Demand destruction accelerates

Corn and soybeans face weaker usage in April.

By Bryce Knorr

Fear of demand destruction from the COVID-19 pandemic fell especially hard on corn in the first quarter of 2020, pressuring futures to the lowest level since 2016. The latest data out this week shows that trend not only accelerated in recent days, but also derailed soybean hopes from the first phase of the trade deal with China, where the disease began.

And, while much of the fallout for corn stems from the collapse of the petroleum market, there are signs the two other legs of demand, exports and feed usage, could also suffer. Strains in the world's supply chain for food could even begin to weigh on soybean crush, the bright spot for that commodity over the winter.

Tracking demand in the grain market in anywhere close to real-time is far from an exact science. While data on exports and ethanol production is reported weekly, soybean crush comes out monthly. Feed usage is even more of a guess. It can only be implied from quarterly stocks estimates.

Here's a look at the current state of demand in a world with too much supply.

Ethanol woes continue

USDA's April 9 supply and demand estimates lowered forecasts for corn usage to make ethanol, kept exports steady but raised livestock feeding for the 2019 crop.

The downgrade for biofuels was a no-brainer, and the news for the energy patch isn't really getting any better. Yes, OPEC+, led by Saudi Arabia and Russia, finally agreed to cut production after a disastrous price war at just the wrong time. But crude oil futures fell to fresh lows below $20 a barrel today. Some traders are suspicious the deal won't be enough to avoid topping off the world's storage capacity in a couple of weeks. Only low prices will lower production in the U.S. and other Western countries where output is normally a function of the market.

Crude inventories last week swelled by a staggering 19.25 million barrels. With usage plummeting that amounts to nearly a 40-day supply, easily a record.

To be sure, the industry is responding to the not-so-invisible hand of the market. The number of U.S. rigs in production is down 26% since the beginning of March. But because companies idle the most inefficient facilities first, overall crude production is off only 6%.

April global crude oil demand is expected to fall some 17% from 2019 levels as much of the world economy ground to a halt. Here in the U.S., demand for gasoline last week was down by a third from last year. And with gasoline priced at a discount to ethanol, ethanol demand is limited by the 10% blend wall.

Ethanol production last week fell to just 570,000 barrels a day, the lowest in at least a decade as inventory bulged to record levels.

While official data won't come out until June, it appears current demand for corn from plants is below 8 million bushels a day, an annualized rate of less than 3 billion bushels, compared to the 5.4 billion used in the 2018-2019 marketing year. This low level won't last when the economy begins to reopen, but could still cause corn usage to fall by more than 300 million bushels this year.

Little wonder, then, that operating margins for ethanol plants remain near very low levels, weakening their average bids for corn by 25 cents a bushel over the past two months

Exports show weakness

Corn exports got off to a slow start last fall due to harvest delays, concerns about quality and large supplies in competing countries. The picture began to brighten in March as buyers took advantage of low prices to stock up. But after two weeks when inspections topped 50 million bushels, shipments fell to 40.5 million last week. One report isn't a trend, but it could be a sign COVID-19 is impacting trade too.

The supply chain for animal products is already broken, of course.

Initially, hog and cattle slaughter surged in March as shoppers stocked up to wait out stay-at-home orders. The pulled-forward demand push didn't last as restaurants and schools closed. April direct cattle slaughter is down 15% from last year, while direct hog numbers fell 36%.

If that feed trend continues, it could impact domestic use of soybean meal too. Crush margins jumped near two-year highs this winter as ethanol production collapsed, decreasing output of DDGSs that compete with meal in livestock rations. Economic woes in Argentina, the world's leading soy product exporter, gave another boost to the industry.

Members of the National Oilseed processors Association crushed 181.3 million bushels of soybeans in March, easily a record that suggests total crush could 193 million bushels when USDA reports its official figures at the beginning of May.

As good as those numbers sound, average daily crush for March was actually a little lower than the prior year. Margins last week dropped towards the low end of their range for the past four years as demand from hog producers eroded.

Moreover, once-promising Chinese demand for U.S. soybeans evaporated as that country shut down for the pandemic. Total weekly export inspections in March and April are down 37% from 2019 as China appeared to shift interest to new crop.

As a result, total daily demand for crush and exports in March fell 13% below 2019 levels. USDA April 9 said total demand would still be a little higher than during the 2018 marketing year.

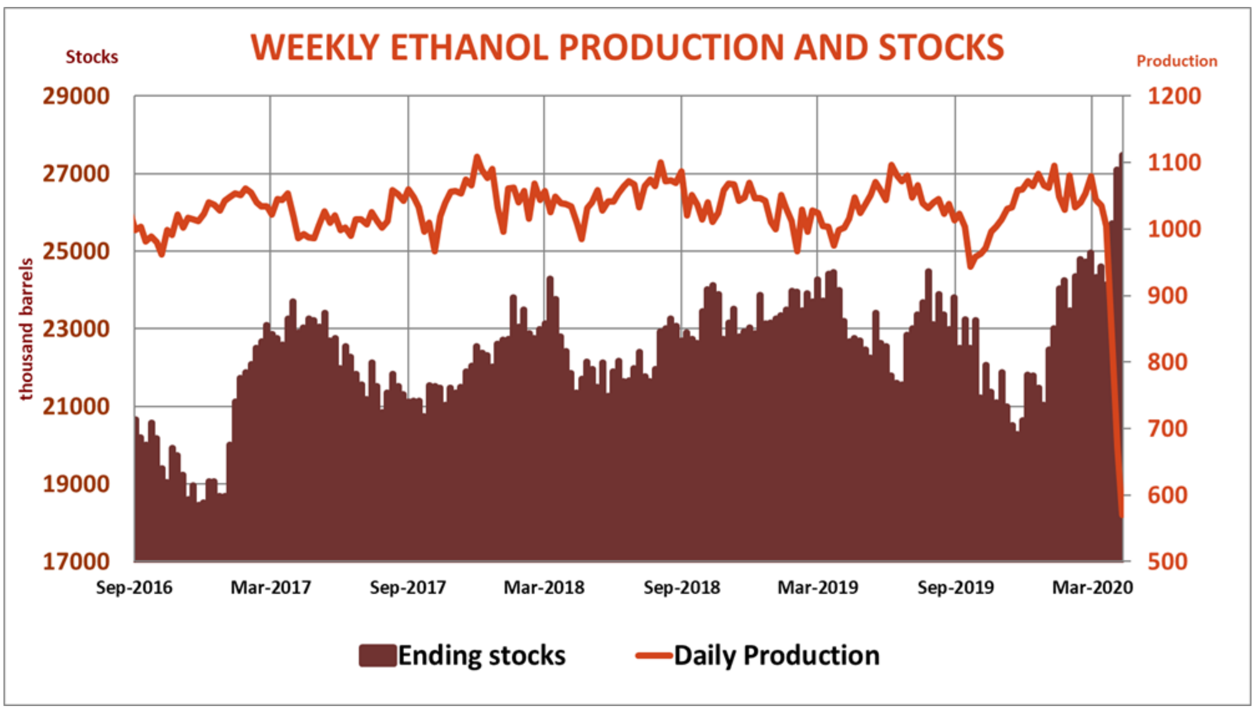
What does it mean?

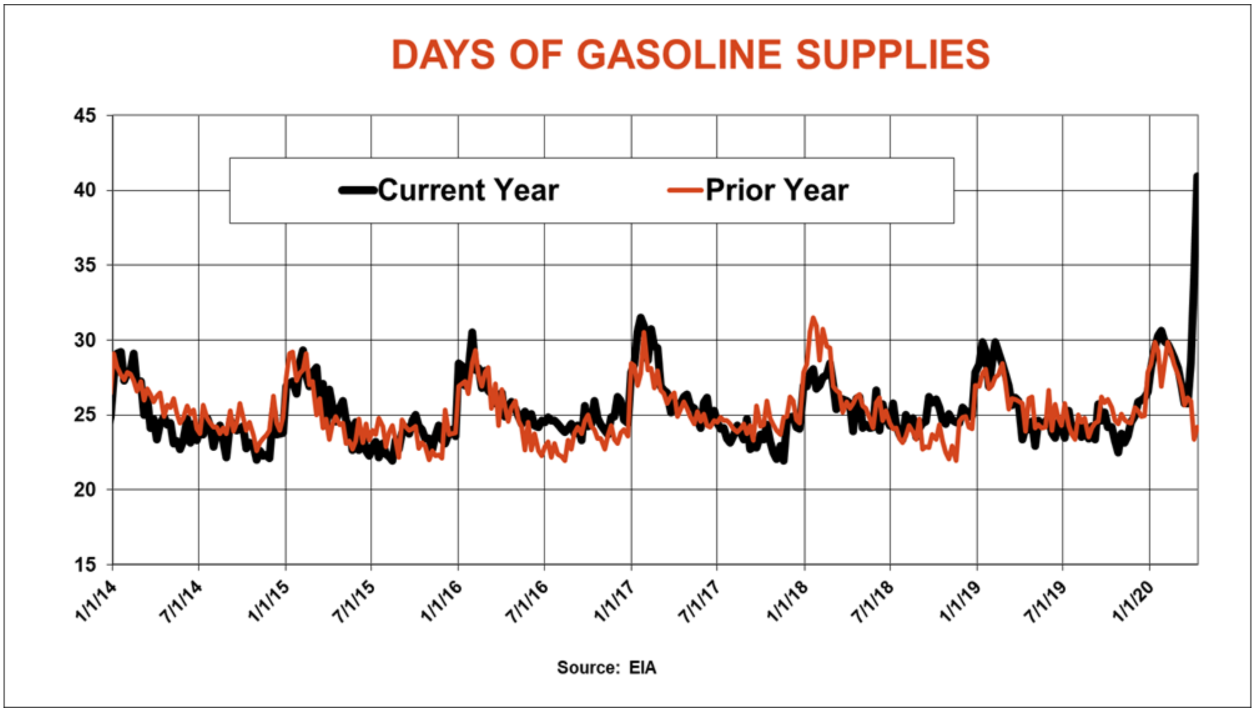
With recession looming in the U.S., it's hardly surprising the grain market is taking a beating. The "meh" reaction by crude oil futures to the OPEC+ production cuts is an indication of how much the market is still grappling with the question of how long this "new normal" will last.

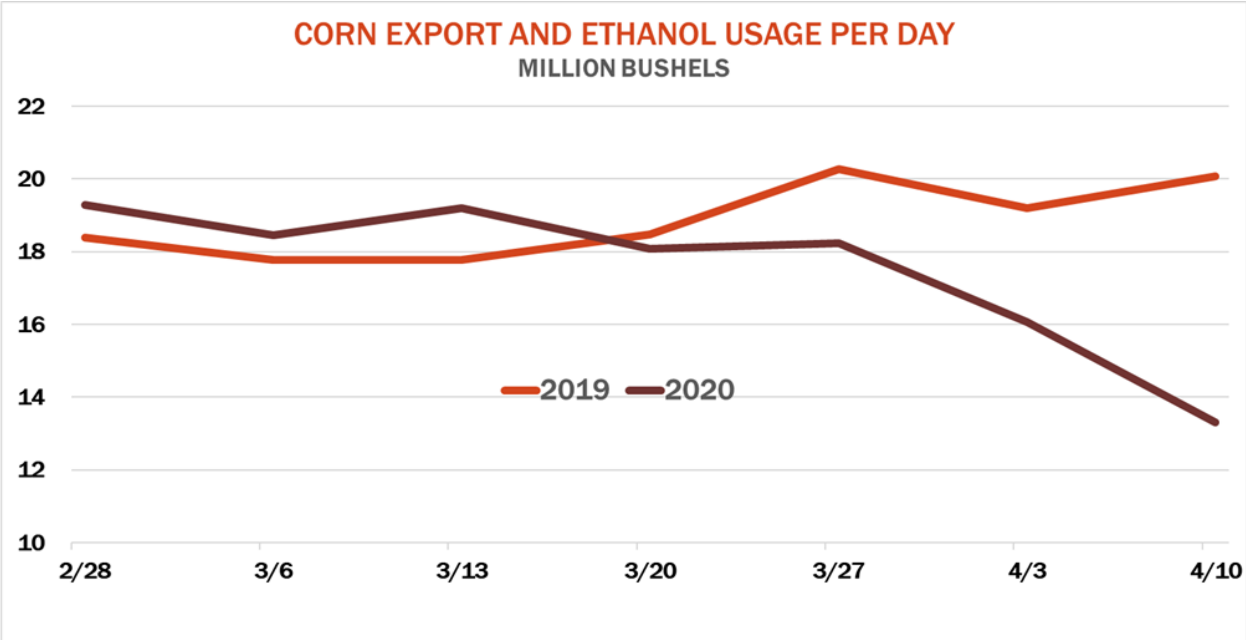
Supply and demand fundamentals for crude oil should give growers at least a little hope, if they can hold out for now. My model puts the average crude oil price around $25 for 2020, which could rise to $39 next year. That's a few bucks below the latest forecast by the Energy Department, but it's something.

The longer-term, perhaps unintended consequences are harder to predict. Will more people work from home, forgoing commutes and burning less gasoline? Will business travel – and nice steak dinners on the expense account -- ever seem as necessary after endless meetings on Zoom? Will attendance at live sporting events or the movies recover after we spend a year on the couch?

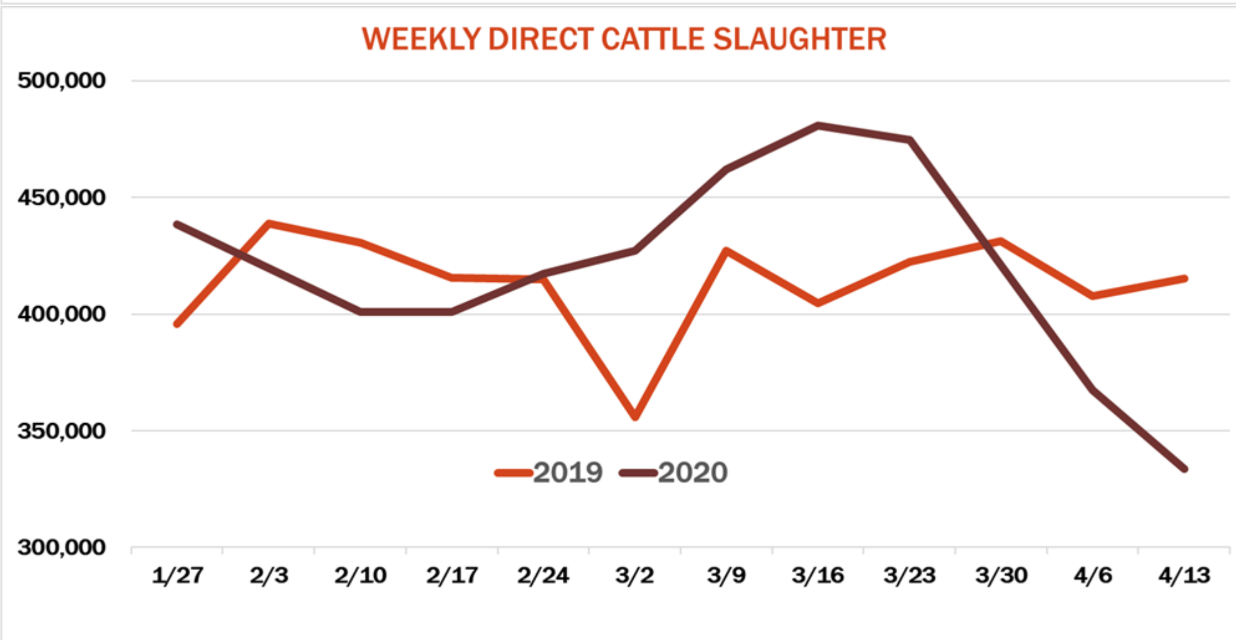
Nobody knows. All we can do is watch the data to see how the story plays out.



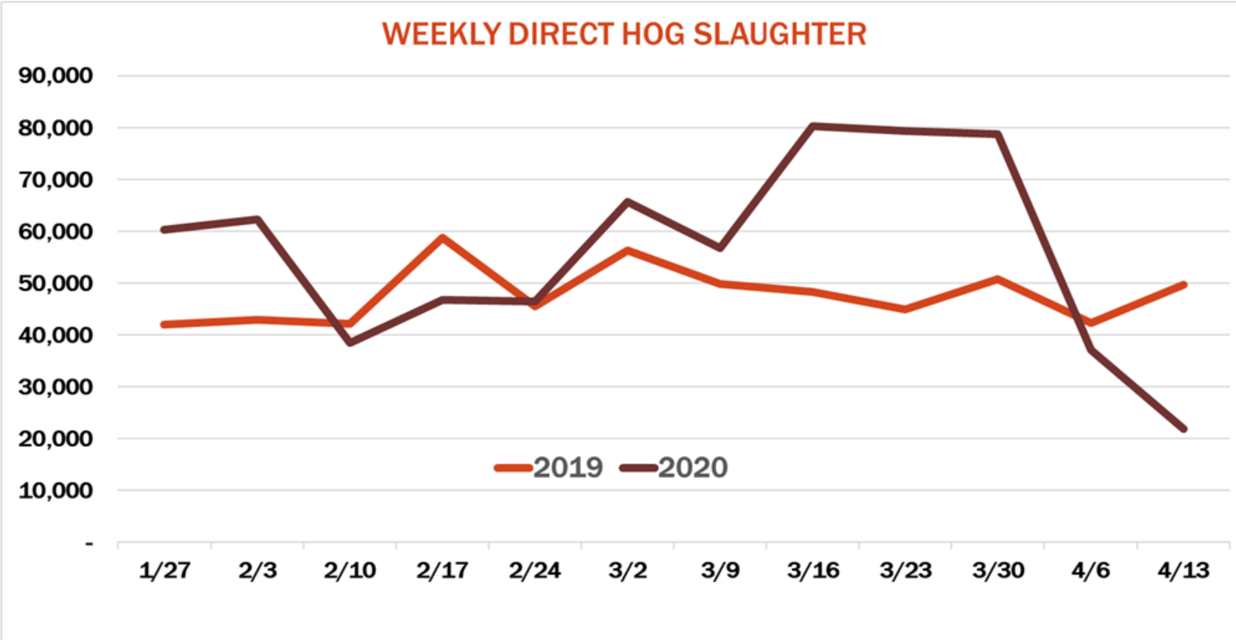

DAYS OF GASOLINE SUPPLIES
45
40
35
30
25
20
15
Current Year
Prior Year
1/1/14
7/1/14
1/1/15
7/1/15
1/1/16
7/1/16
1/1/17
7/1/17
1/1/18
7/1/18
1/1/19
7/1/19
1/1/20
Source: EIA

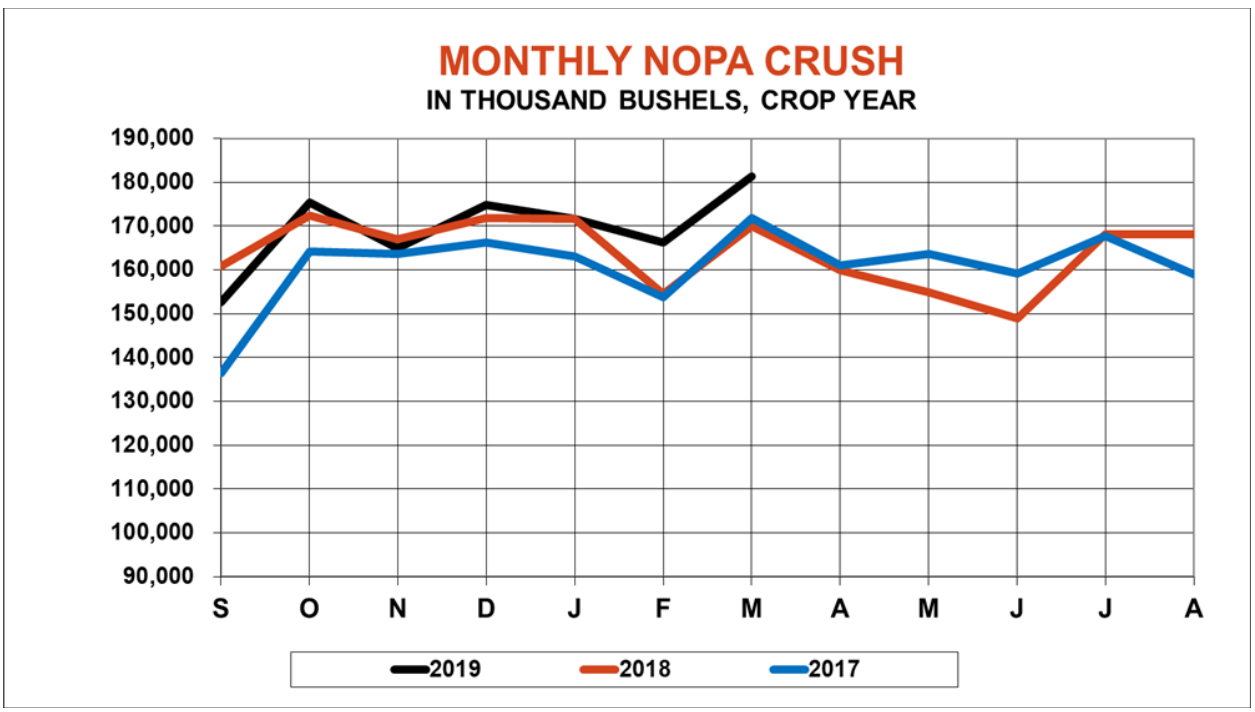


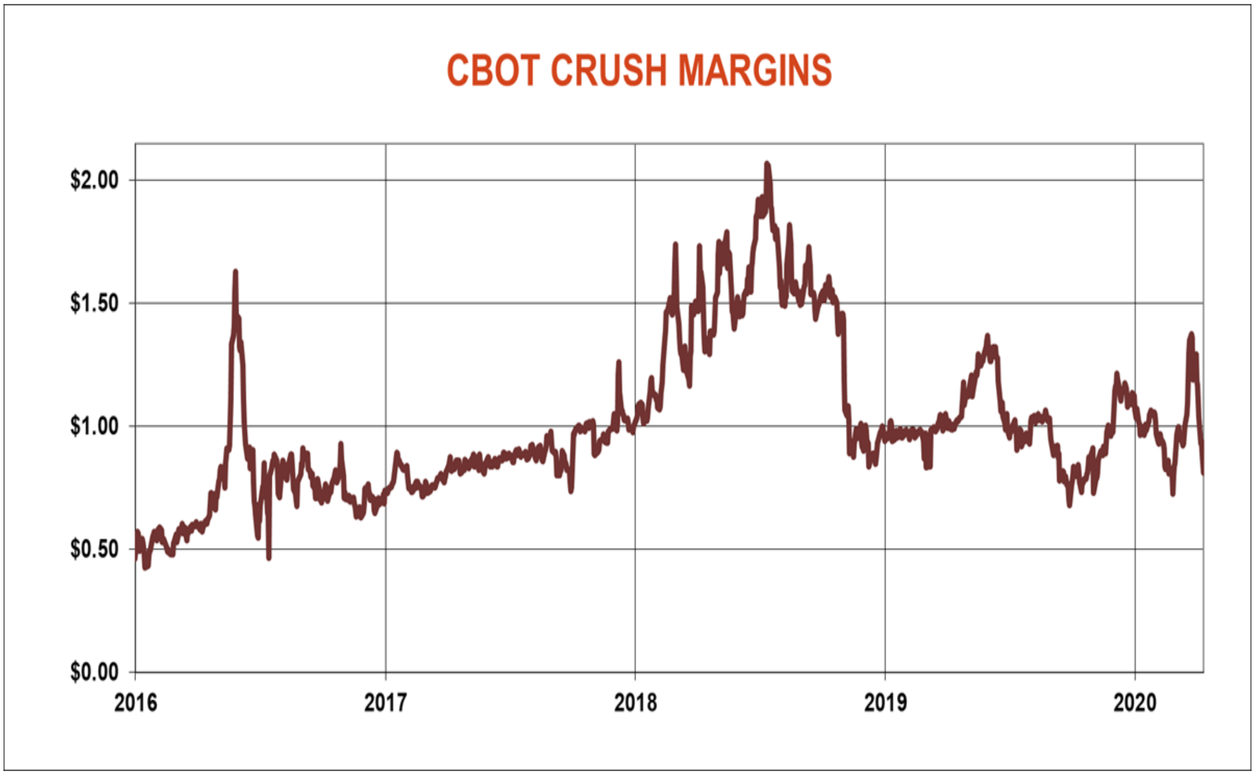
CORN EXPORT AND ETHANOL USAGE PER DAY
MILLION BUSHELS
22
20
18
16
14
12
10
2019
2020
2/28
3/6
3/13
3/20
3/27
4/3
4/10

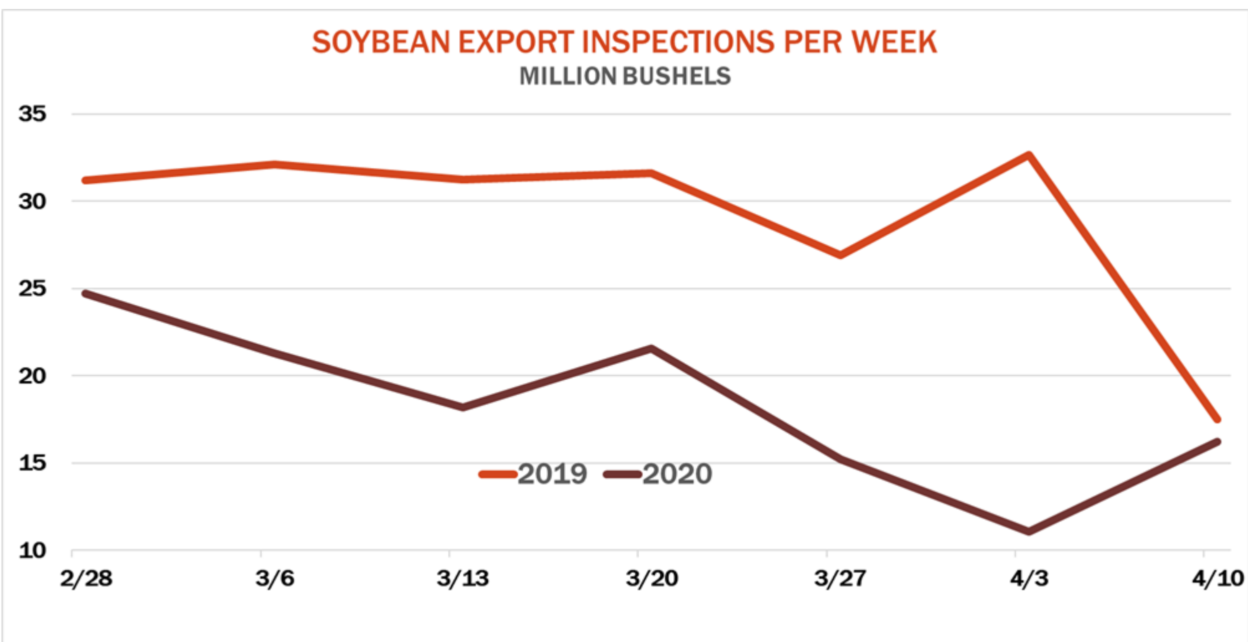


WEEKLY DIRECT CATTLE SLAUGHTER
500,000
450,000
400,000
350,000
300,000
2019
2020
1/27
2/3
2/10
2/17
2/24
3/2
3/9
3/16
3/23
3/30
4/6
4/13


WEEKLY DIRECT HOG SLAUGHTER
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2019
2020
1/27
2/3
2/10
2/17
2/24
3/2
3/9
3/16
3/23
3/30
4/6
4/13


MONTHLY NOPA CRUSH
IN THOUSAND BUSHELS, CROP YEAR
190,000
180,000
170,000
160,000
150,000
140,000
130,000
120,000
110,000
100,000
90,000
S
O
N
D
J
F
M
A
M
J
J
A
2019
2018
2017


CBOT CRUSH MARGINS
$2.00
$1.50
$1.00
$0.50
$0.00
2016
2017
2018
2019
2020


SOYBEAN EXPORT INSPECTIONS PER WEEK
MILLION BUSHELS
35
30
25
20
15
10
2019
2020
2/28
3/6
3/13
3/20
3/27
4/3
4/10