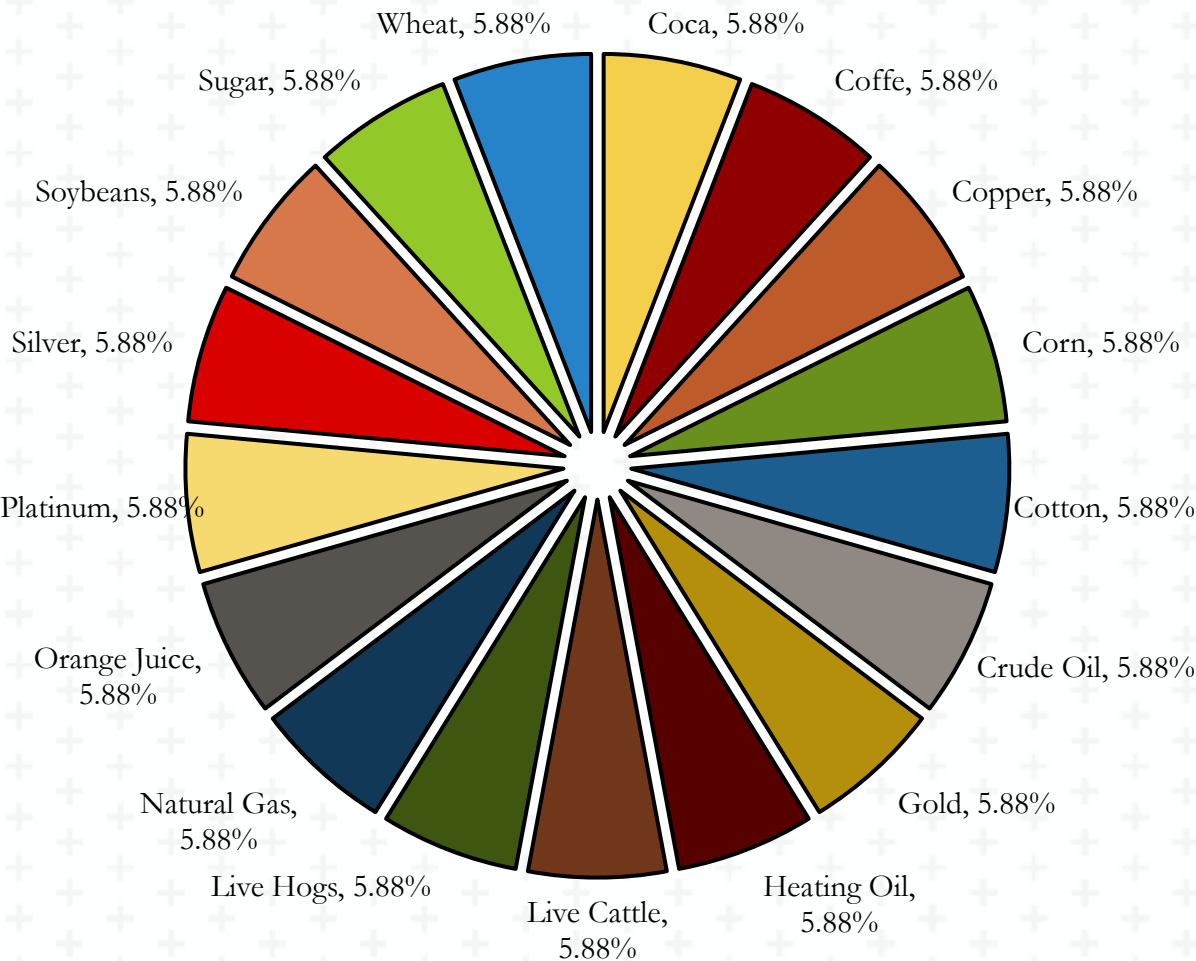
Money Flow Into Sector- USD



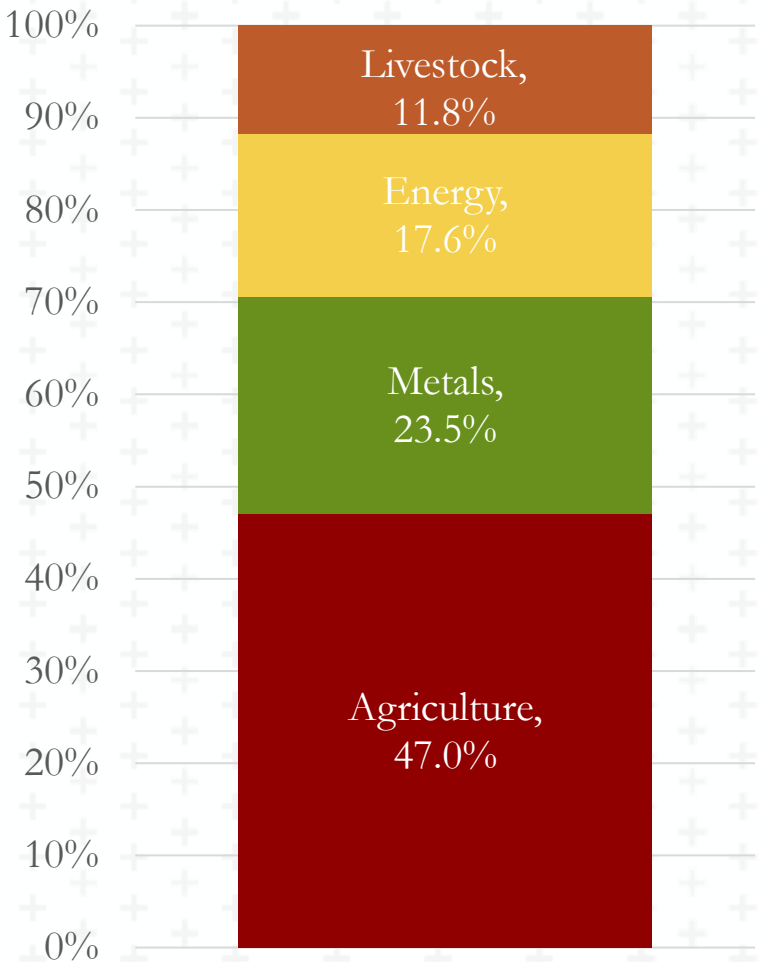
Data Source:
Trading View

Money Flow Into Sector- TRCCI

Thomson Reuters Equal Weight
Commodity Index



Index Breakdown by
Components



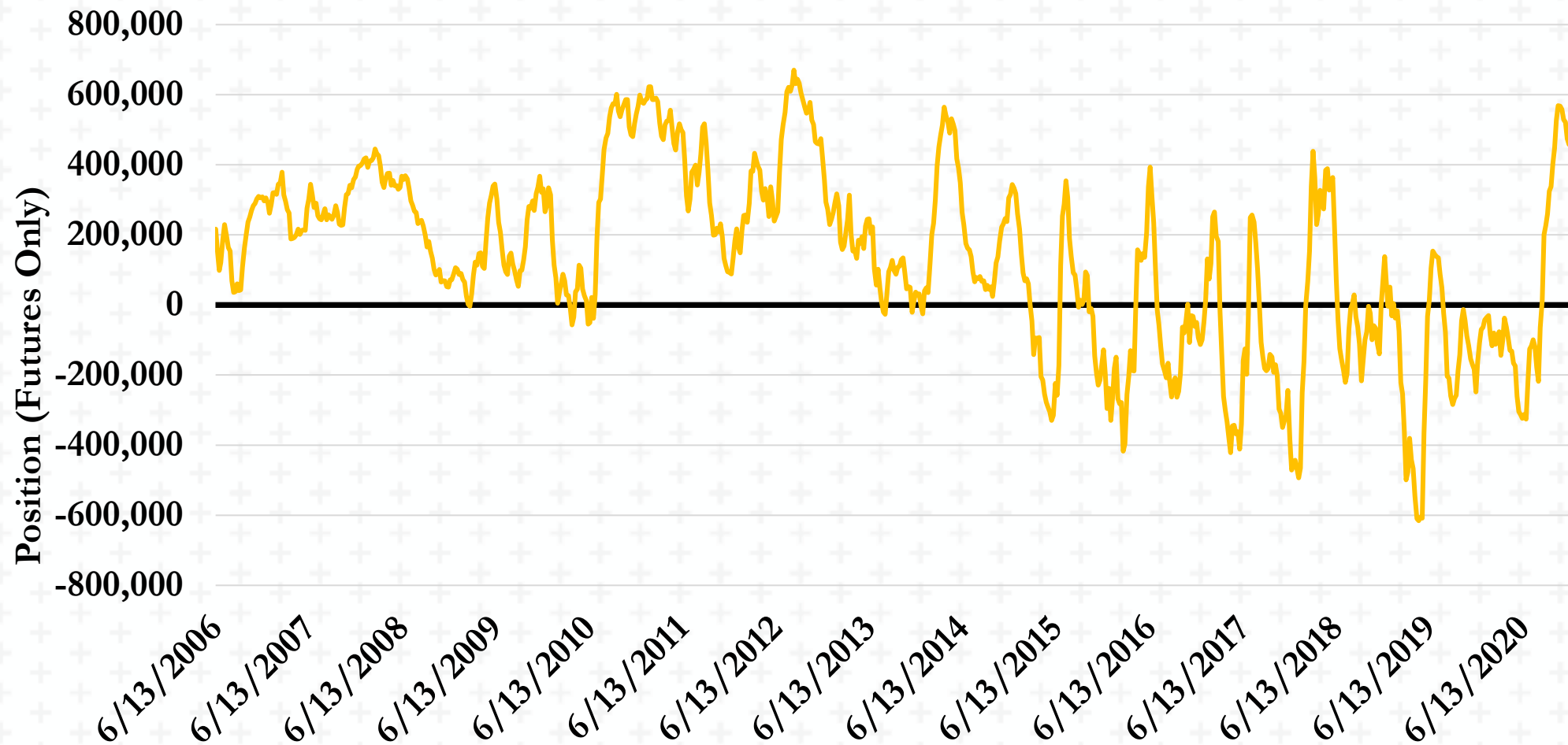
Money Flow Into Sector- TRCCI



Data Source:
DTN ProphetX

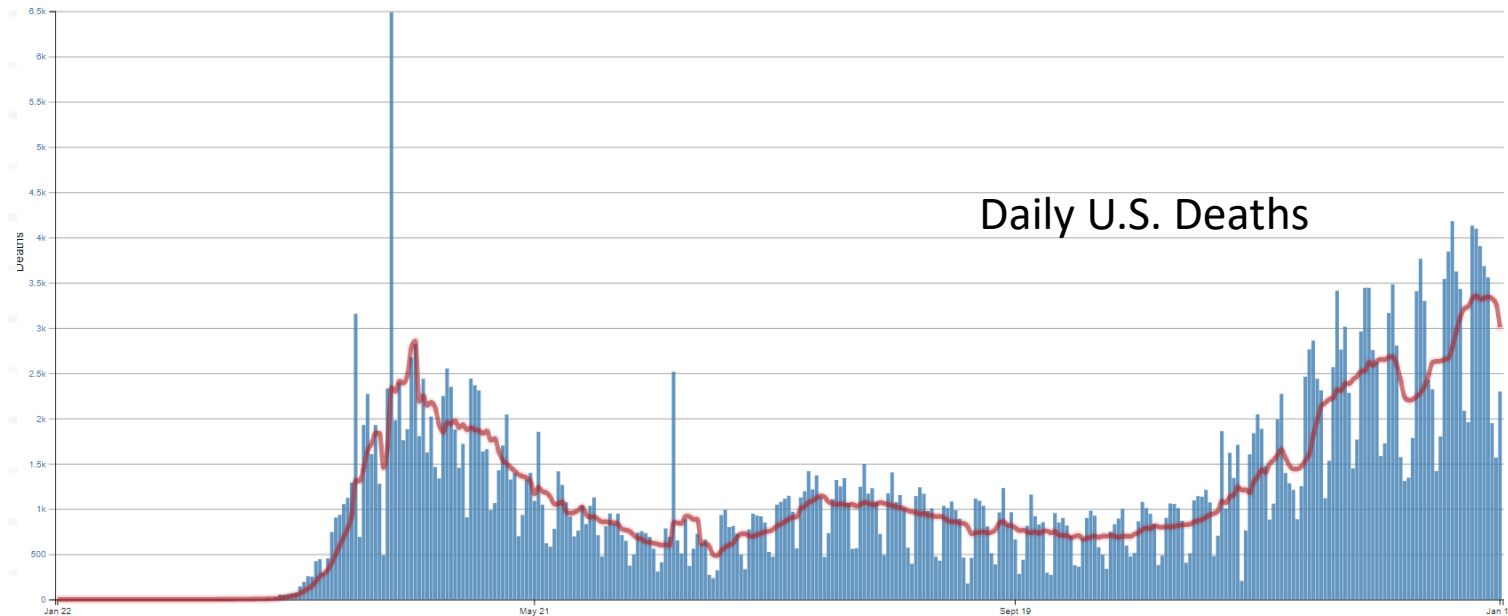
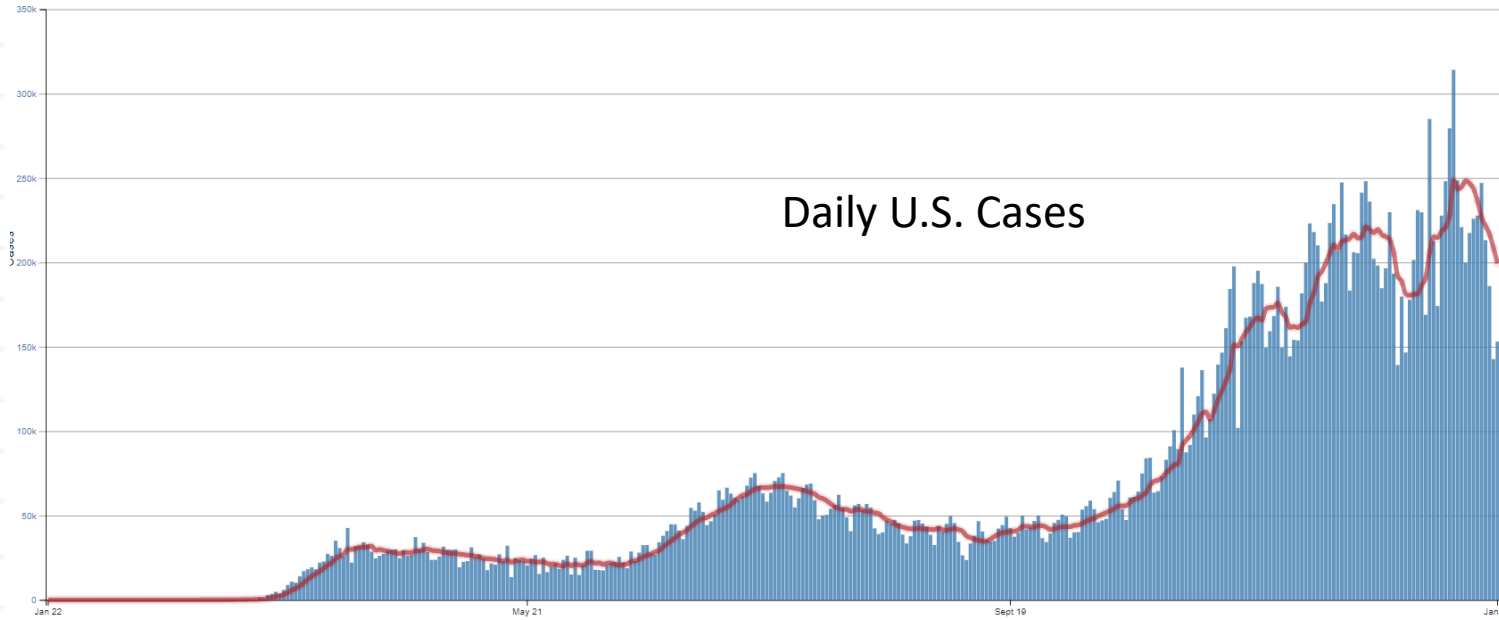
Money Flow Into Sector- USD

Net Managed Money- All Positions Corn, Soybeans, Chicago HRW
& SRW, and KC HRW Wheat: Jun. 2006- Jan. 2021



Data Source:
CFTC Weekly

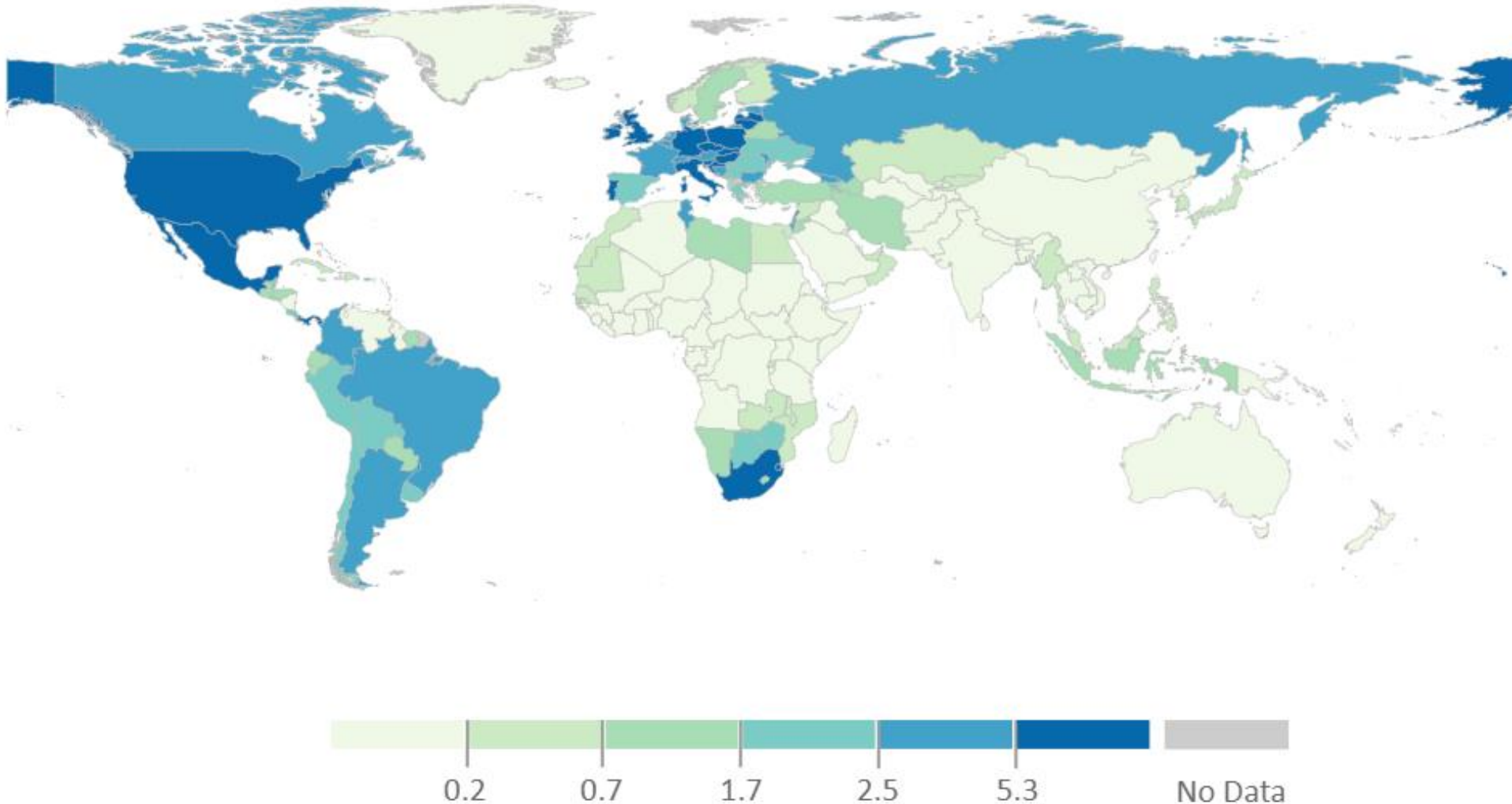
Wildcard Continues To Be COVID



Source: Center for
Disease Control

Wildcard Continues To Be COVID

Global deaths from COVID-19 reported per 100,000 population in the past 7 days

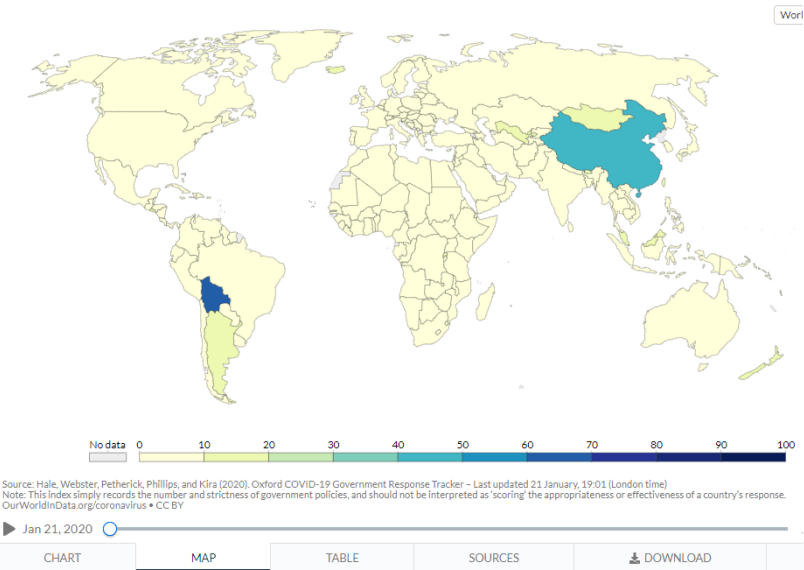


Source: Center
for Disease
Control

Government Response to COVID

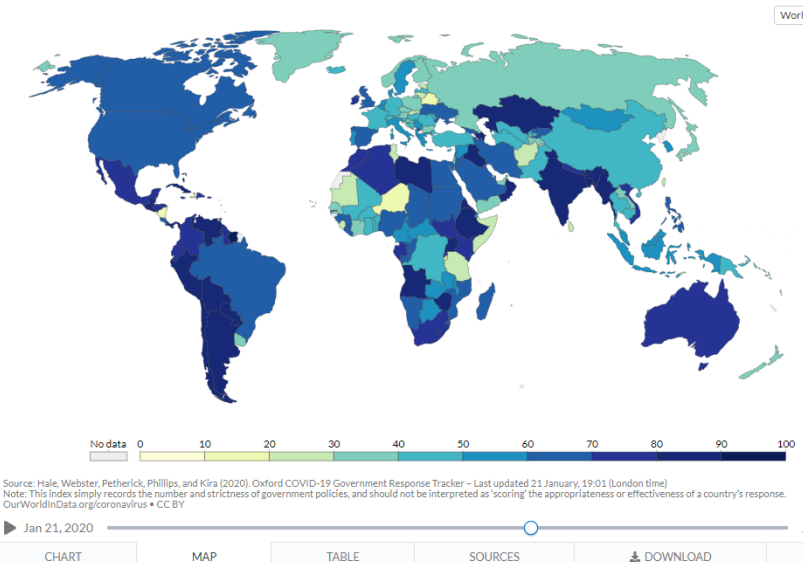
COVID-19: Government Stringency Index, Jan 23, 2020

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



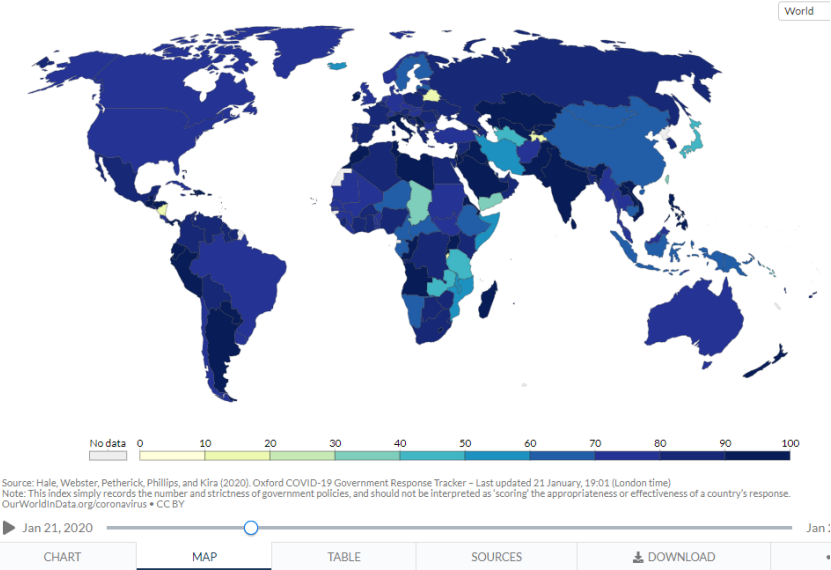
COVID-19: Government Stringency Index, Sep 5, 2020

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



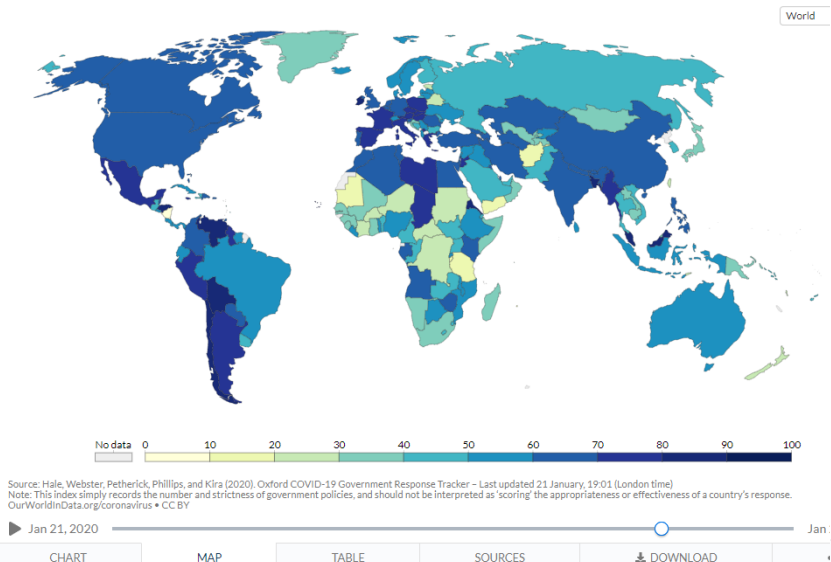
COVID-19: Government Stringency Index, Apr 7, 2020

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



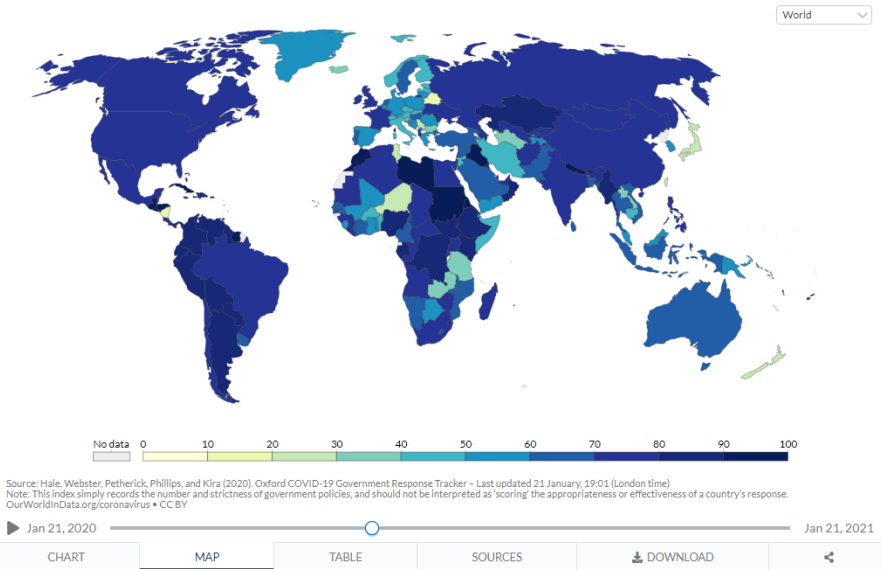
COVID-19: Government Stringency Index, Nov 11, 2020

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



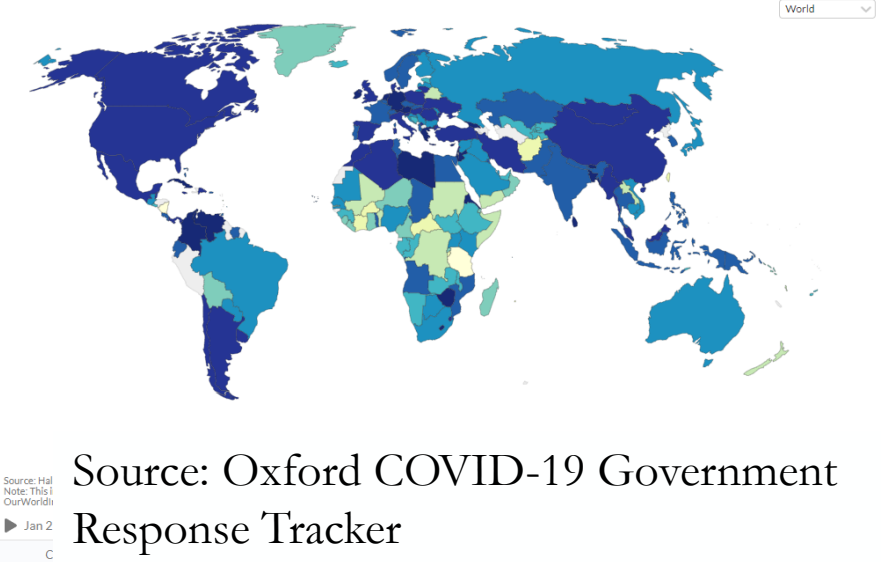
COVID-19: Government Stringency Index, Jun 10, 2020

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



COVID-19: Government Stringency Index, Jan 20, 2021

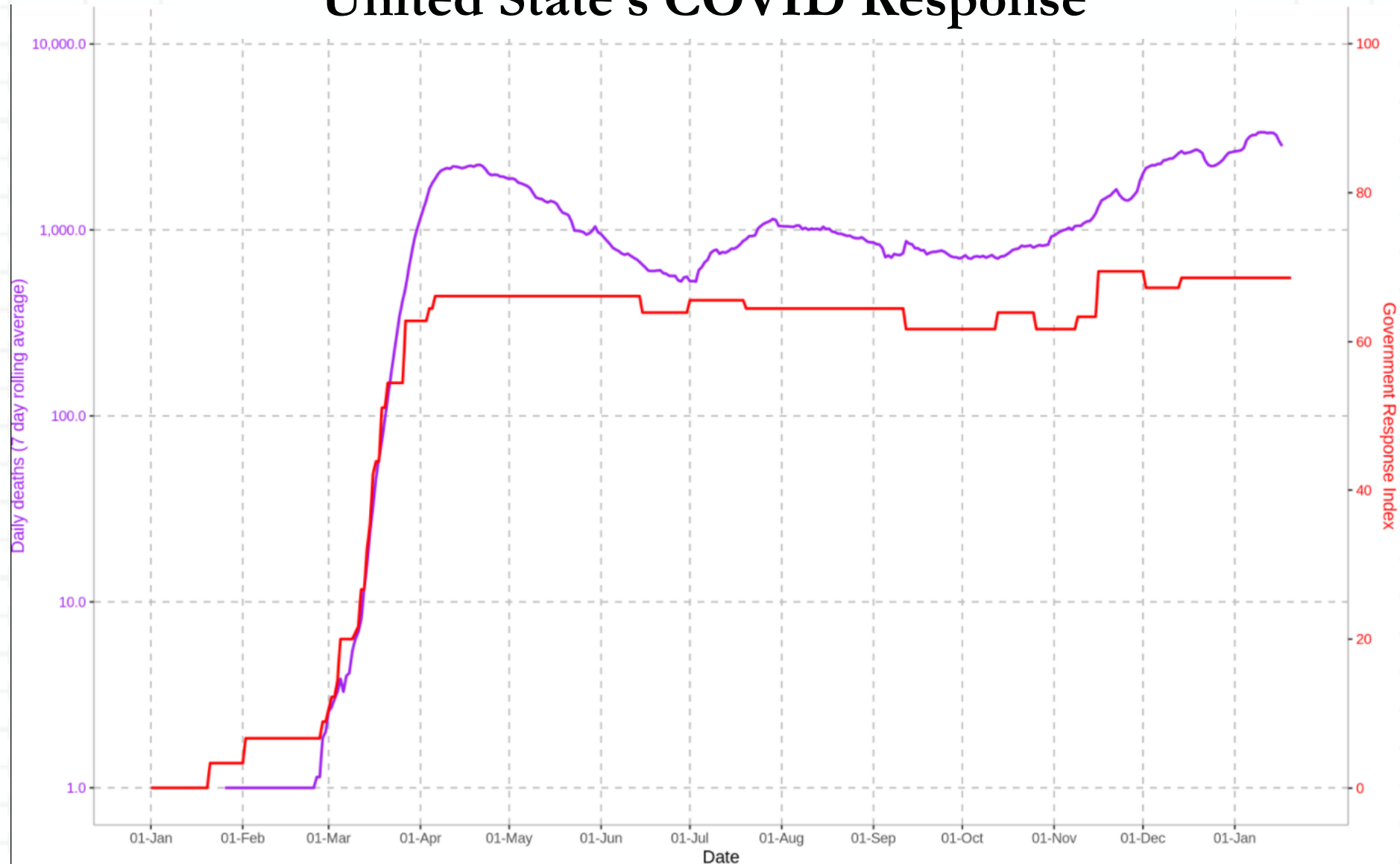
This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



Source: Oxford COVID-19 Government Response Tracker

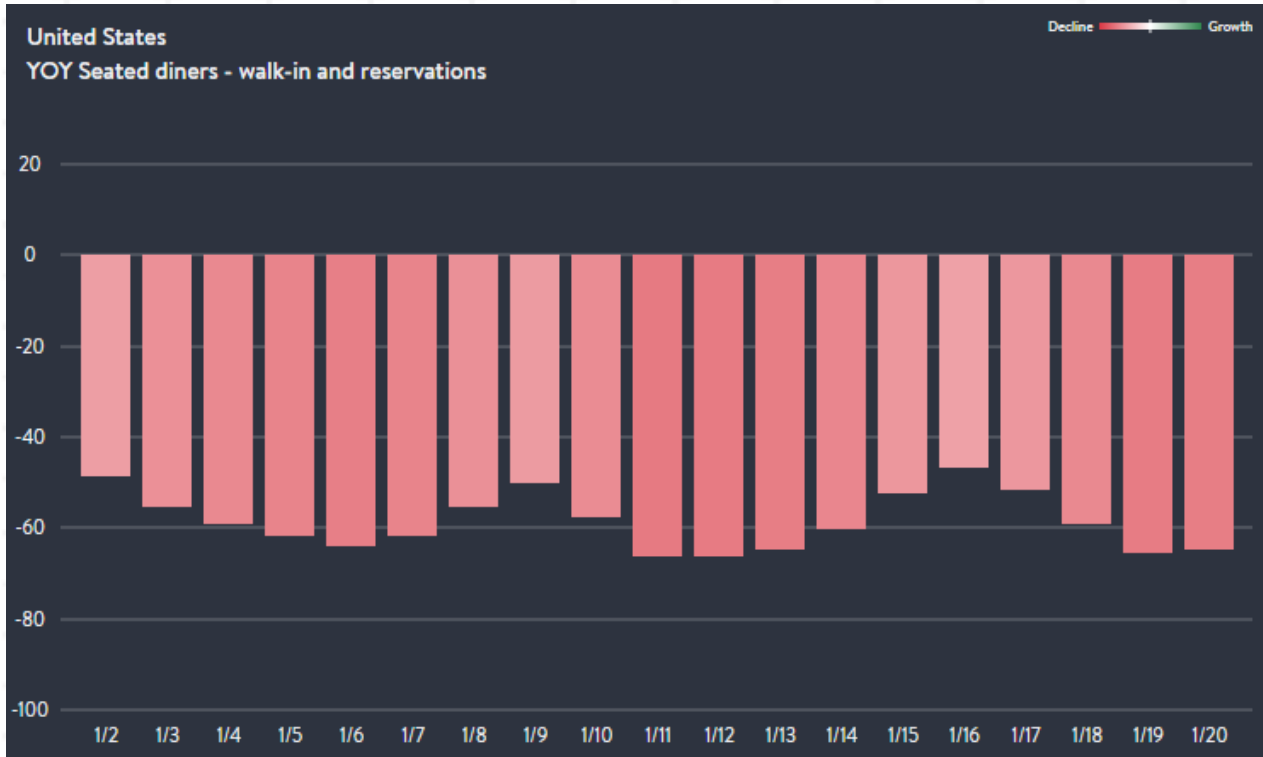
Government Response to COVID

United State's COVID Response



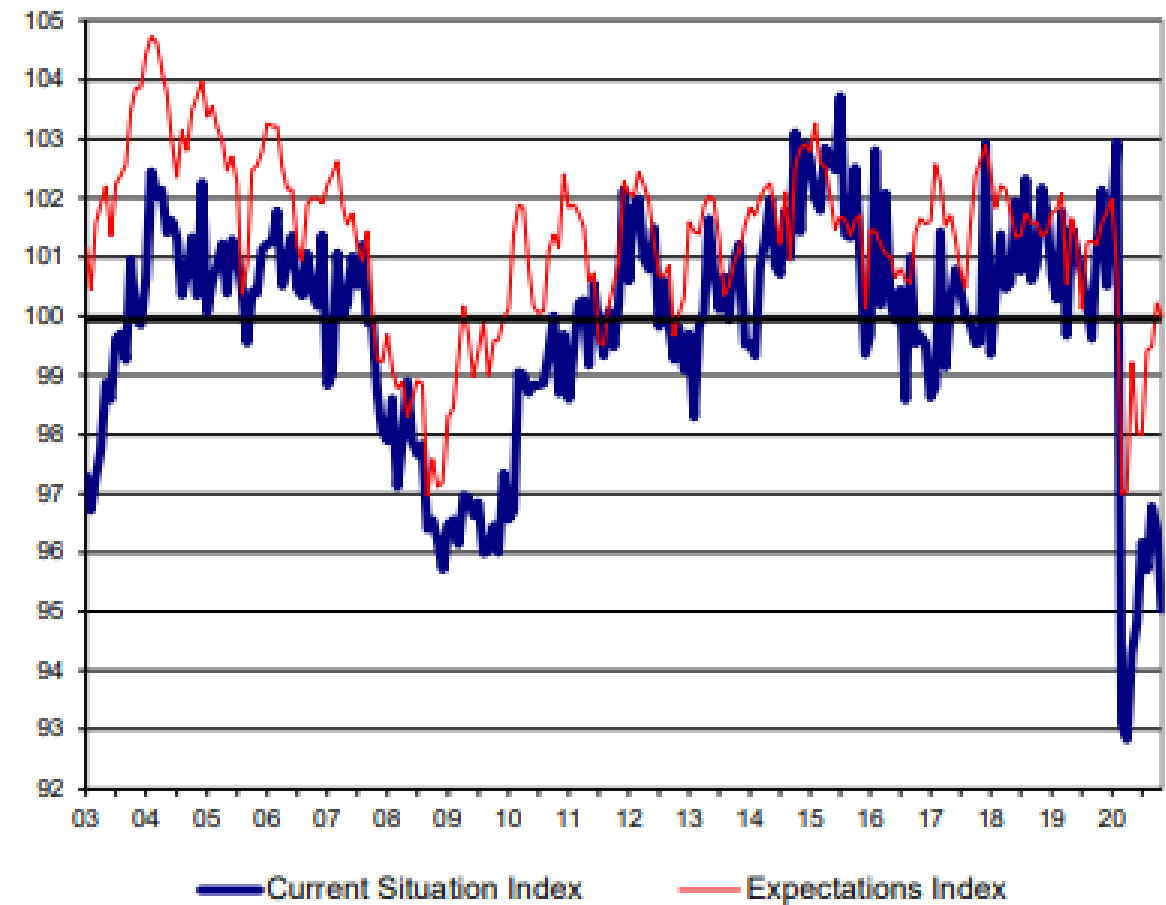
Source:
Oxford
COVID-19
Government
Response
Tracker

Restaurant Sector



Source: Open Table.com

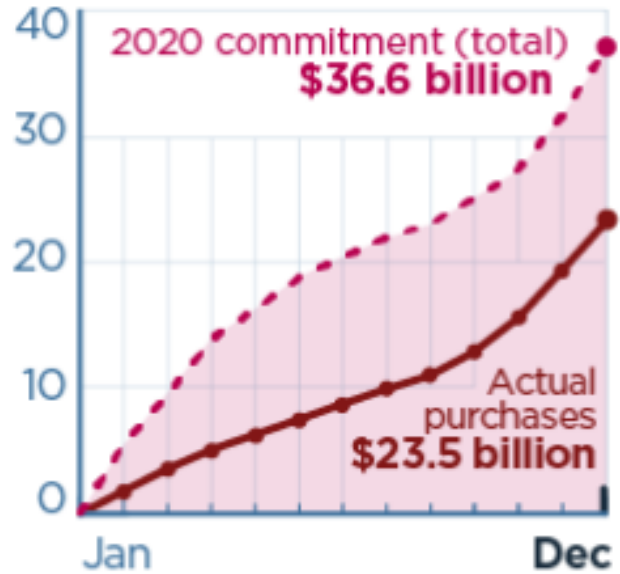
Current Situation & Expectations Indices



Source: National Restaurant Association

Phase 1 Trade Deal

Agriculture

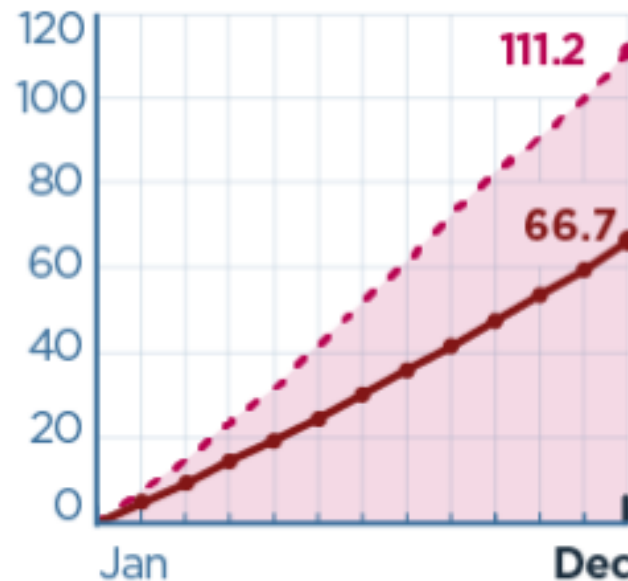


Agriculture- China reached 64% of their target in 2020, but US imports up 65% over 2019.

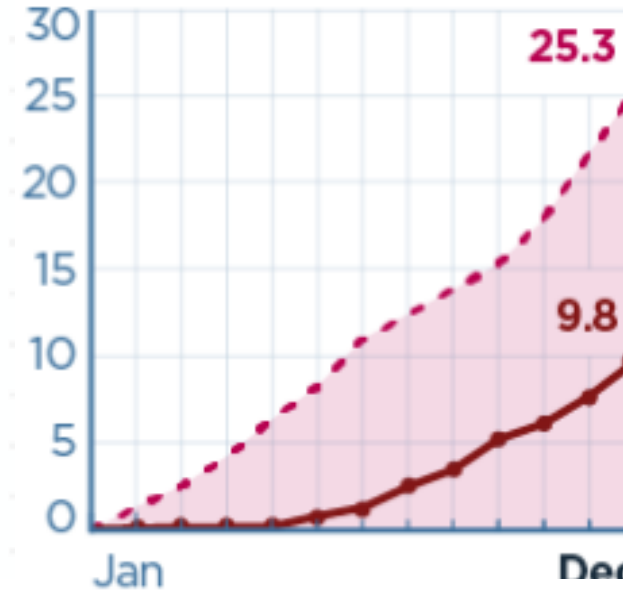
US Data show the previous record of \$25.9 billion. Jan-Nov stand at \$21.7 billion.

Manufactured Goods- China reached 60% of their target.

Manufactured goods



Energy

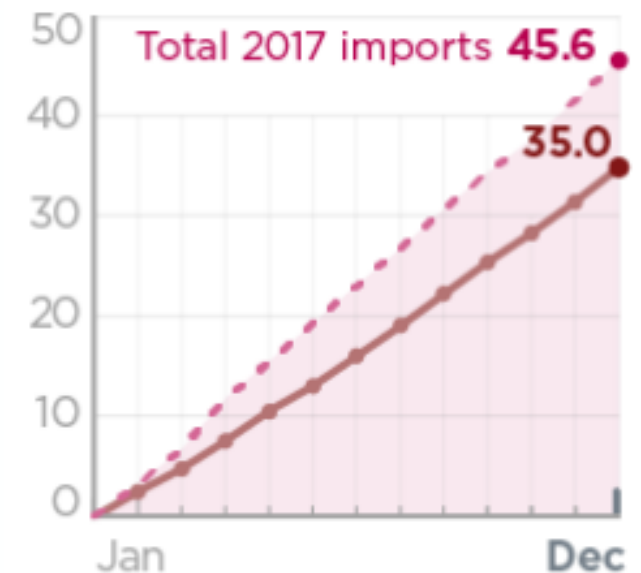


Energy- China reached 39% of their target.

Uncovered Goods- No set target, but down 23% from 2017 levels.

Question becomes- how does the Biden Administration respond?

Uncovered



African Swine Fever- this week

HEALTHCARE & PHARMA JANUARY 20, 2021 / 10:12 AM / UPDATED 2 DAYS AGO

Germany finds 30 more African swine fever in wild boar

By Reuters Staff

- ❖ Germany had been in talks with China, Japan and others to relax restrictions on German pork imports- where are those now??
- ❖ China's hog herd reportedly grew 31% year over year, but hog prices and feeding margins remain strong.
- ❖ Strong producer prices have aided China in building a more modern pork industry.

UPDATE 1-China reports first African swine fever outbreak in nearly 3 months - Reuters

21-Jan-2021 06:23:21 AM

Adds background, detail on previous outbreaks

Jan 21 (Reuters) - China on Thursday reported an outbreak of African swine fever in the southern province of Guangdong - the country's first reported cases of the deadly disease in almost three months.

African swine fever ravaged the pig herd in China, the world's top pork consumer, after the first outbreak in mid-2018, killing millions of hogs. The industry has recovered, however, with the herd growing by 31% year-on-year to 406.5 million heads by the end of 2020. ([Full Story](#))

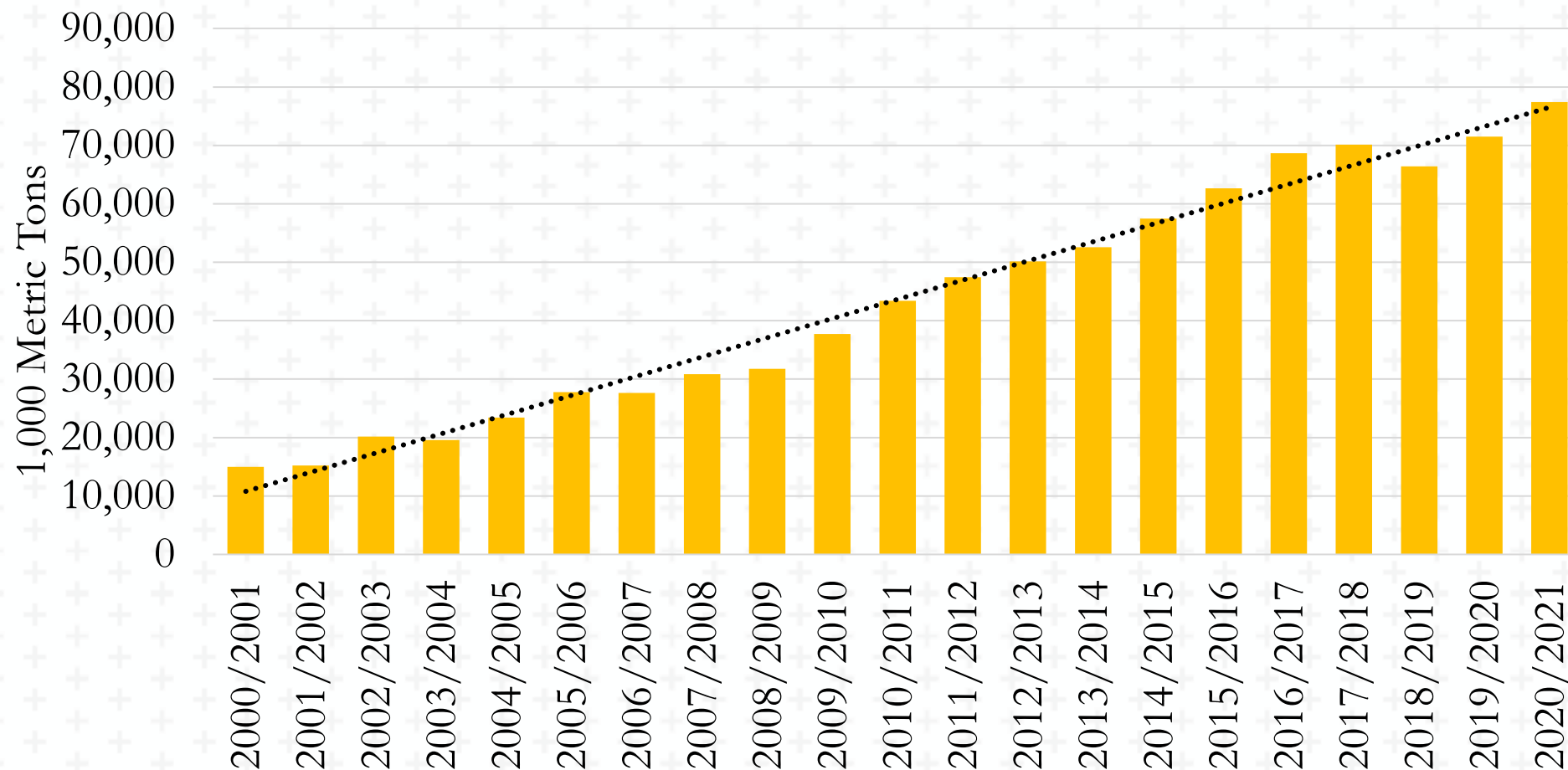
The Guangdong outbreak occurred on a farm in Pingyuan county with 1,015 pigs, killing 214 of them, the Ministry of Agriculture and Rural Affairs said in a statement, adding that illegal transportation was the suspected cause.

The last reported swine fever outbreak in China was on Oct. 26, when authorities seized a vehicle that was illegally taking pigs into Sichuan province from another region.

The last confirmed outbreak on a farm was more than seven months ago, on June 5, in Yunnan province, according to the ministry's website.

African Swine Fever

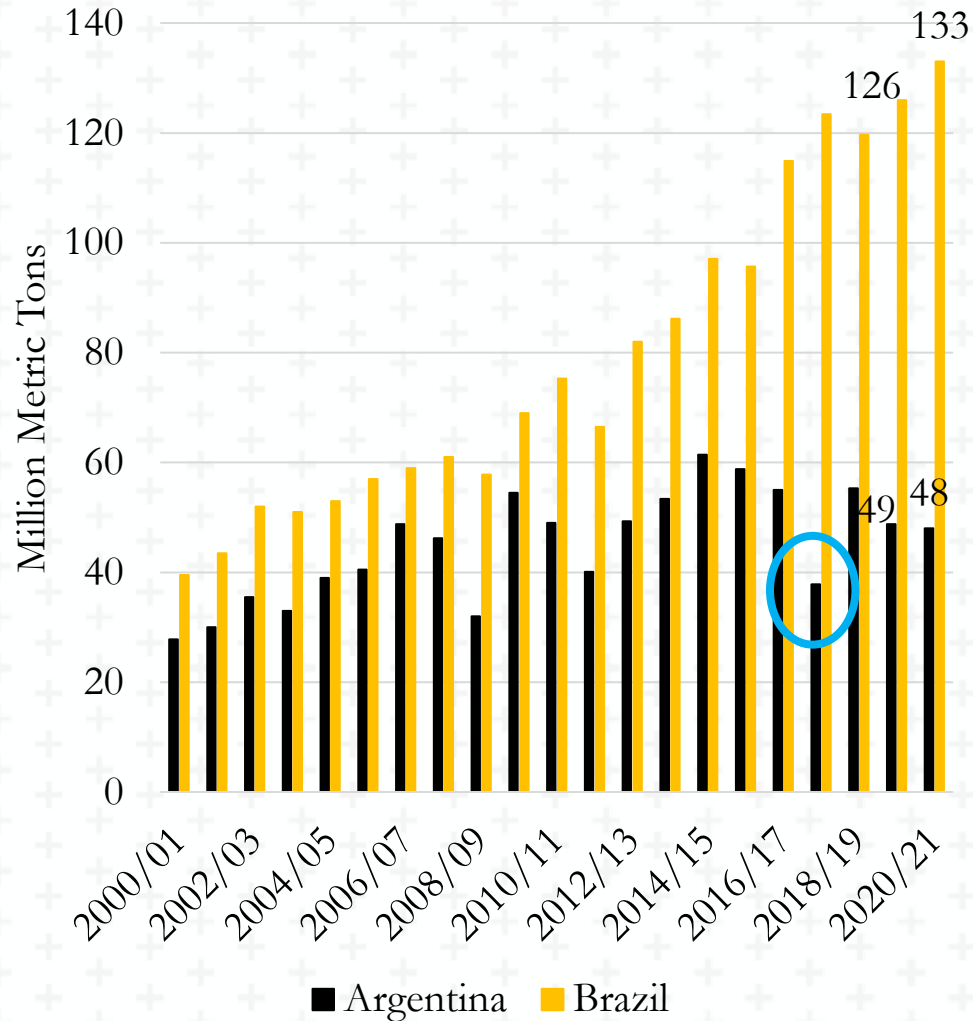
Chinese Soybean Meal Domestic Consumption



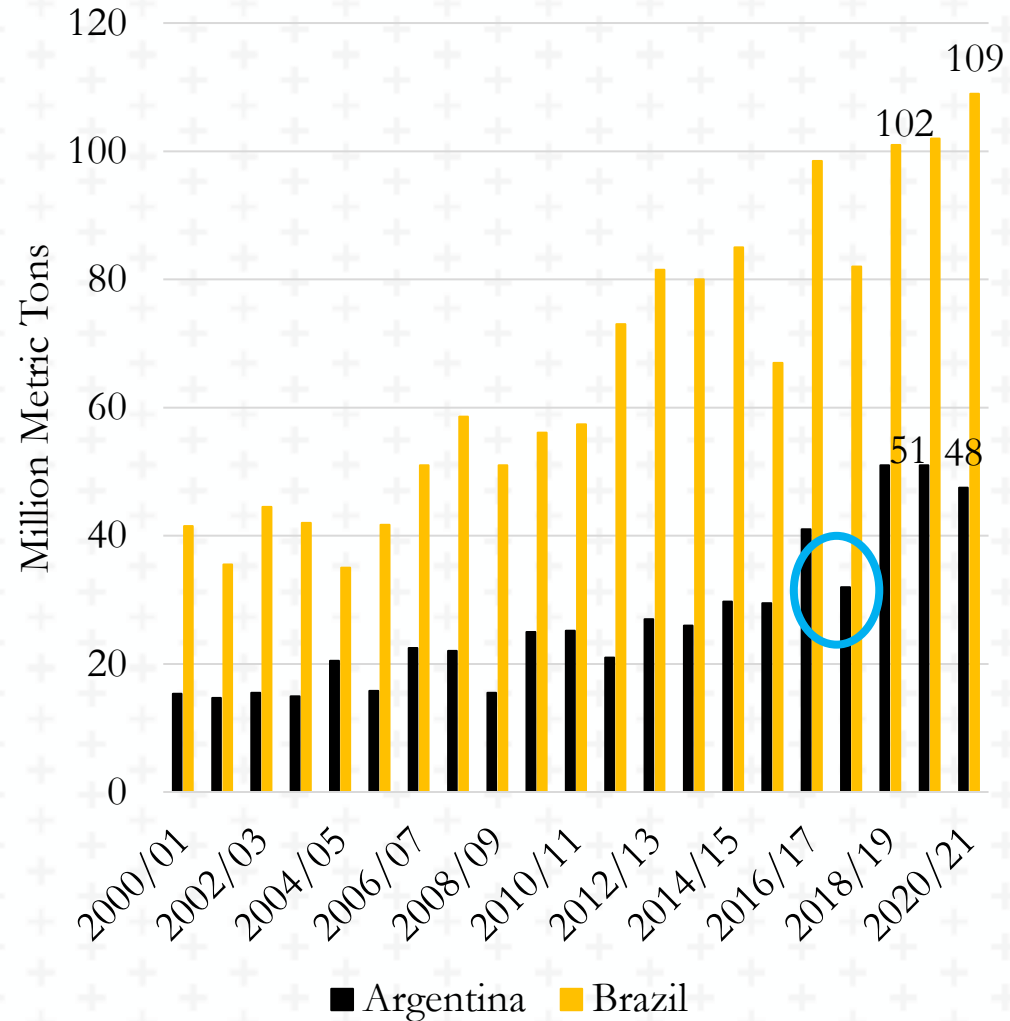
Weekly Soybean meal crush exceeded 2mmt 23 times in 2020. It only did it 5 times between 2017-2019.

South American Production

Argentina and Brazil Soybean Production



Argentina and Brazil Corn Production



In January USDA Lowered Corn Production

- 1.5 mmt for Argentina
- 1 mmt for Brazil

Lower Soybean Production

- 2 mmt for Argentina
- Nothing for Brazil

South American Weather

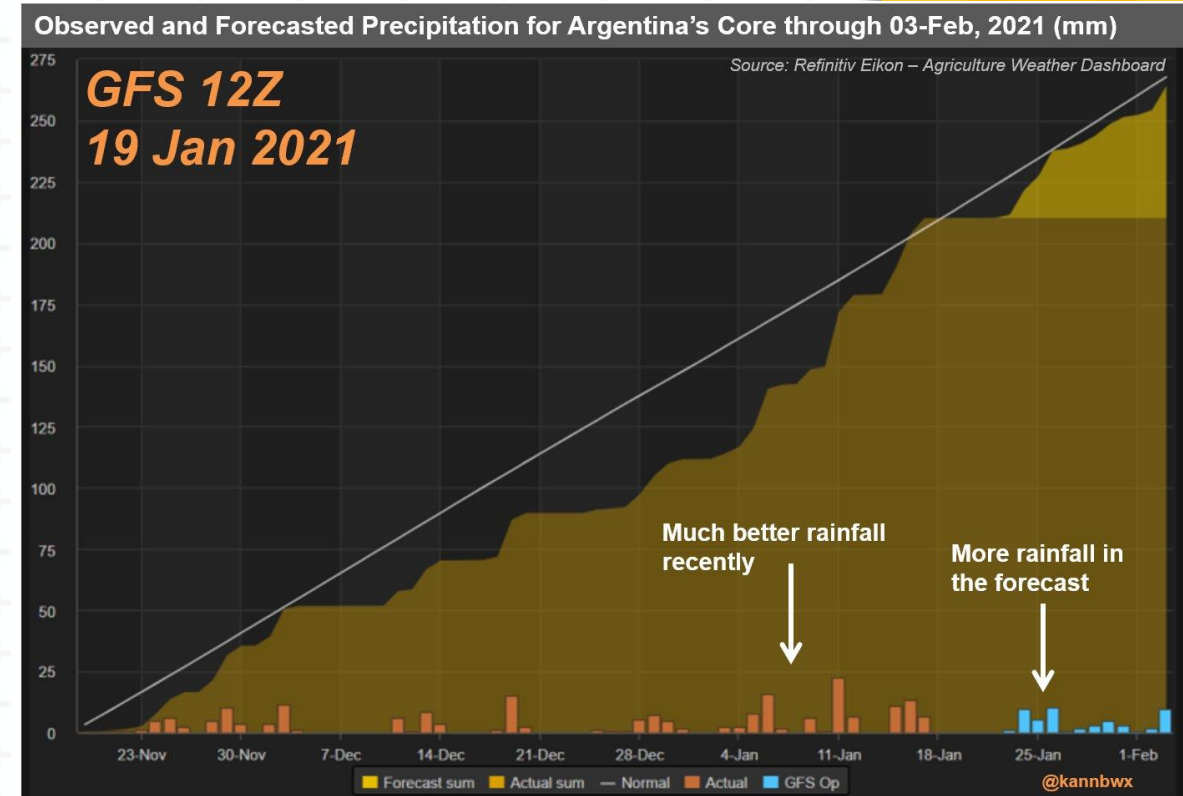
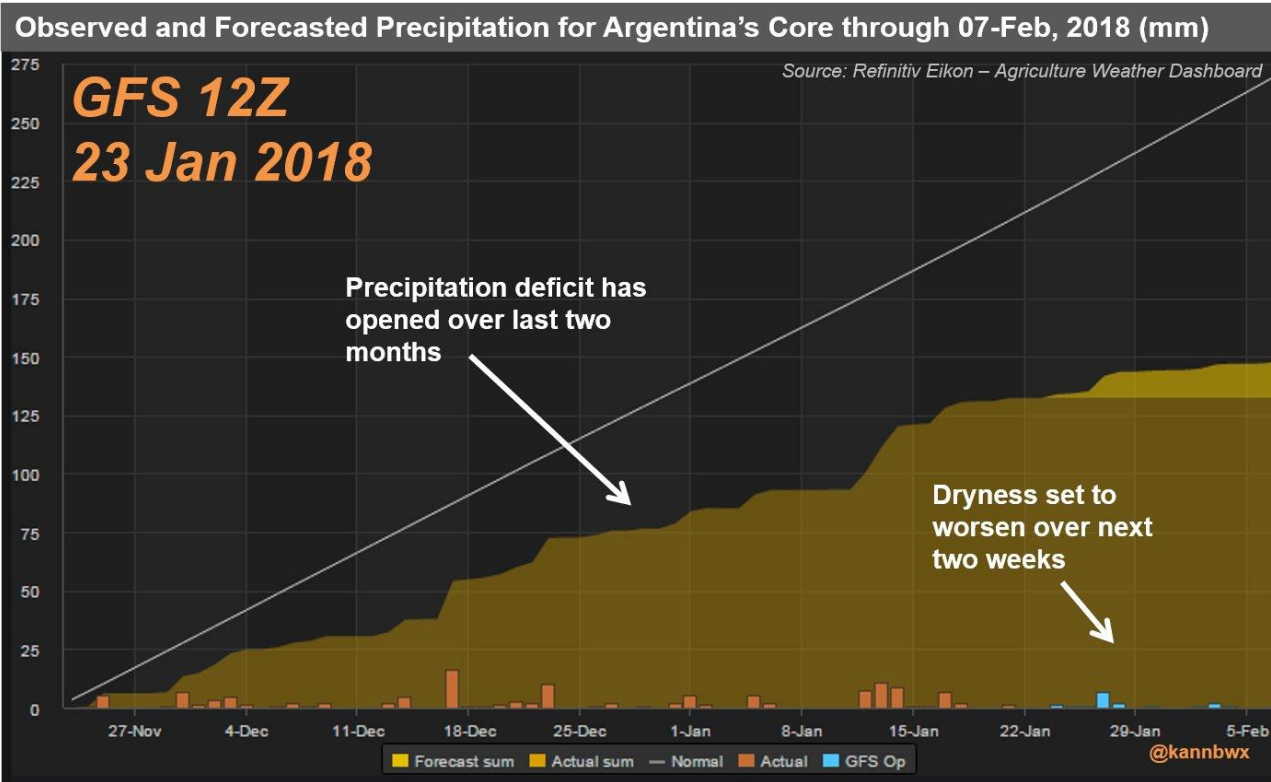
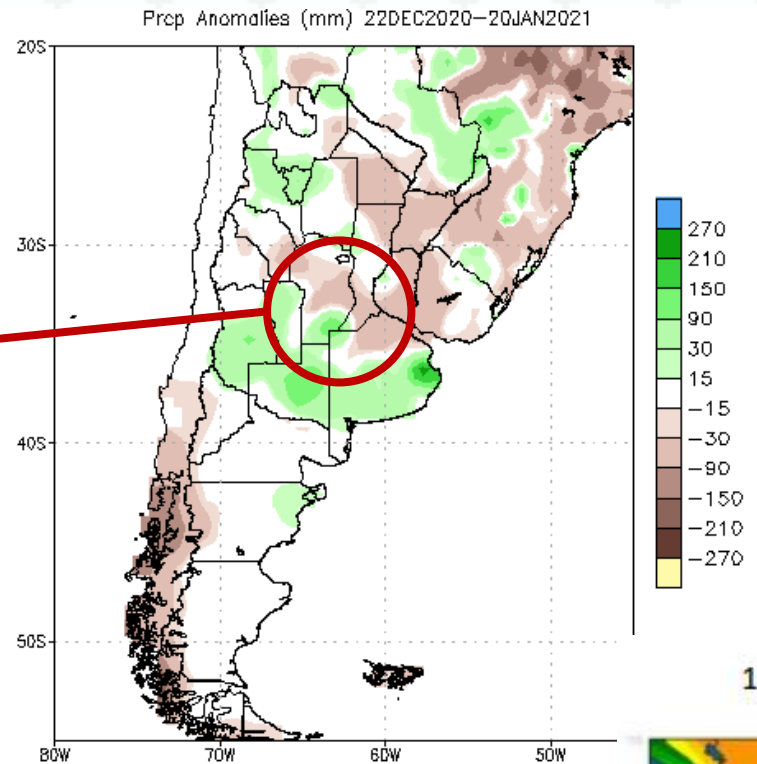
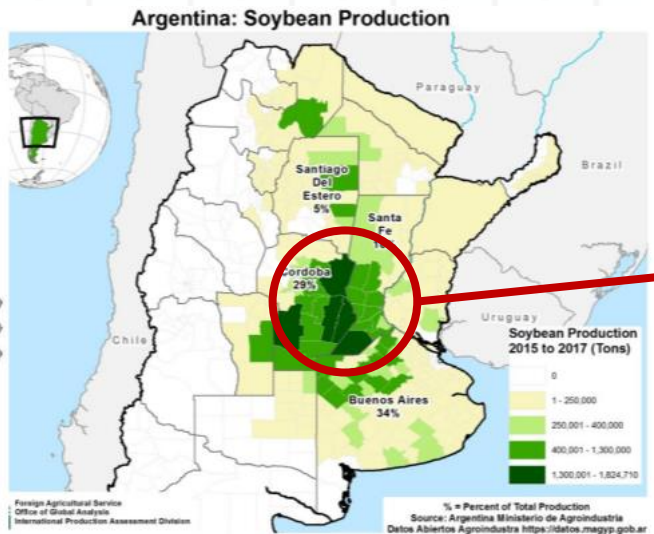


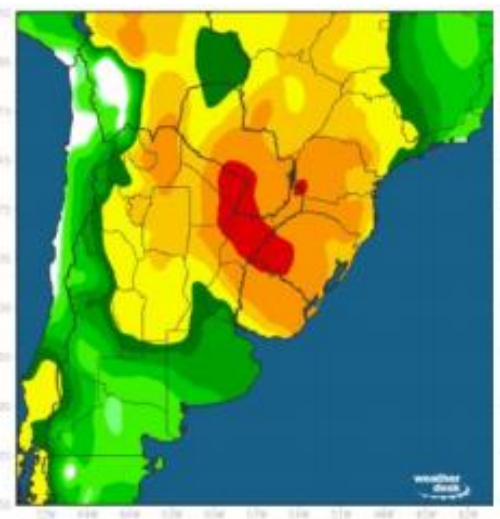
Image Credit: Karen Braun

South American Weather- Arg.

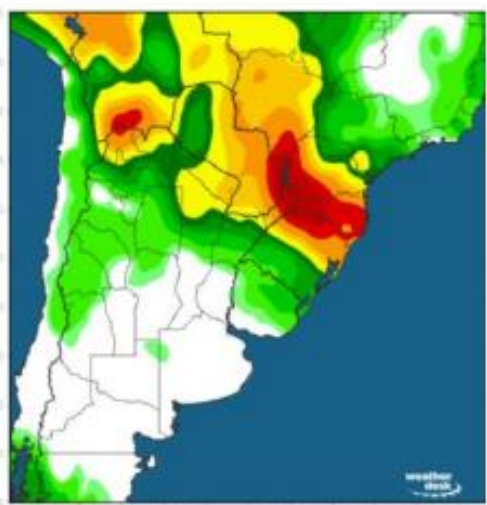


Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) F
Climatology (1981-2010)

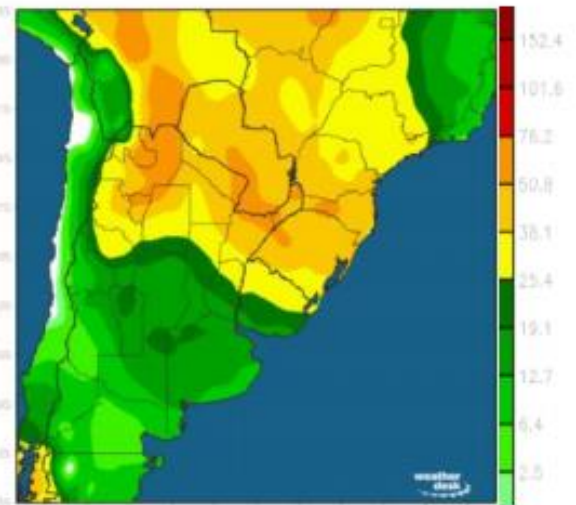
6-10 Day Weather



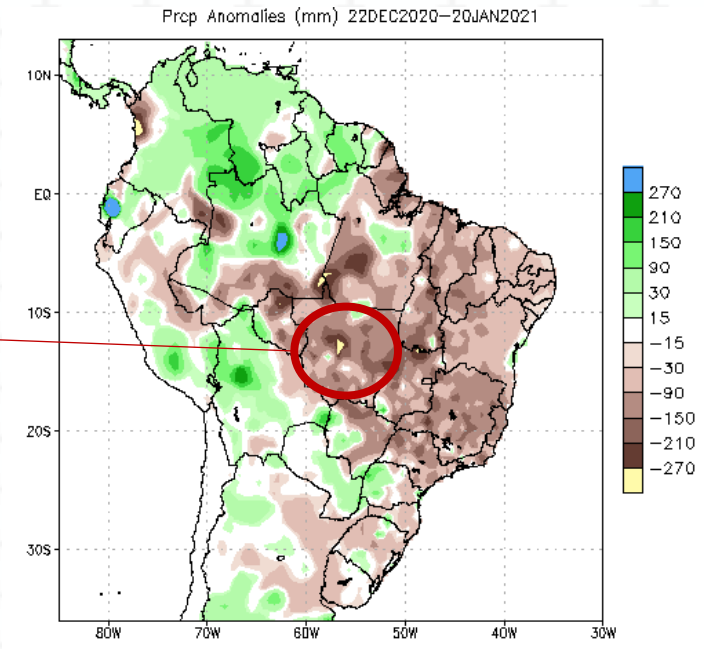
1-5 Day Weather



11-15 Day Weather

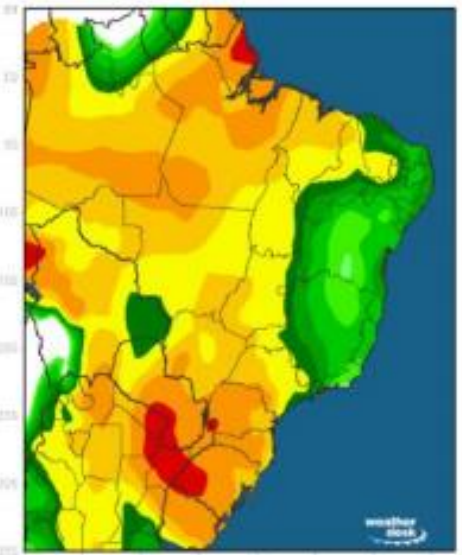


South American Weather- Brazil

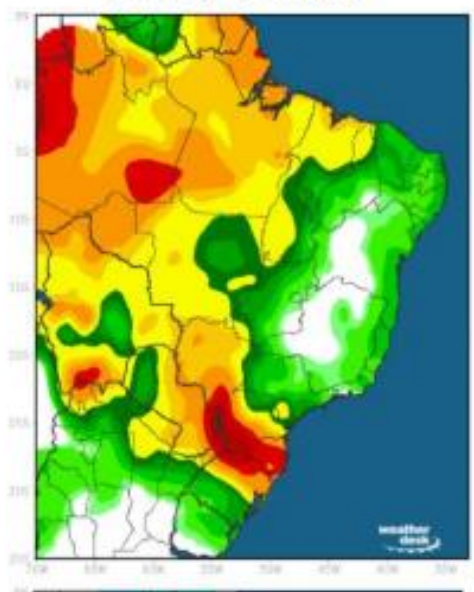


Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis Climatology (1981-2010)

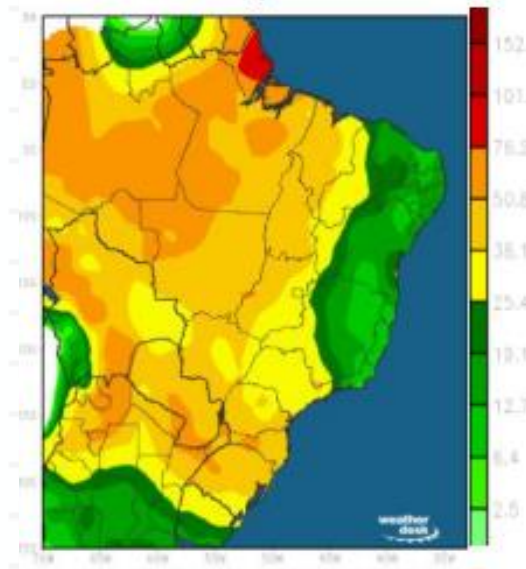
6-10 Day Weather



1-5 Day Weather

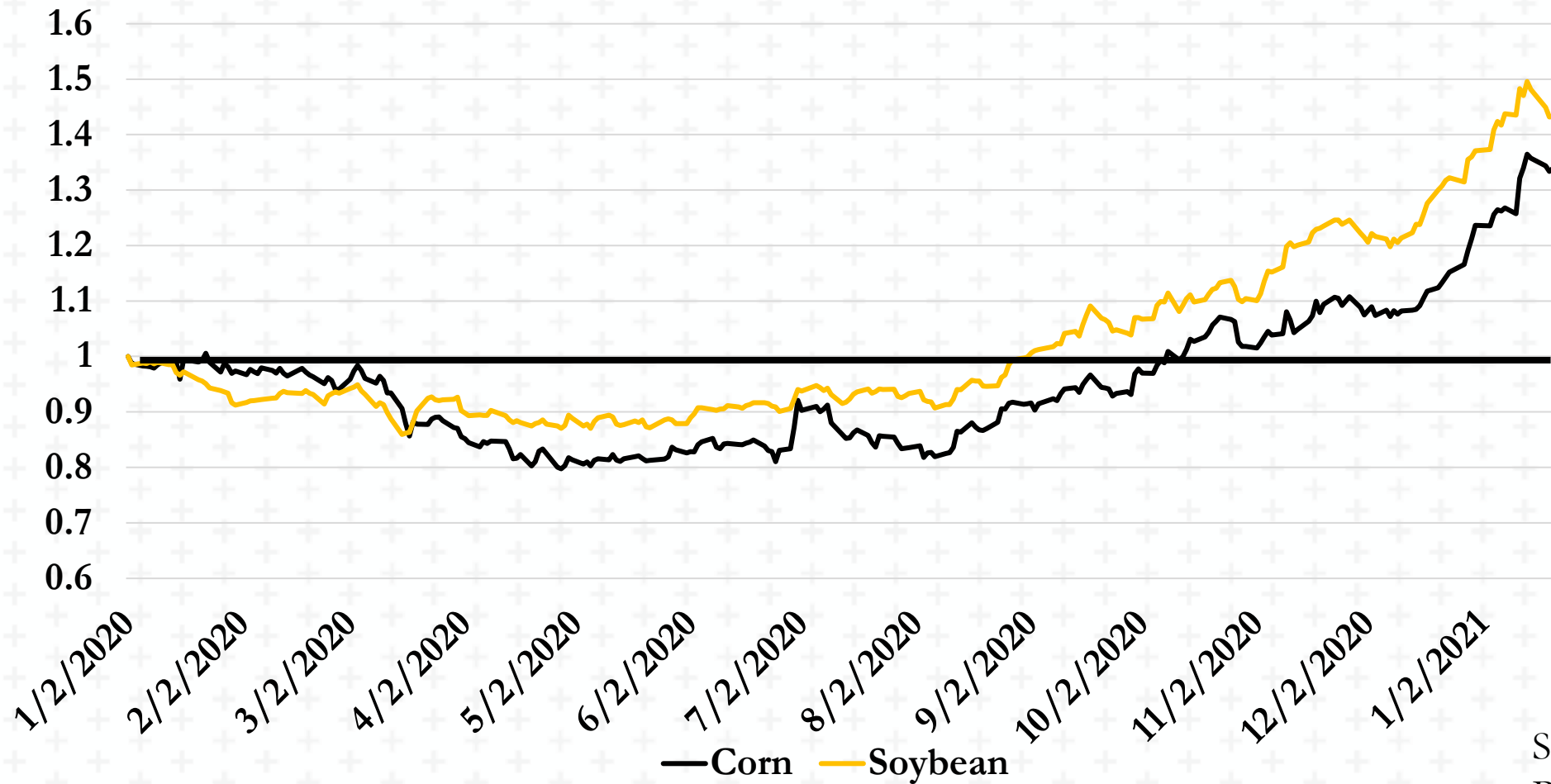


11-15 Day Weather



Most Active Futures Contracts

Most Active Futures Contracts for Corn and Soybeans
Index= 1/1/2020



Source: DTN
ProphetX

January WASDE- Jan. 12th

World Agricultural Supply and Demand Estimates

Crop Production- Annual Summary

1st Quarter Grain Stocks

Winter Wheat Seedings

World Markets and Trade- Grains and Oilseeds

2020/21 U.S. Crop Production

	Corn		Soybeans	
	Yield	Production	Yield	Production
NASS. January	172.0	14.182	50.2	4.135
Trade Average	175.3	14.470	50.5	4.158
NASS November	175.8	14.507	50.7	4.170
2019/20 Final	167.5	13.620	47.4	3.552

2020/21 Ending Stocks

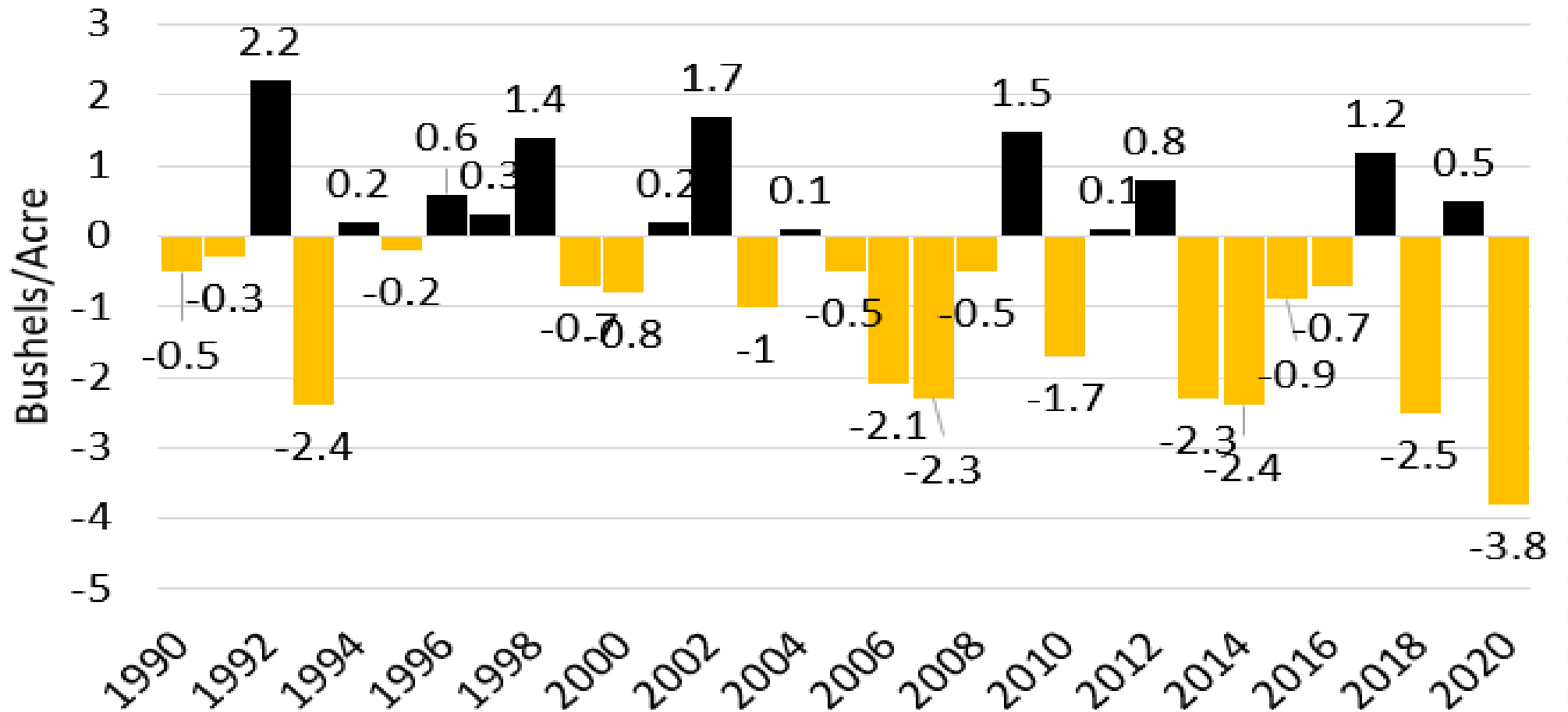
	US		World	
	Jan. (Dec)	Estimate	Jan. (Dec.)	Estimate
Corn	1.552 (1.702)	1.599	283.83 (288.96)	283.53
Soybeans	0.140 (0.175)	0.139	84.31 (85.64)	82.66
Wheat	0.838 (0.862)	0.859	313.19 (316.5)	313.19

1st Quarter Grain Stocks (Dec. 1)

	Corn	Soybeans	Wheat
December 1	11.322	2.933	1.674
Estimate	11.951	2.920	1.695
Surprise	-.629	+0.013	0.021

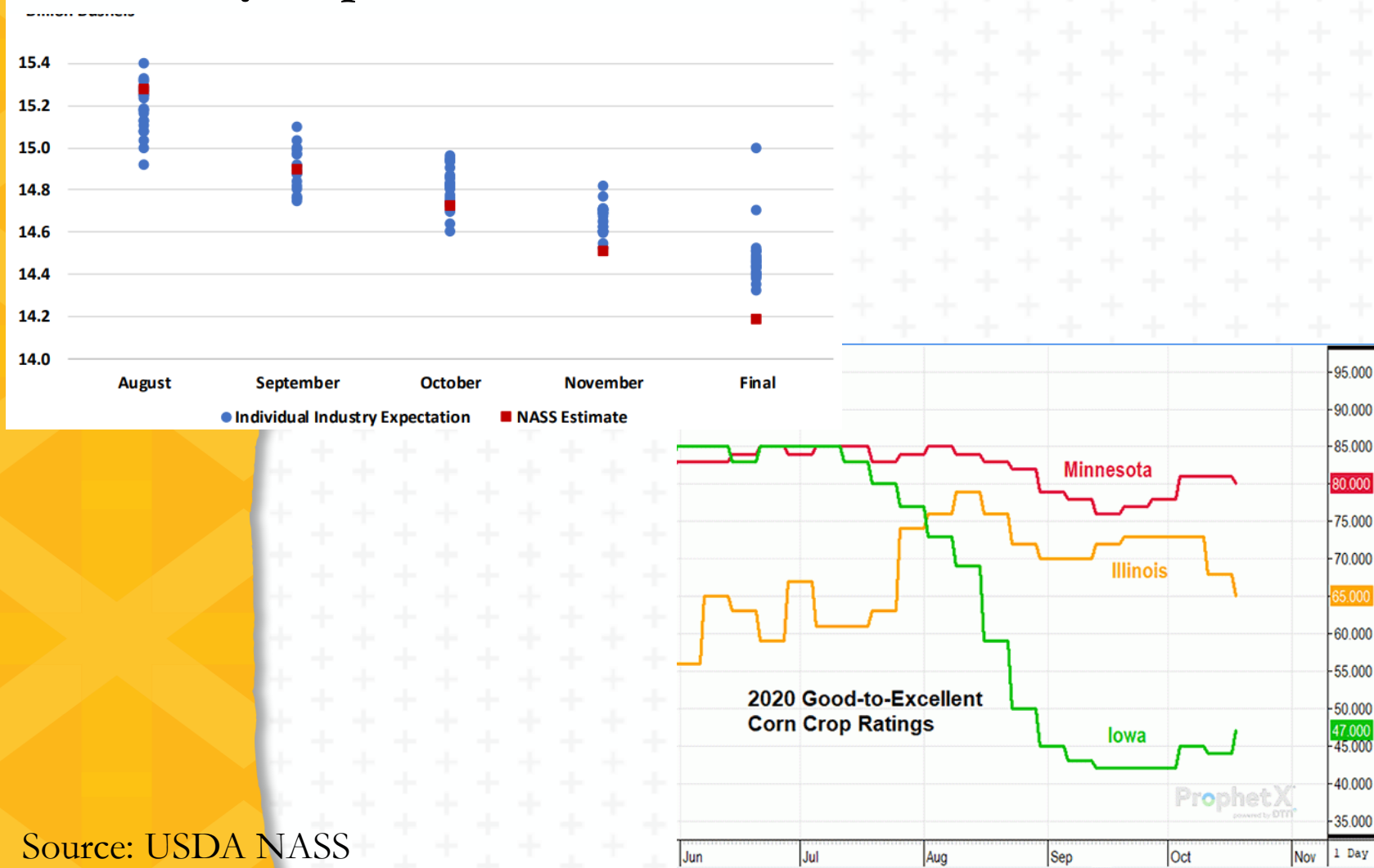
US Corn Yield- Nov. to Final

Change in US Corn Yield
(Final - November Estimate)



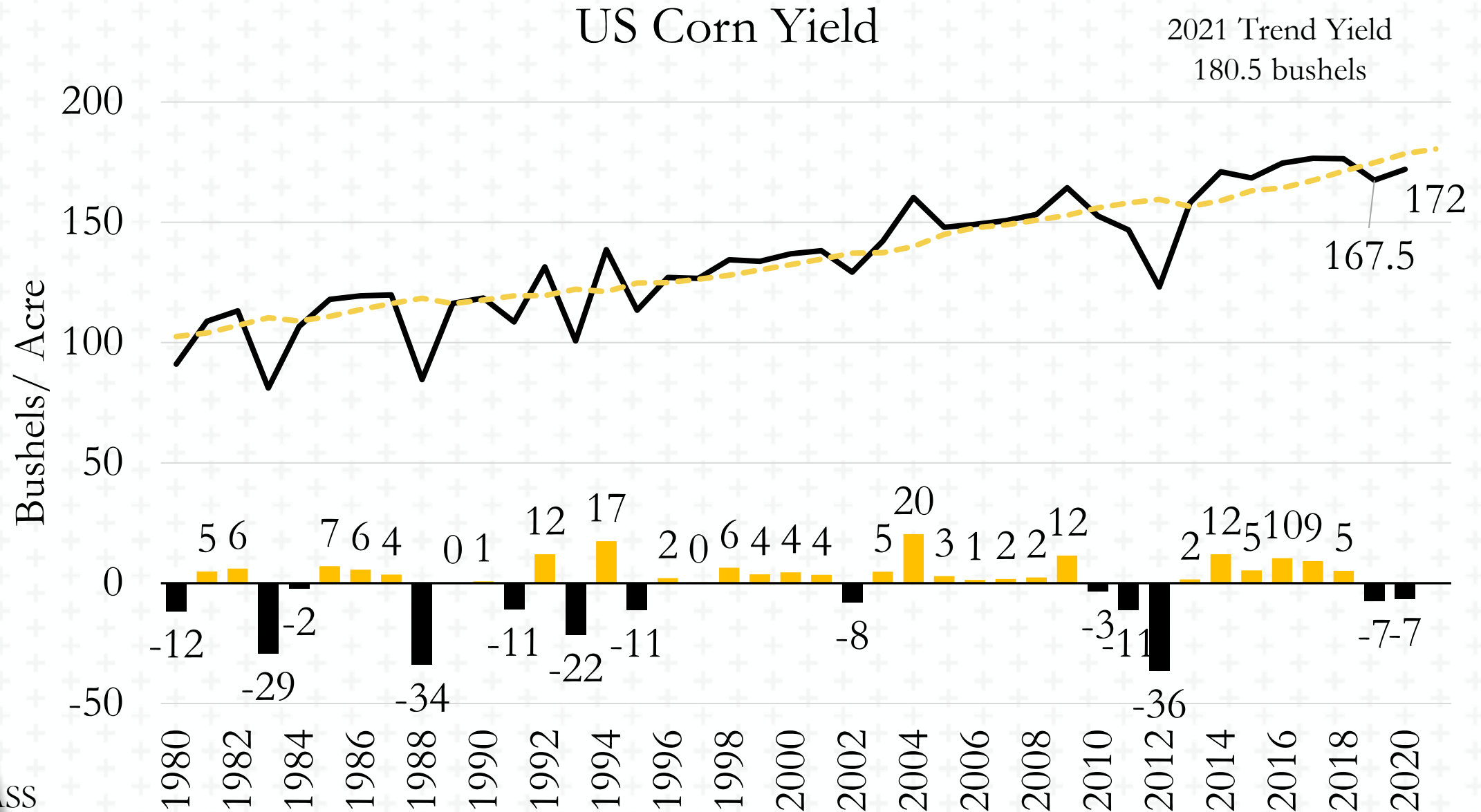
U.S. Corn Yield- Change

2020 US Corn Production
Industry Expectations vs NASS



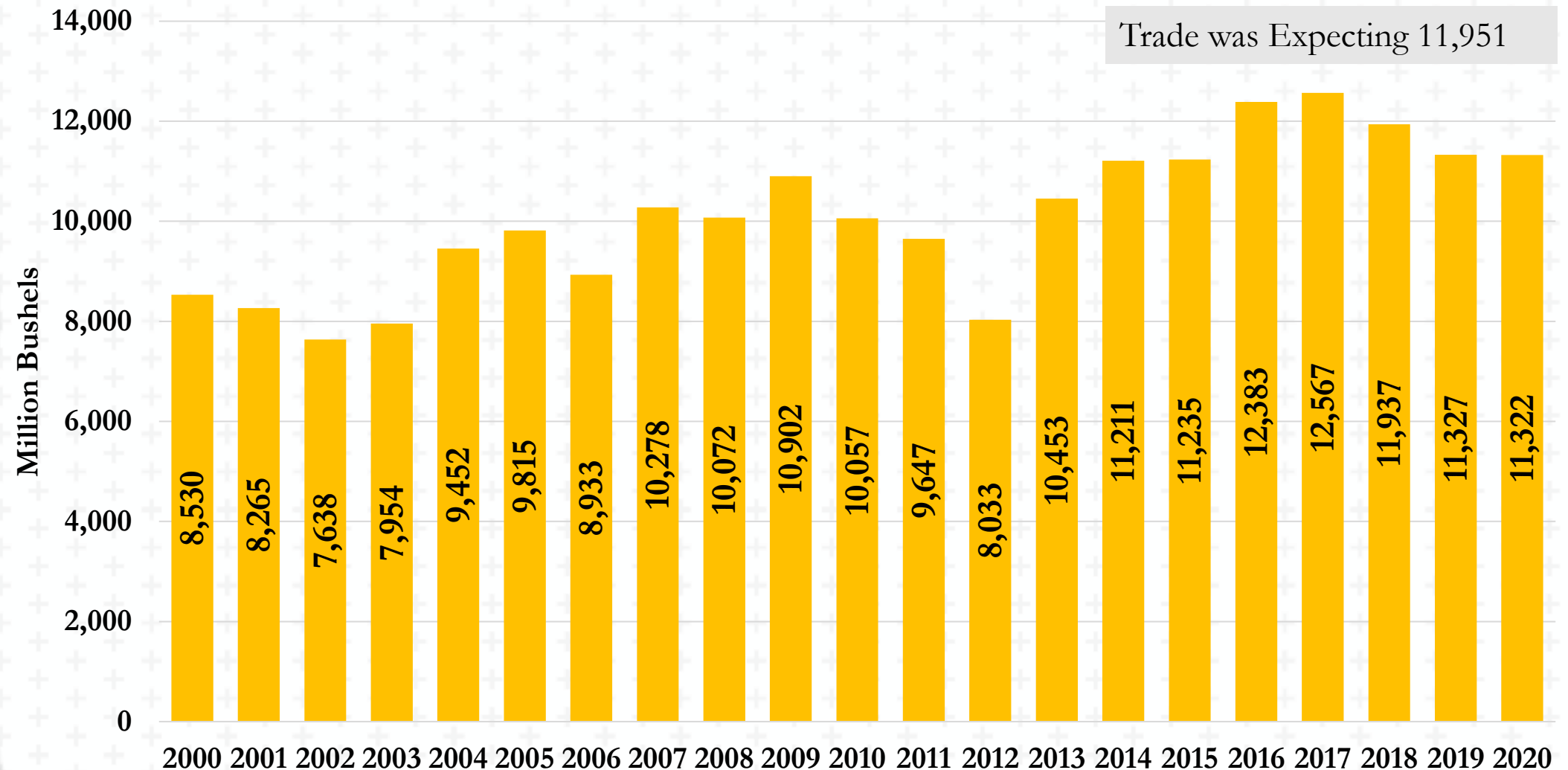
Ranked by 2019 Production	2020 Nov.	2020 Jan.	Nov- Jan Change
Iowa	184	178	-3.3%
Illinois	195	192	-1.5%
Nebraska	185	181	-2.2%
Minnesota	202	192	-5.0%
Indiana	189	187	-1.1%
S. Dakota	165	162	-1.8%
Kansas	132	134	1.5%
Ohio	168	171	1.8%
Wisconsin	184	174	-5.4%
Missouri	167	171	2.4%
N. Dakota	145	139	-4.1%
Michigan	160	154	-3.8%
Kentucky	181	184	1.7%

US Corn Yield and Deviation



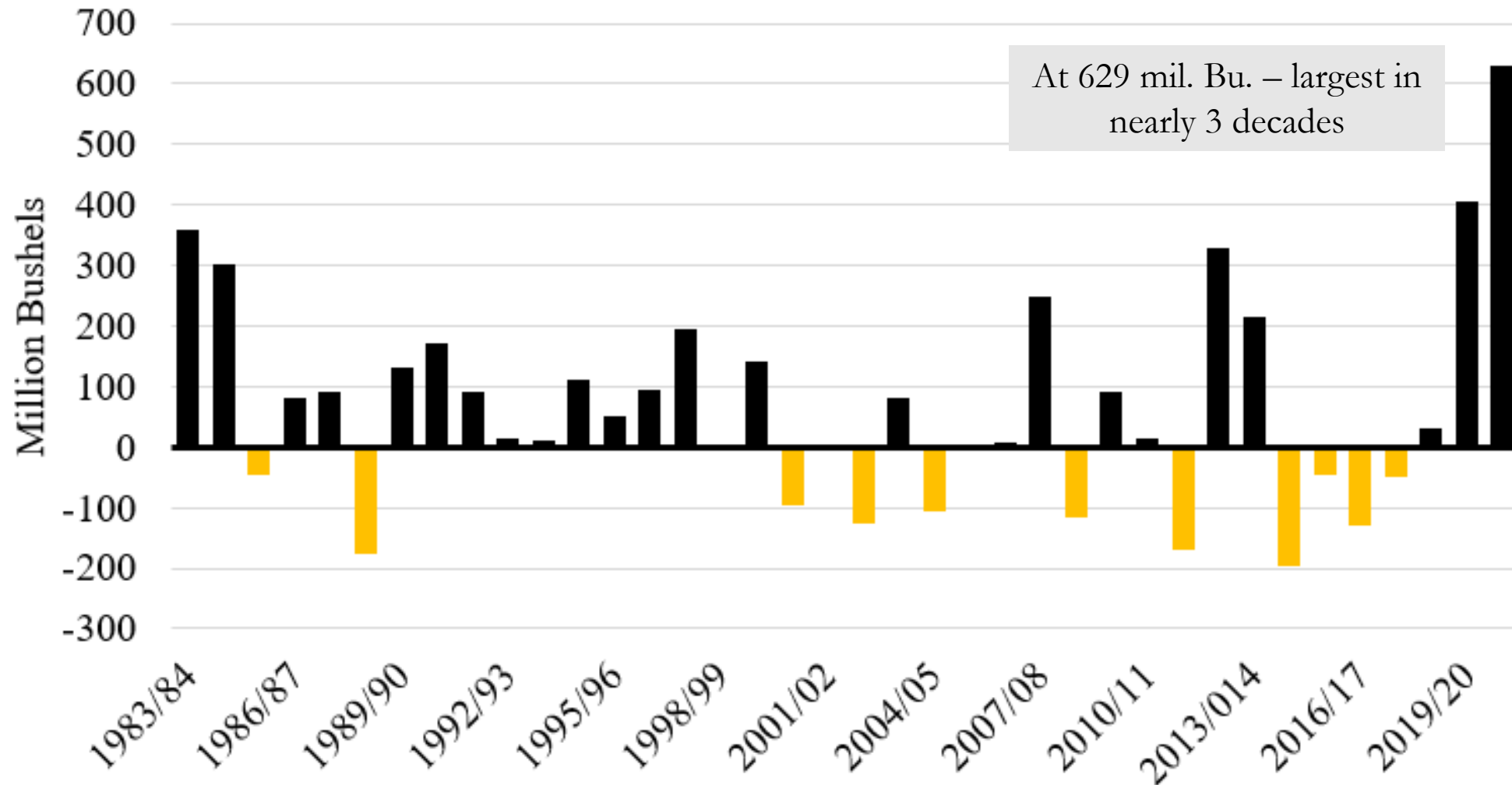
1st Quarter Grain Stocks- Corn

December 1st Corn Stocks



1st Quarter Corn Stocks

Suprises in US December Corn Stocks
Trade Average minus Actual Stocks



Stocks were 629 million bushels lower than traders expected.

However, there was the 288 mil. Bushel reduction in productions from what traders expected.

Subtracting 288 from 629 equals 341 million bushels of more demand than what traders expected.

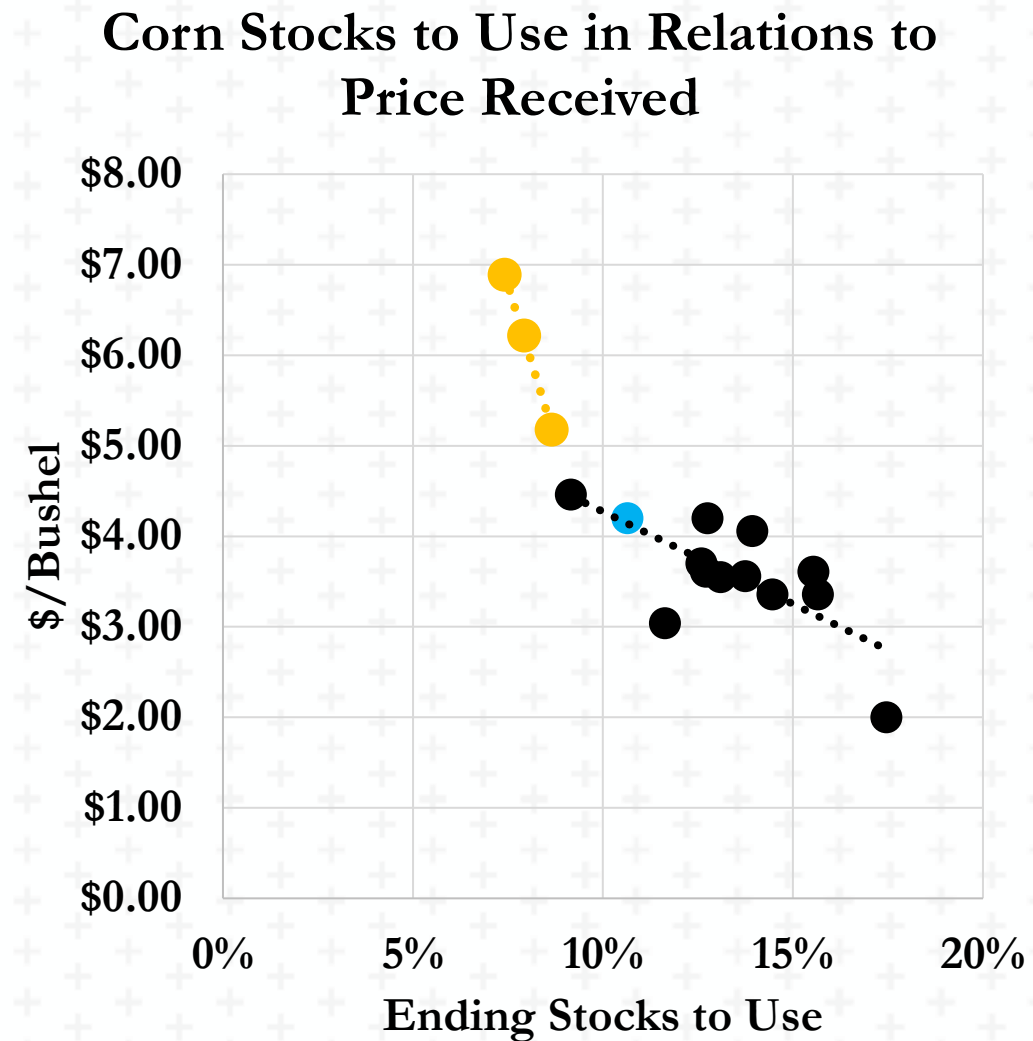
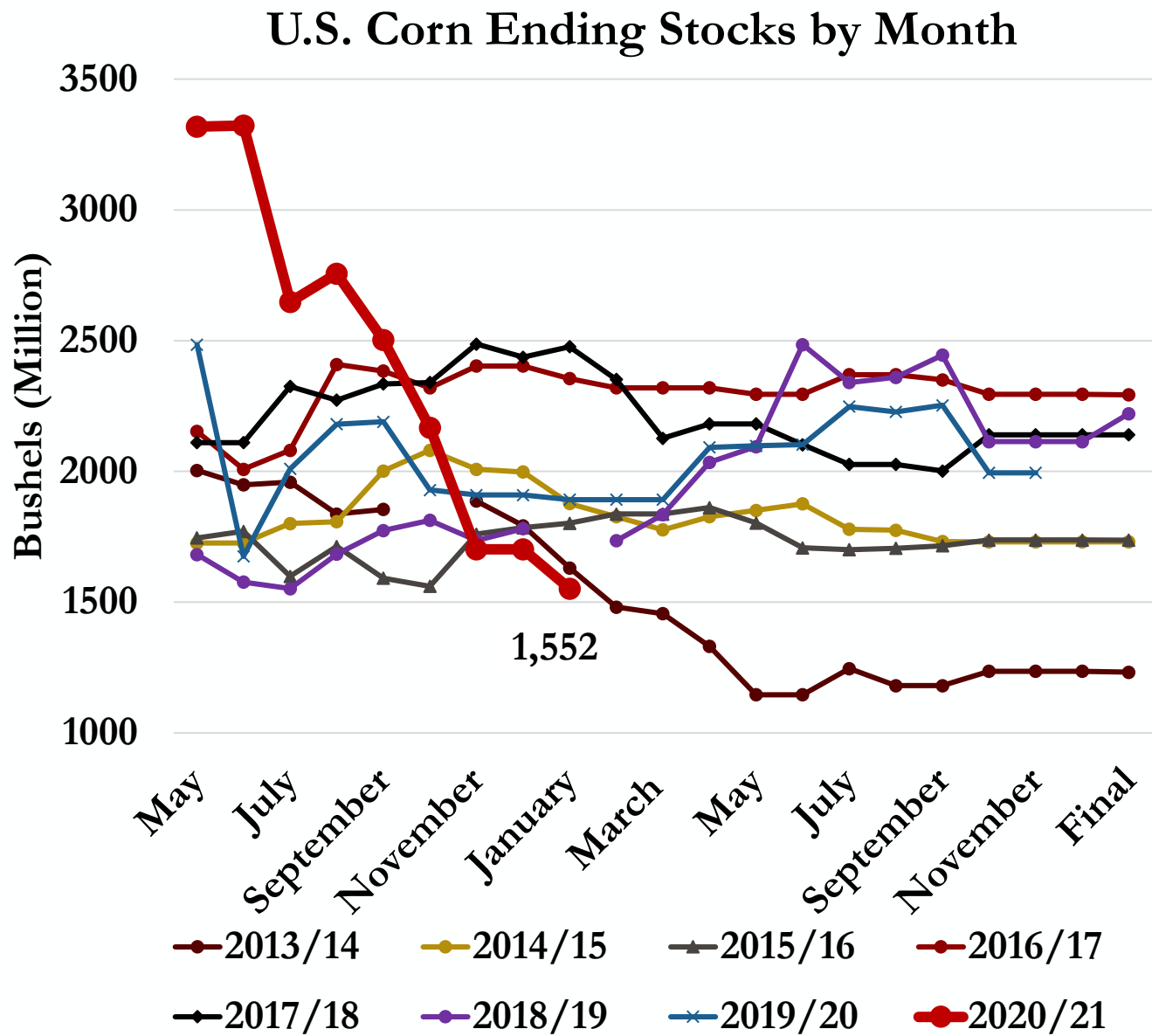
So much for decreased feed use due to COVID.

Projected 2020/21 Feed and Residual Use

Implied First Quarter Feed and Residual Use= 2,725.7 million bushels.

Percent of Total Feed Use used During the First Quarter	Implied 2020/21 Feed and Residual Use
37% Observed During 1996/97- 2005/06	7,367 mil. Bu.
39% Observed During 2006/07- 2009/10	6,989 mil. Bu.
45% Observed During 2014/15- 2019/20	6,057 mil. Bu.
USDA 20/21 Jan. Projection	5,650 mil. Bu.

Ending Stocks of US Corn



Source: USDA
WAOB

US Soybean Yield and Deviation

US Soybean Yield

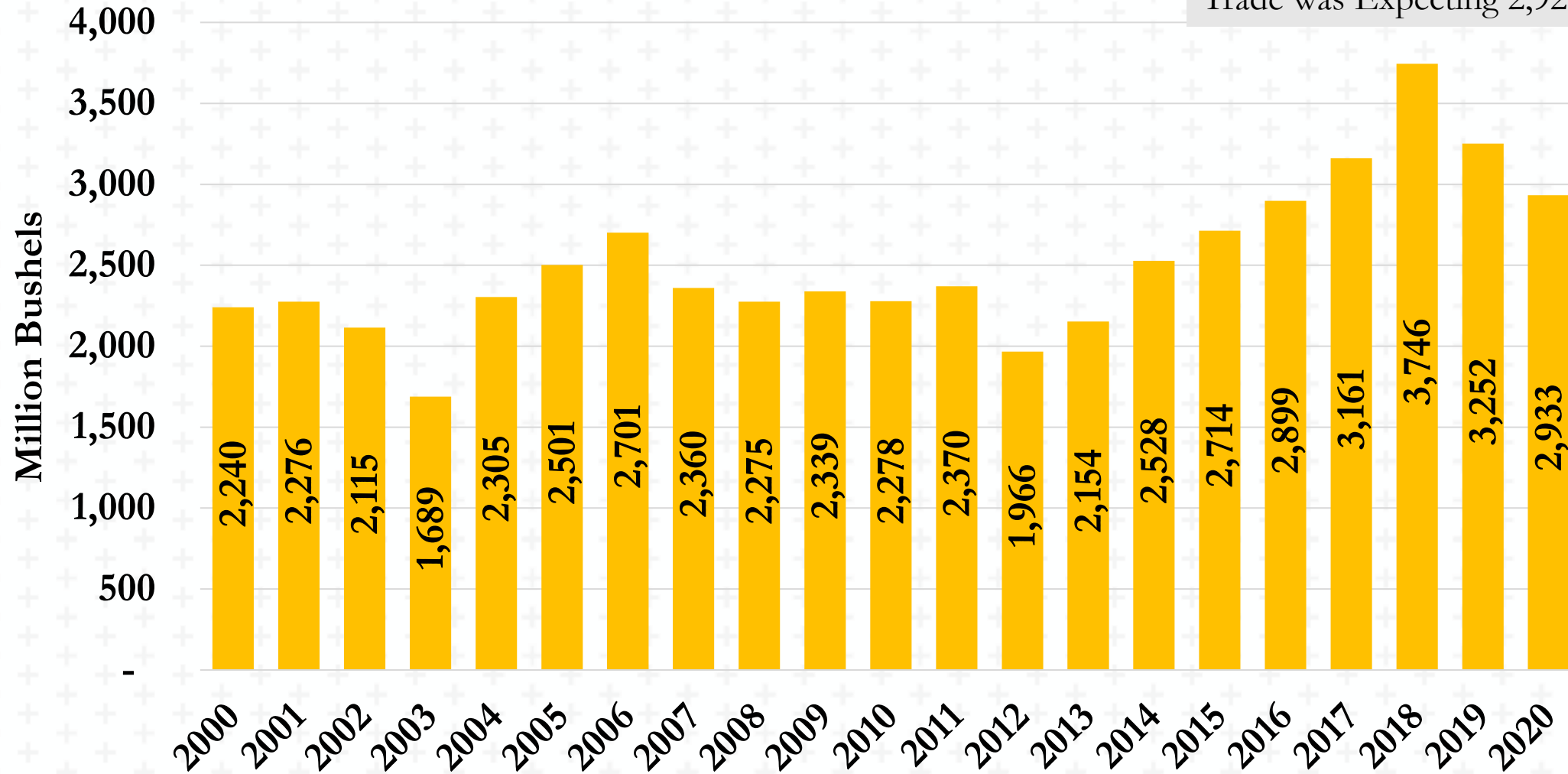


Source:
USDA NASS

1st Quarter Grain Stocks- Soybeans

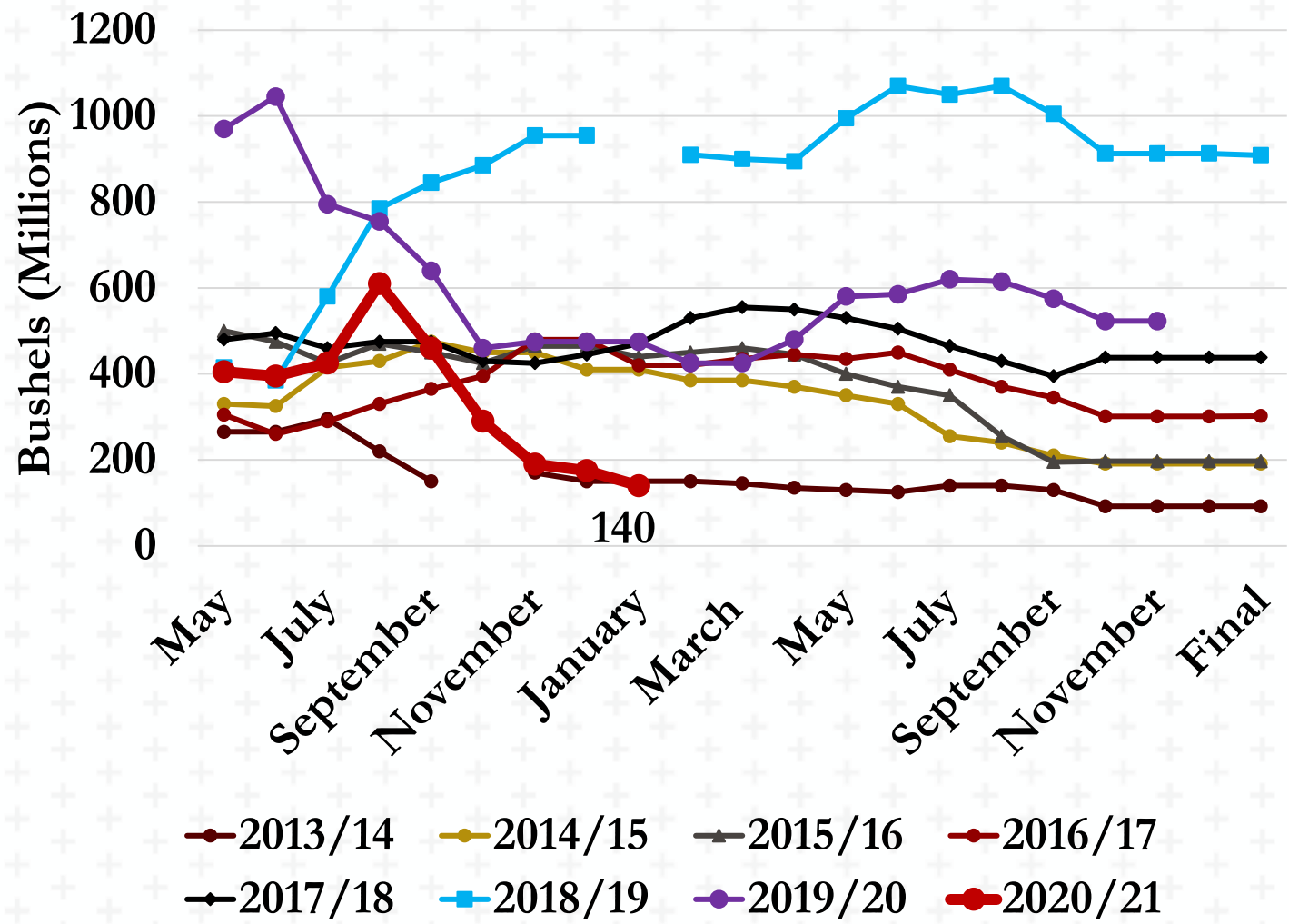
December 1st Soybean Stocks

Trade was Expecting 2,920

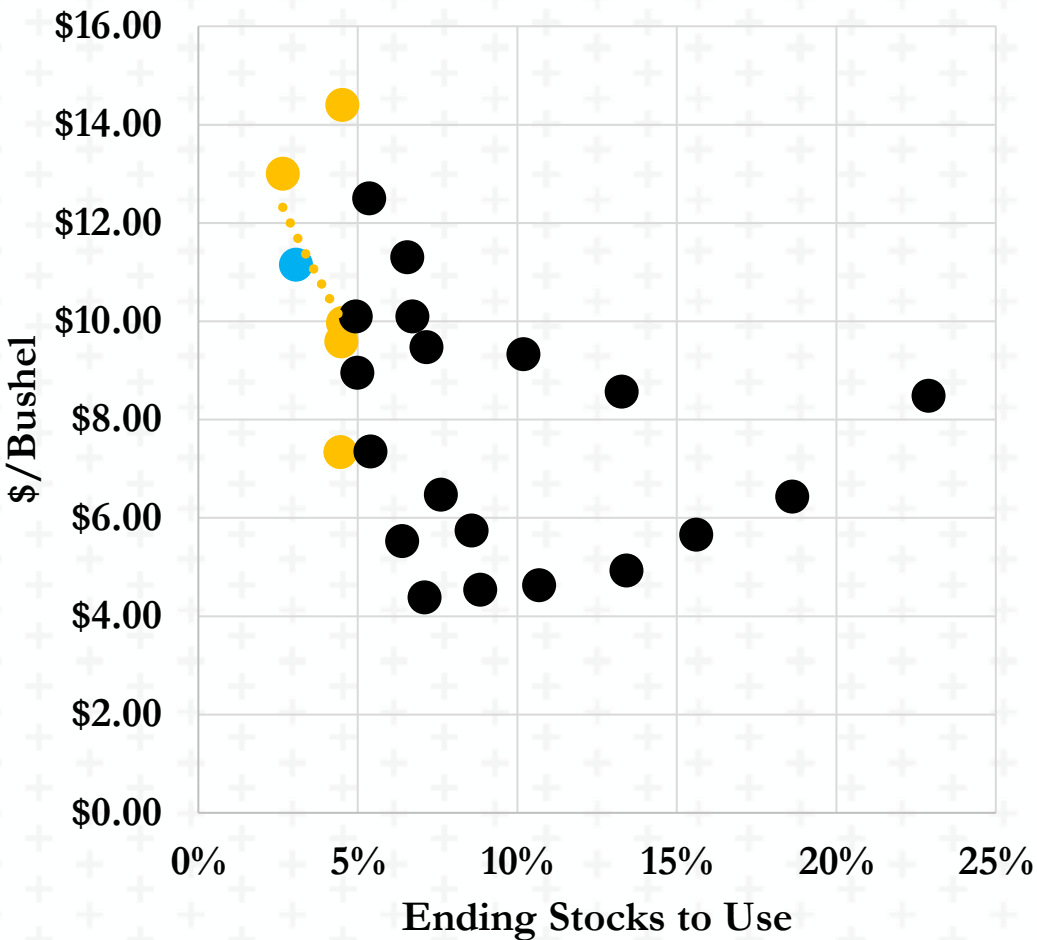


Ending Stocks of US Soybeans

U.S. Soybean Ending Stocks by Month



Soybean Stocks to Use in Relation to Price Received



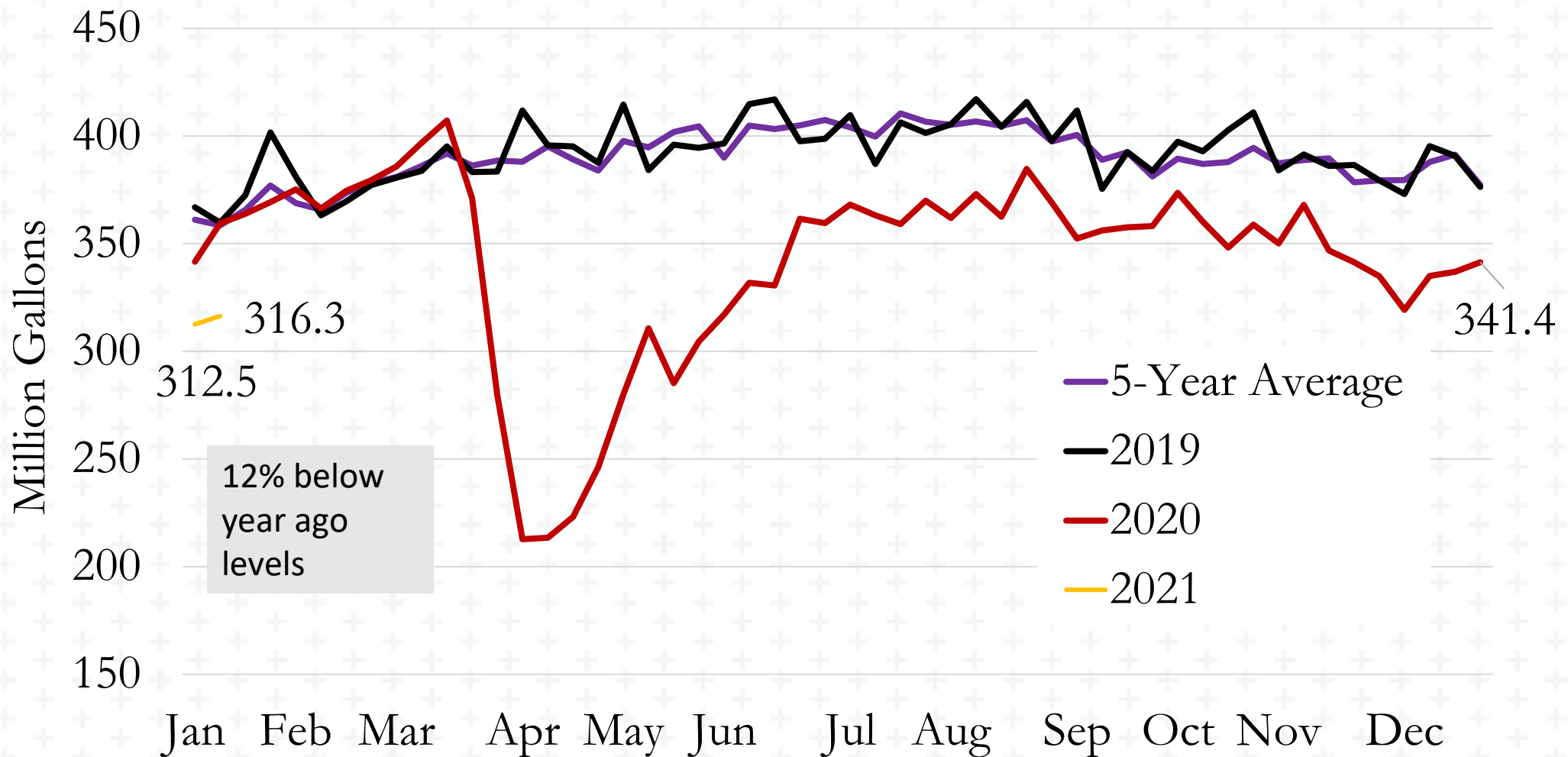
Source: USDA
WAOB



Commodity
Markets

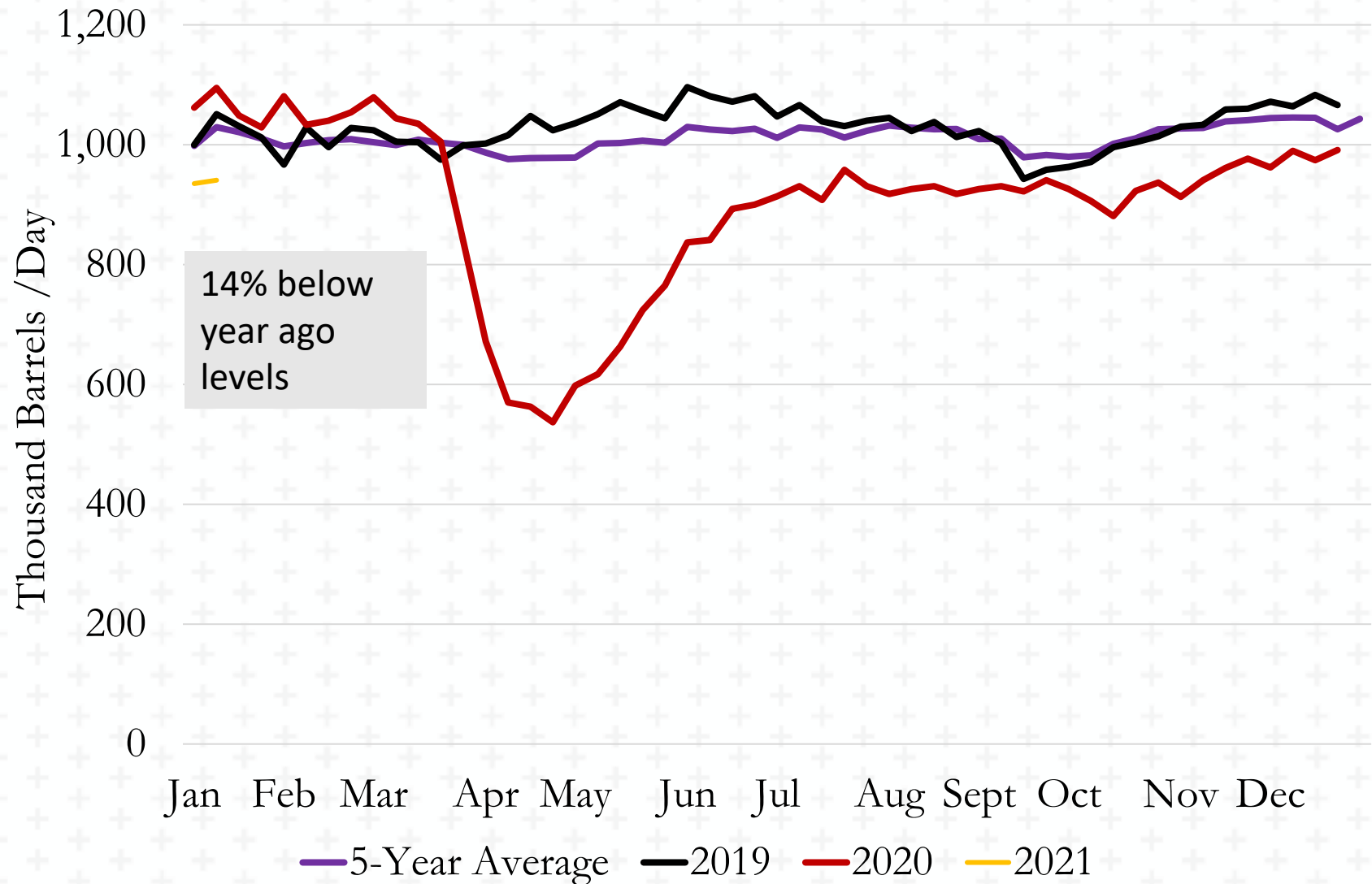
Corn Demand- Gas Consumption

Weekly Demand of Finished Motor Gasoline



Corn Demand- Ethanol Production

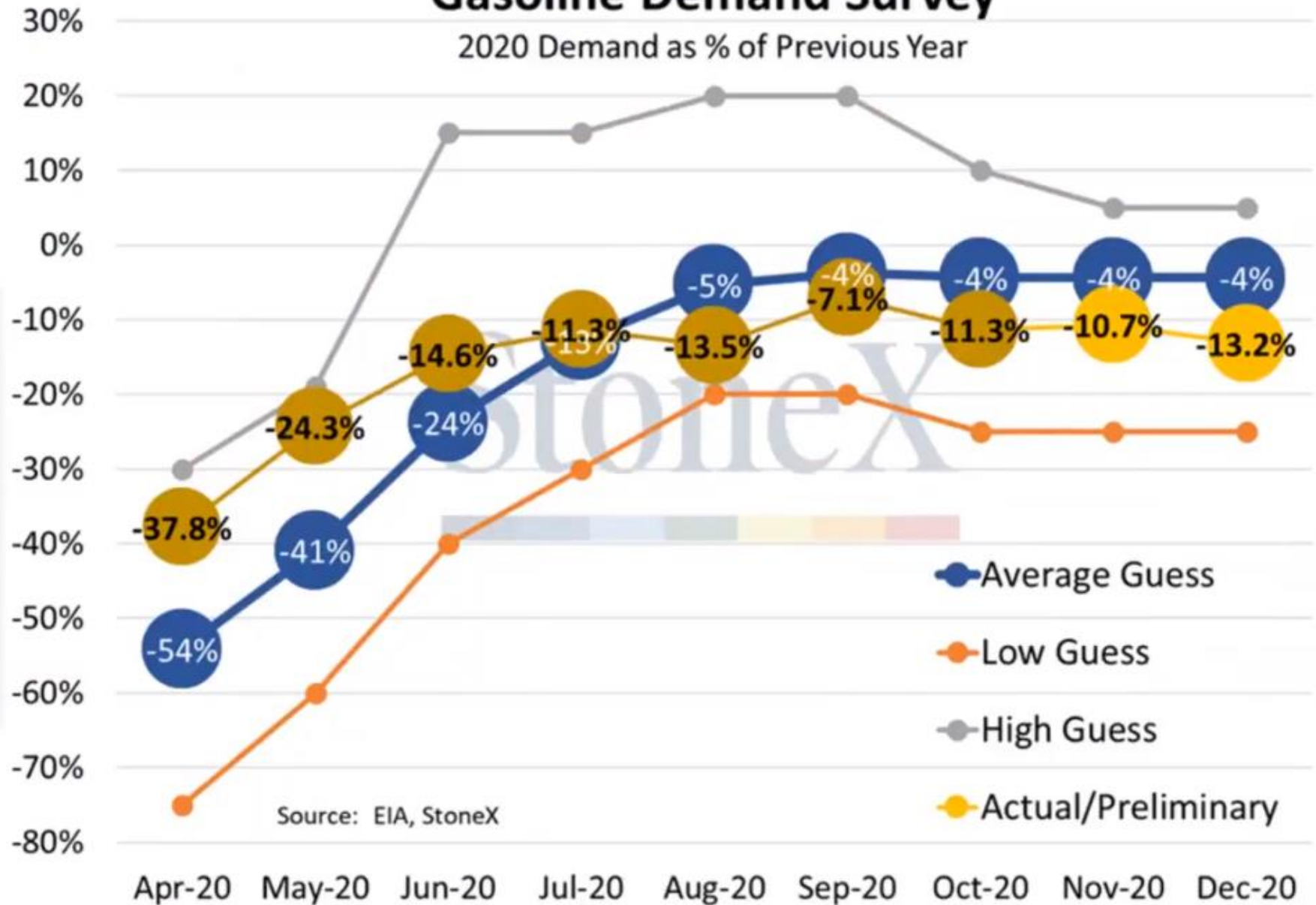
Us Weekly Ethanol Production



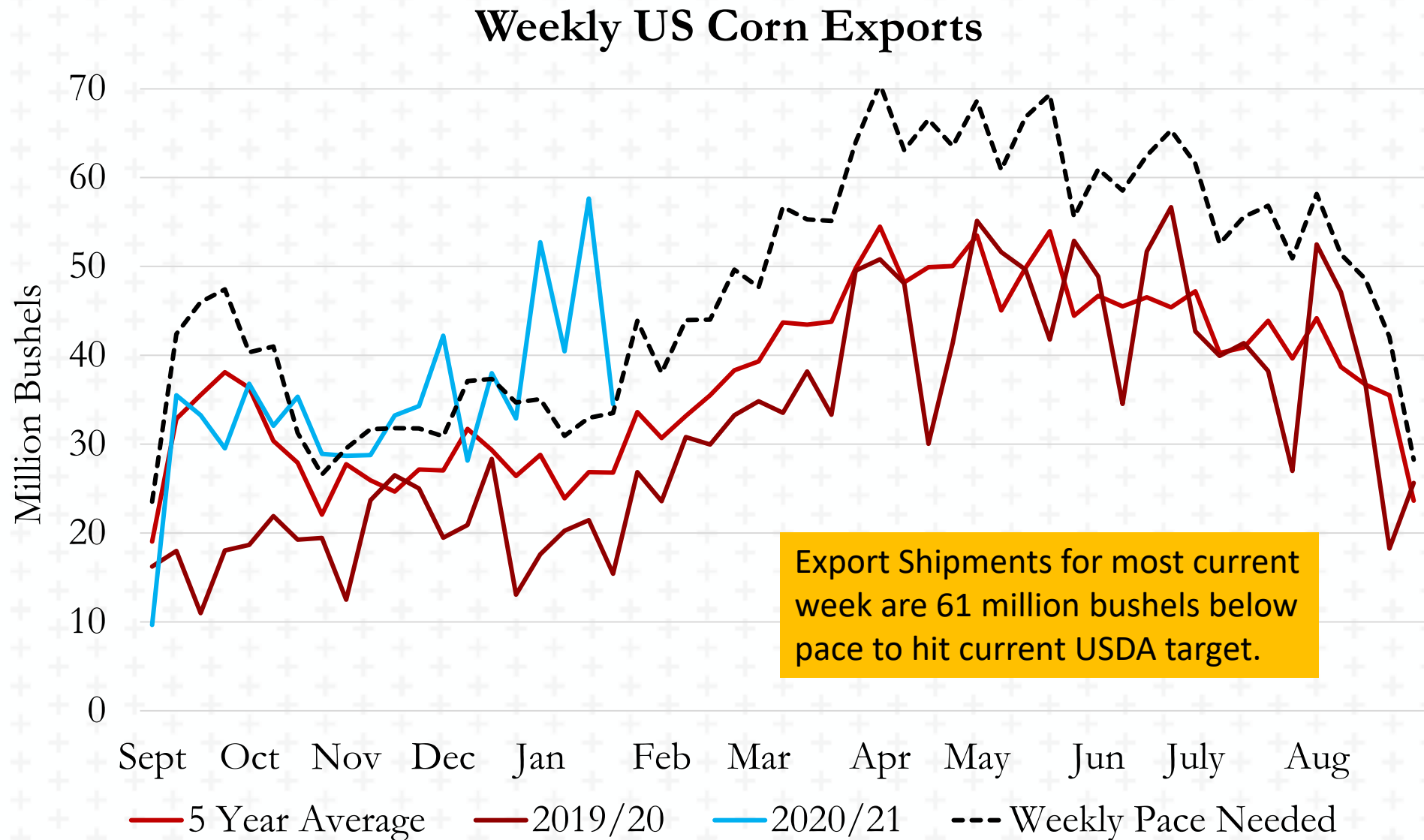
Source: Energy
Information
Agency

Gasoline Demand Survey

2020 Demand as % of Previous Year



Corn Demand- Exports



World Supply of Corn

China just updated their numbers to show there is a production to use gap of 28 mmt.

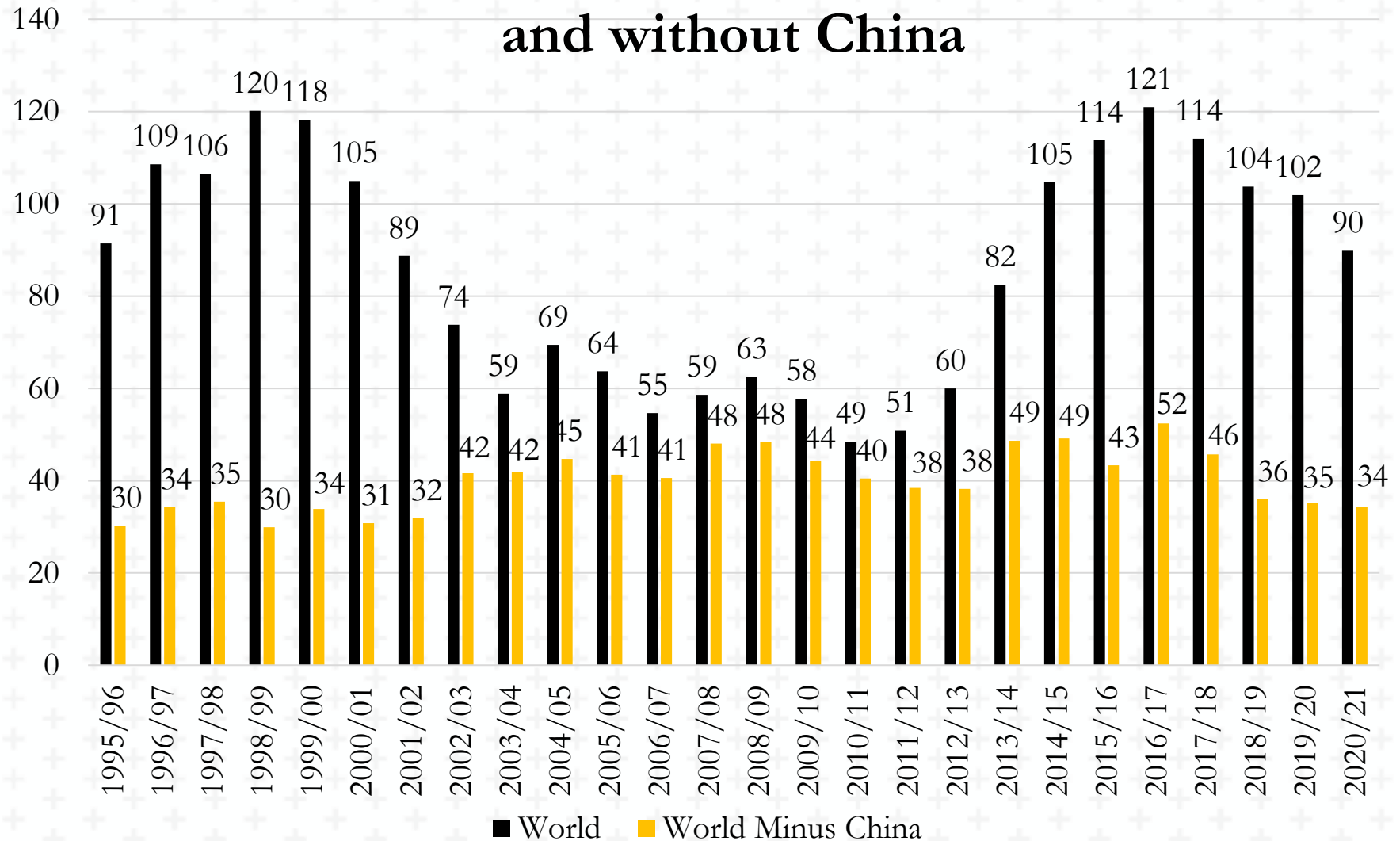
Thoughts: Would require a change in Chinese Policy.

- ❖ Self-Sufficiency
- ❖ Other Grains
- ❖ Flood their domestic market

Increasing Chinese Corn Supply

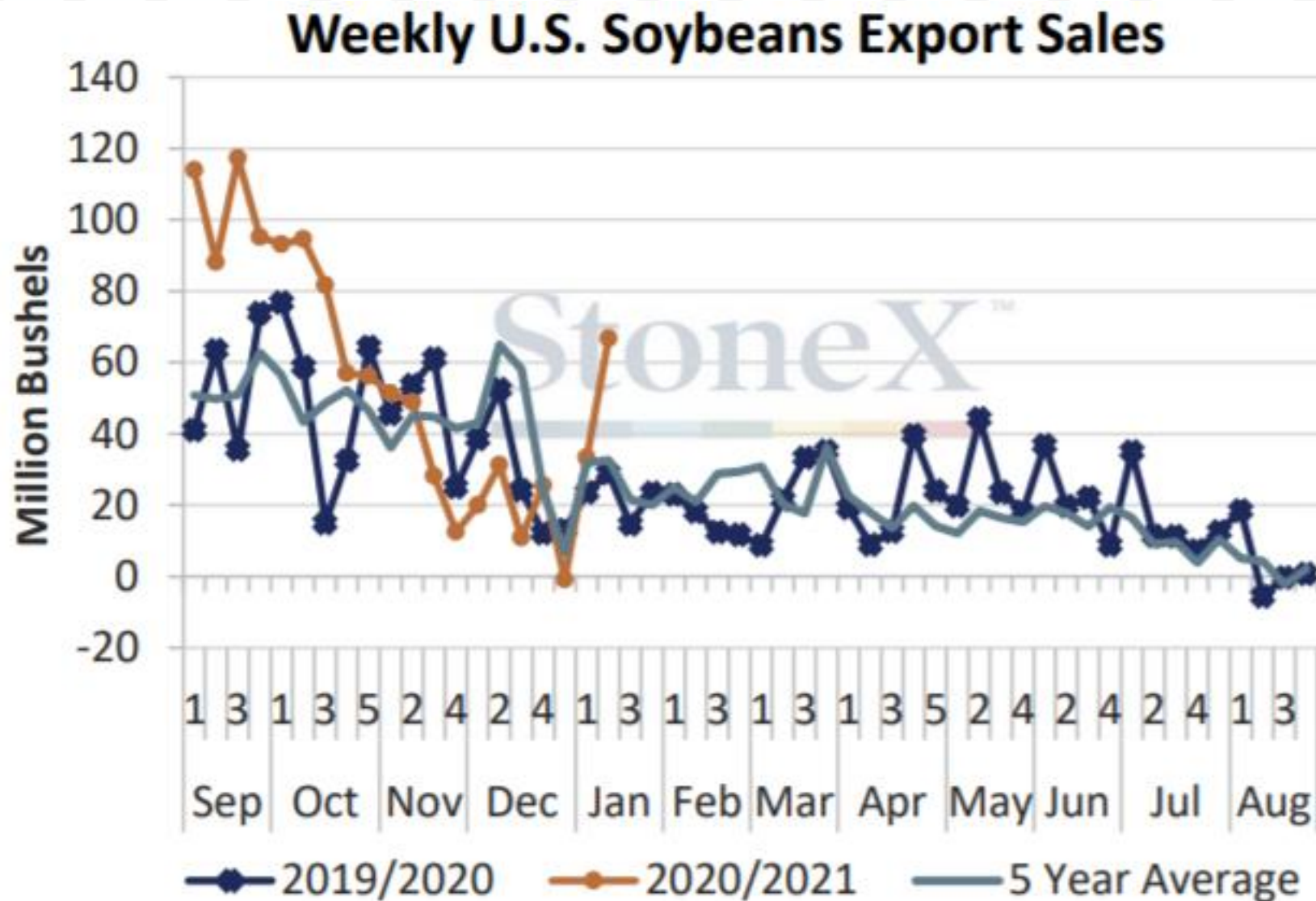
- ❖ Dec. 31 report on development outlines that “ethanol is okay only if it stocks aren’t tight” and that “corn and corn acres for industry should not compete with food security.”

World Days of Corn Supply Available with and without China



Source: Author Calculation using USDA FAS Data

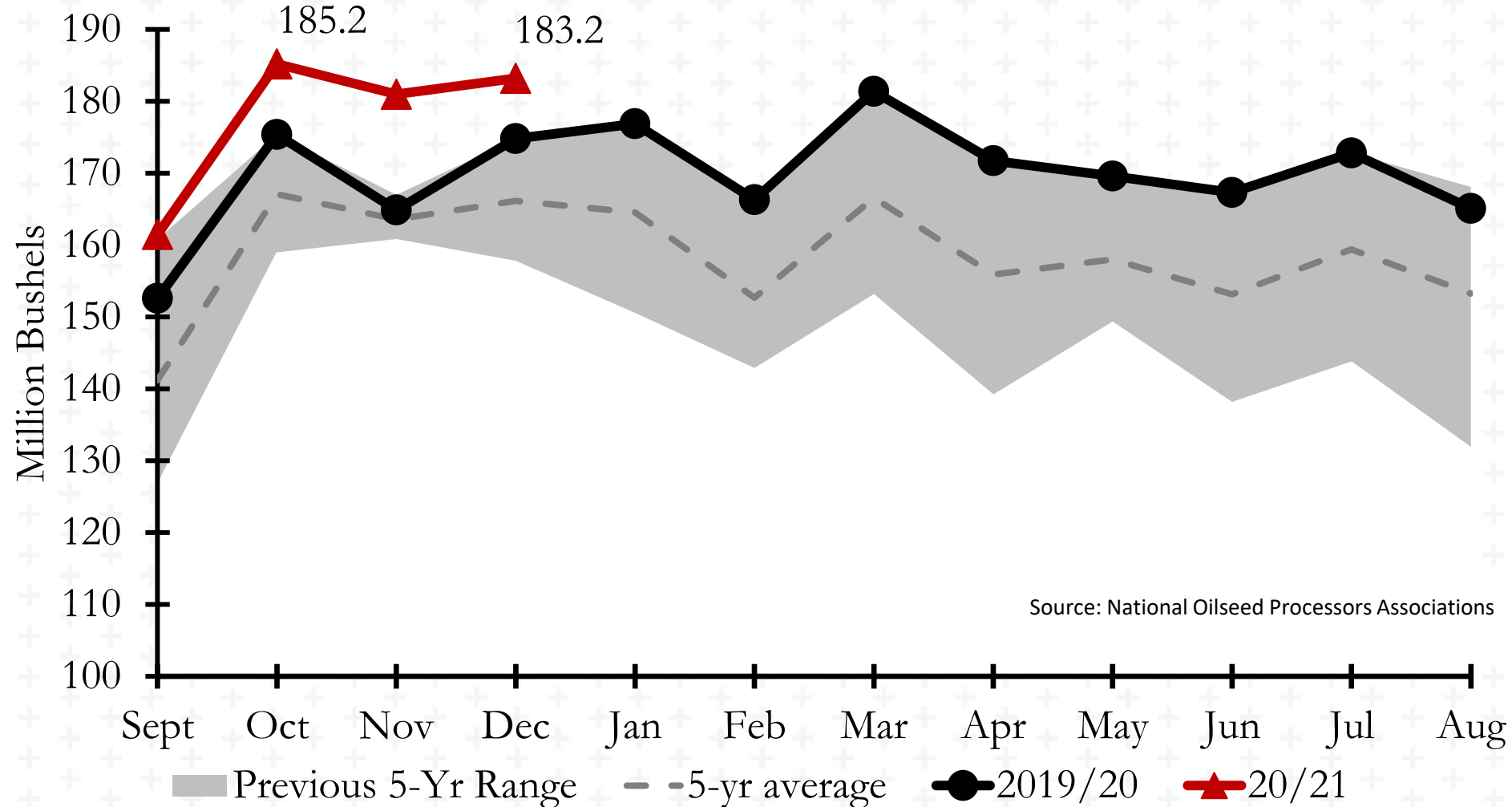
Soybean Demand- Exports



21% ahead of Current USDA
Export Pace
❖ 458 million bushels!!

Soybean Demand- Crush

NOPA Soybean Monthly Crush - Jan. 15 Report



- ❖ December was 2 million bu. Below trade estimates, but 8.4 mil. Bu. above last December.
- ❖ Second all-time highest month- behind October 2020.
- ❖ All four months of 2020/21 have set new monthly records!!
- ❖ Implied crush signals a 42 million bushel increase over last year. USDA is up 35 million year over year.

What's driving Soybean Crush?

Soybean Meal- Most Active Contract



Labor Concerns in Argentina

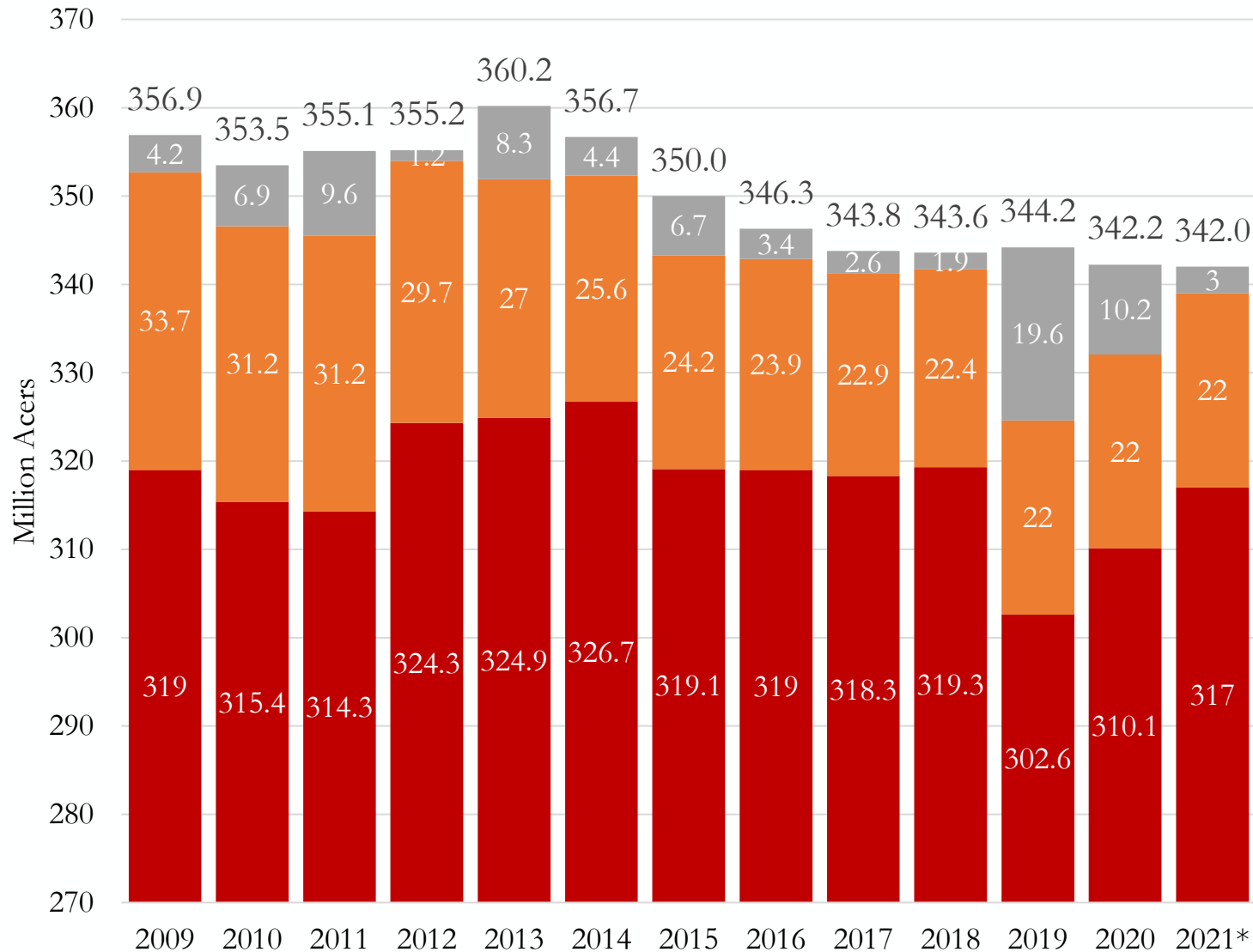
❖ Down roughly 2/3 in December

Soybean Crush- Replacement Values



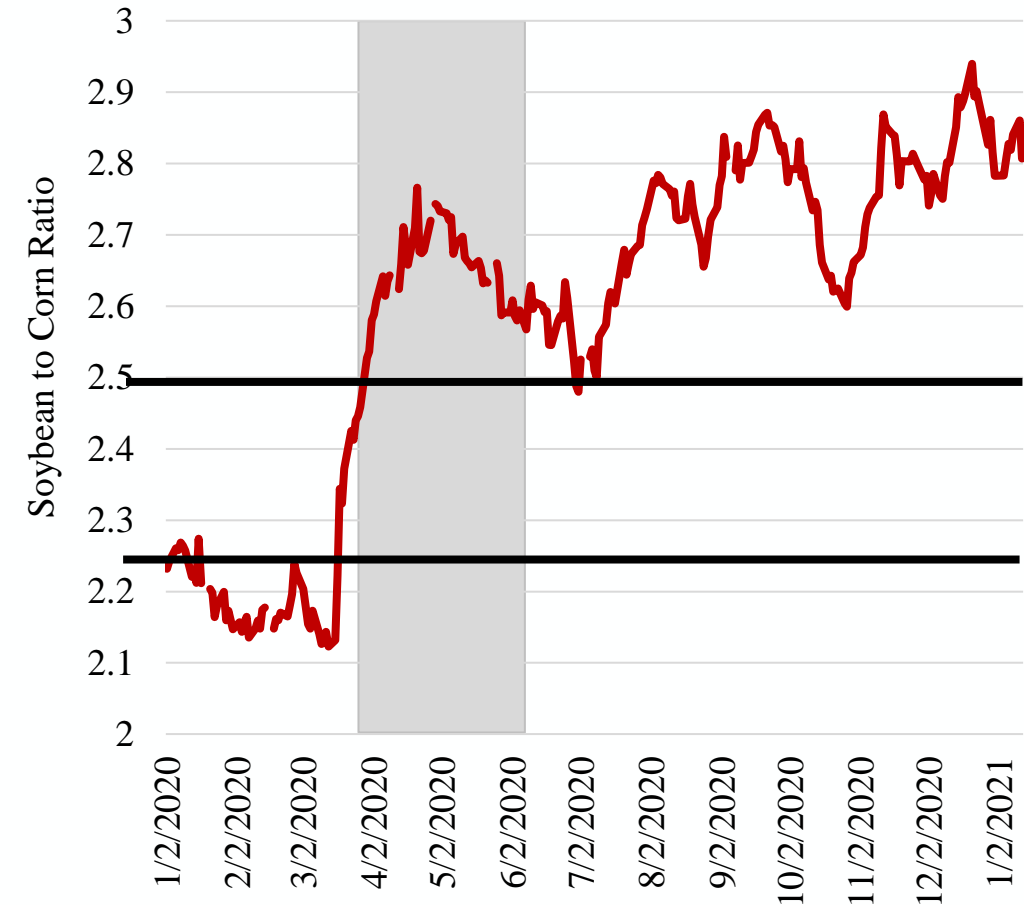
Available Acres- 2021

Expectations for Acres



IHS Markit/Informa put their 2021 Corn Acres at 94.2 up from 91.1 in December, 90.5 for Soybeans

New Crop Soybean (Nov. 20)/ New Crop Corn (Dec.)- Hardin County



Corn Balance Sheet: Shrinking Production, Demand?

Corn Balance Sheet	Unit	2016/17	2017/18	2018/19	2019/20	2020/21 Jan. Est. (Δ Sept.)	Ben's 21/22 Est.
Area Planted	Mil.ac.	94.0	90.2	88.9	89.7	90.8 (-1.2)	90.5
Area Harvested	Mil. Ac.	86.7	82.7	81.3	81.3	82.5 (-1)	83.1
Yield	Bu./acre	174.6	176.6	176.4	167.5	172.0 (-6.5)	180.5
Beg. Stocks	Mil. Bu.	1,737	2,293	2,140	2,221	1,919 (-334)	1,552
Production	Mil. Bu.	15,148	14,609	14,340	13,620	14,182 (-718)	15,000
Imports	Mil. Bu.	57	36	28	42	25	30
Total Supply	Mil. Bu.	16,942	16,939	16,509	15,883	16,127 (-1,051)	16,567
Feed and Res.	Mil. Bu.	5,470	5,304	5,429	5,827	5,650 (-175)	5,700
Food, Seed, In	Mil. Bu.	6,885	7,057	6,793	6,282	6,375 (-150)	6,450
Ethanol Crush	Mil. Bu.	5,432	5,605	5,378	4,852	4,950 (-150)	5,025
Exports	Mil. Bu.	2,294	2,438	2,066	1,778	2,550 (+225)	2,300
Total Use	Mil. Bu.	14,649	14,798	14,288	13,887	14,575 (-100)	14,450
Ending Stocks	Mil. Bu.	2,293	2,140	2,221	1,919	1,552 (-951)	2,117
Farm Price	\$/Bu.	\$3.36	\$3.36	\$3.61	\$3.56	\$4.20 (+\$0.70)	\$3.65

Soy Balance Sheet: Surprising Yields, Trade Optimism

Corn Balance Sheet	Unit	2016/17	2017/18	2018/19	2019/20	2020/21 Jan. (Δ Sept.)	Ben's 21/22 Est.
Area Planted	Mil. Acres	83.4	90.2	89.2	76.1	83.1 (-0.7)	90.5
Area Harvested	Mil. Acres	82.7	89.5	87.6	74.9	82.3 (-0.7)	88.4
Yield	Bu./Acres	52.0	49.3	50.6	47.4	50.2 (-1.7)	51.0
Beg. Stocks	Mil. Bu.	197	302	438	909	525 (-52)	140
Production	Mil. Bu.	4,296	4,412	4,428	3,552	4,135 (-178)	4,508
Imports	Mil. Bu.	22	22	14	15	35 (+20)	30
Total Supply	Mil. Bu.	4,515	4,735	4,880	4,476	4,695 (-208)	4,678
Soy Crush	Mil. Bu.	1,901	2,055	2,092	2,165	2,220 (+20)	2,205
Exports	Mil. Bu.	2,166	2,134	1,752	1,676	2,230 (+105)	2,200
Seed	Mil. Bu.	105	104	88	96	103 (+3)	105
Residual	Mil. Bu.	41	5	39	16	22 (-16)	25
Total Use	Mil. Bu.	4,214	4,297	3,971	3,953	4,555 (+113)	4,535
Ending Stocks	Mil. Bu.	302	438	909	525	140 (-320)	143
Farm Price	\$/Bu.	\$9.47	\$9.33	\$8.48	8.57	\$11.15 (+1.90)	\$11.80

Source: USDA WAOB

Key Take Aways

- ❖ Several Factors continue to add downside risk
 - ❖ COVID-19
 - ❖ South American Weather
 - ❖ Trade
- ❖ Fundamentals for corn and soybeans have greatly improved and support current prices.
 - ❖ All attention was given to the USDA corn yield adjustment, but corn feed and residual demand was also very impressive.
- ❖ Expectations are that Soybean prices may continue to decline as Brazils Harvest mitigates short-term supply concerns.
 - ❖ World Supply and Demand Fundamentals still point to prices remaining well above the depressed levels observed before August
- ❖ 2021 acreage remains a key question.
 - ❖ Profitability gives soybeans the edge against most crops
 - ❖ But spring weather is a big factor, and
 - ❖ Farmers just love to plant corn.



Thank You- Ohio!

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