2019 Grain Market Outlook

Ness City, Kansas January 7, 2019

DANIEL O'BRIEN

EXTENSION AGRICULTURAL ECONOMIST



Department of Agricultural Economics



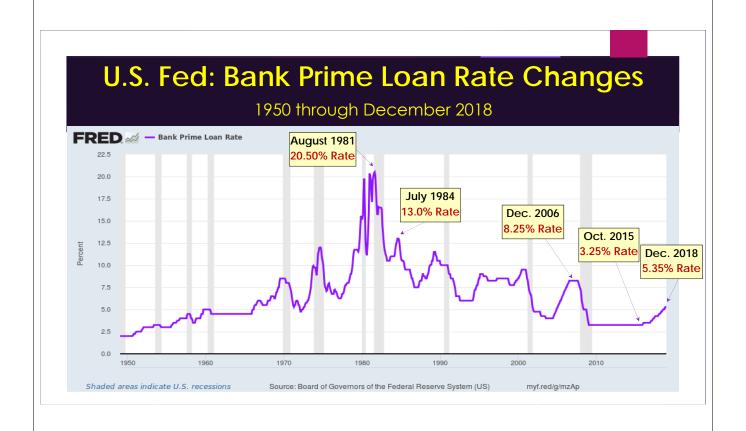


Topics to be discussed.....

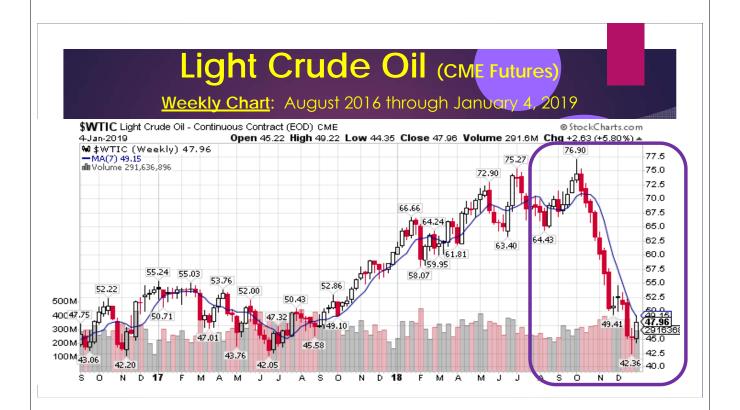
- 1) Macroconomic "forces at work" in the U.S. & where they are taking U.S. Agriculture
- 2) Grain Market Overview

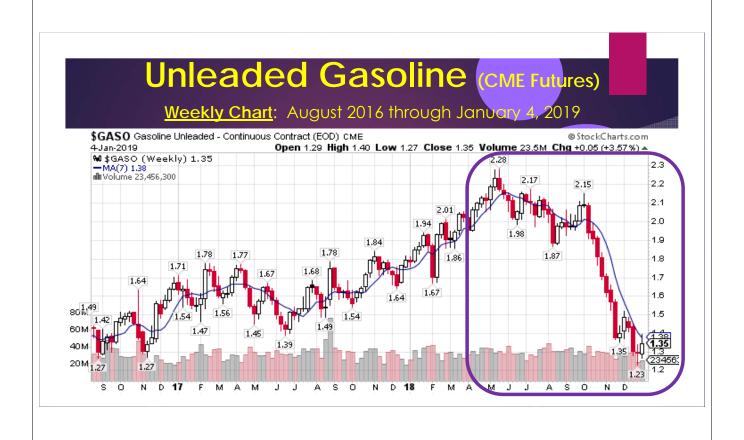
 → Through Fall 2019
 - Corn & Grain Sorghum
 - Wheat
 - Soybeans & Cotton

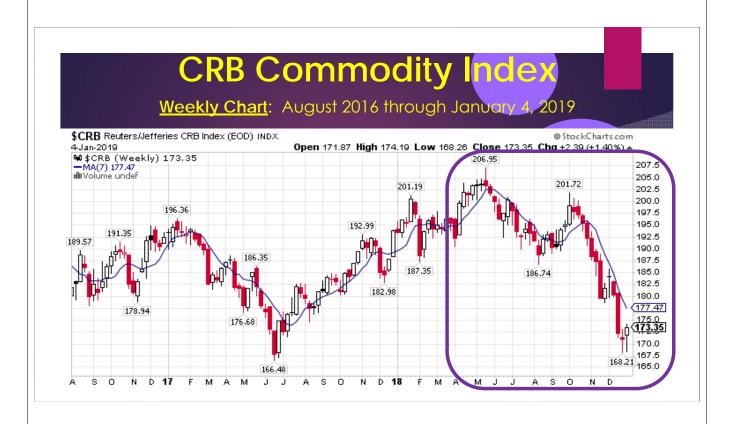


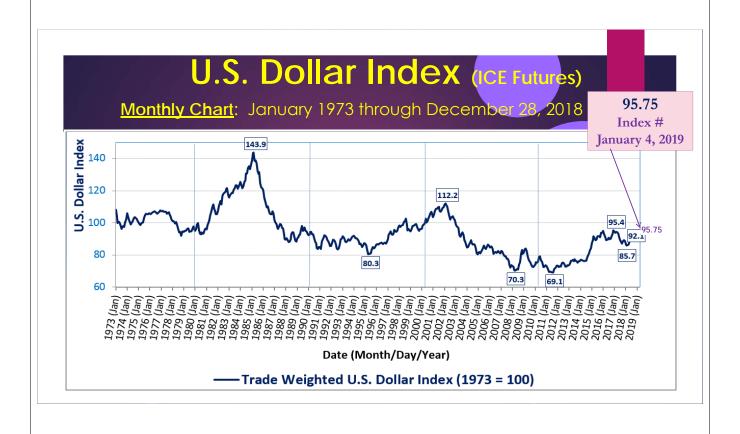


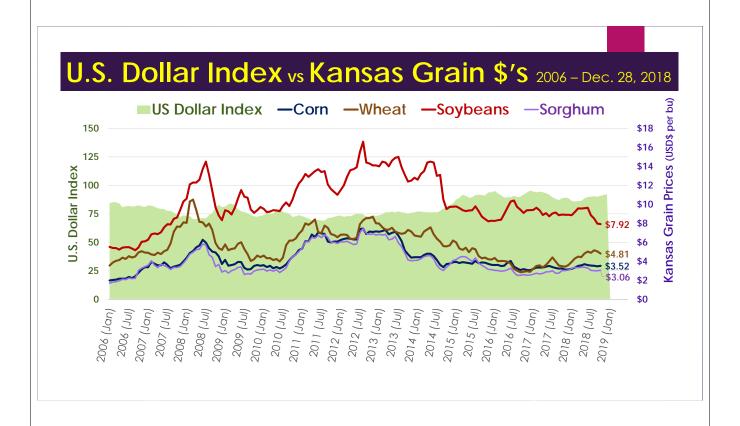












Unpredictable Grain Markets in 2018-19

- ☐ The "Ups & Downs" of U.S. Trade Tensions
 - U.S. Abandonment of the Trans Pacific Partnership (TPP)
 - o Potential impact on U.S. wheat exports vs TPP Countries
 - NAFTA (U.S.-Mexico-Canada)
 - Mexico grain purchases from the U.S.
 - o Canada grain export competition vs U.S. (Wheat, Oilseeds)
 - U.S. vs China
 - Soybeans & Sorghum (Need of both "With" & "Without" Scenarios)

USDA Market Facilitation Payments (MFP)

- A. Direct payments to farmers of <u>soybeans</u>, <u>sorghum</u>, <u>corn</u>, <u>wheat</u>, <u>cotton</u>, dairy & hogs.
 - Soybean MFPs = \$1.65 /bu x 50% of production (\$3.700 bln)
 - Sorghum MFPs = \$0.86 /bu x 50% of production (\$156 mln)
 - Wheat MFPs = $$0.14 / \text{bu } \times 50\%$ of production (\$119 mln)
 - Corn MFPs = $$0.01 / \text{bu } \times 50\%$ of production (\$ 96 mln)
 - Cotton MFPs = $$0.06 / lb \times 50\%$ of production (\$277 mln)

Market Facilitation Payments (MFP) more

- A. Direct payments to farmers of soybeans, sorghum, corn, wheat, cotton, dairy & hogs.
 - Hog MFPs = \$8.00 /head x 50% of production (\$290 mln)
 - **Dairy MFPs** = \$0.12 /cwt milk x 50% of MPP Production (\$127 mln)
- ☐ No Adjustments for Low Yields in 2018

"The aid is based on this year's production. It will not be adjusted for those who suffered low yields due to factors such as drought."

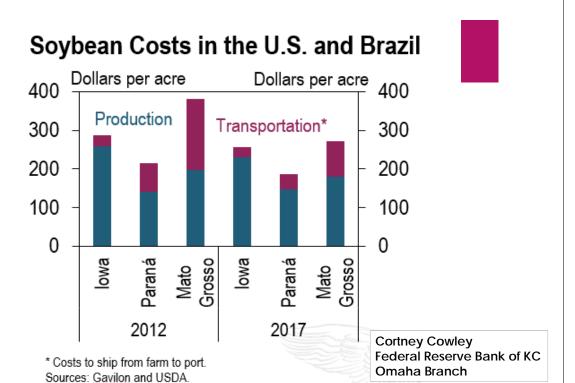
DTN Chris Clayton 8/27/2018

Economic Impact of U.S.-China Tariffs (Hayes, Hart ISU)

- ► The U.S. will continue to export soybeans to China, BUT this means that a 25% wedge will exist (i.e., 25% Tariff = 25% "Wedge)
 - o IF the U.S. was equal to 50% the World Soybean Production, THEN the U.S. Soybean price should fall by 12.5% (1/2 of 25% "wedge")
 - o **BUT** the **U.S.** *only* produces 33% of World Soybean Production, **SO** the U.S. Soybean price will be down $\approx 1.75 /bu
 - o IF Soybeans are \$1.75 lower THEN U.S. Corn will be \$0.70 /bu lower

Economic Impact of U.S.-China Tariffs (Hayes, Hart ISU)

- ► Based on "old crop" MY 2017/18 Ending Stocks, <u>U.S. Corn</u> \$\(\setminus \text{AUG2018}\) were \$\(\setminus 0.50\) /bu lower than they would usually be (Now \$0.35-\$0.50 /bu KSU)
- **▶** U.S.-China Possible Impact on U.S. Export Competitiveness
 - US soybean producers do **NOT** have a 25% cost advantage over Brazil
 - If this "*Trade War*" between the U.S. & China goes on long enough, the U.S. will *likely* need to <u>downsize</u> U.S. soybean production by 30%
 - As a result "IF Soybeans are \$1.75 lower THEN <u>U.S. Corn</u> will be \$0.70 /bu lower." (because U.S. Corn Acres-Production will have increased)



Grain Market Events to Come

- 1) 2018 U.S. Corn & Soybean harvest (USDA Jan-Feb 2019)
 - o **Corn**^{2018/19} < 14.626 bln bu? **⇒** End Stocks < 1.781 bb?
 - o **Soybeans**^{2018/19} < 4.600 bln bu? **⇒** End Stocks < 955 mb?
- 2) U.S. HRW Wheat Seedings (USDA Jan-Feb 2019)
 - o **Increase** in response to û HRW wheat \$'s in 2018 ???
 - o **OR** poor Fall2018 seeding conditions to \$\mathbb{I}\$ HRW Acres²⁰¹⁹ ???

More Grain Market Events to Anticipate....

- 3) 2019 South America Crop Plantings (Nov 2018-Jan 2019)
 - Soybeans S.Am 2019 Up 5-10%?

 ⇒ 'Existing' or 'New' Acres?
 - Corn S.Am 2019 Down 5%? \Rightarrow 2nd Crop Impact (Exports)?
 - Argentina <u>export taxes</u> & Brazil <u>domestic issues</u> are a wildcard
- 4) Break Dormancy for 2019 HRW Wheat Crop (March 2019)
 - Uncertain crop conditions affecting Kansas HRW Wheat at that time (?)

More Grain Market Events to Anticipate....

- 5) 2019 U.S. Spring Crop Plantings (April-May ²⁰¹⁹)
 - Soybeans U.S 2019 \$\mathbb{T}\$ ≈ 4 mln ac. ?

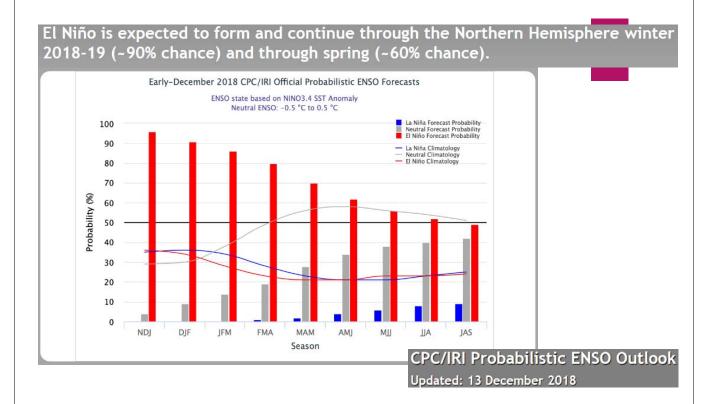
 \$\mathbb{U.S.-China Trade Status?}\$
- 6) 2019 U.S. HRW Crop Development (April-June 2019)
 - Q? What will the protein &/or quality condition of the 2019 crop be?
 - Q? What "cross over" HRS vs HRW wheat market impacts will occur?

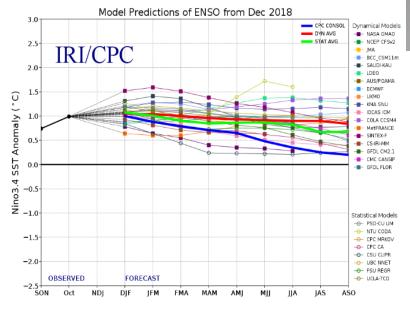
Yet Still MORE Events to Come....

7) 2019 South America Crop Development (Jan-May 2019)

- El Nino forecast ²⁰¹⁹ ⇒ Wetter than normal in Spring-early Summer, but NOT a certain impact on their crops
- 8) 2019 U.S. Crop Developments (May-Oct 2019)
 - El Nino forecast ²⁰¹⁹

 Generally <u>positive</u> for U.S. crops, but also NOT a certain effect in the U.S. growing season





The majority of models predict El Niño to develop and persist into Northern Hemisphere summer 2019.

> IRI/CPC Pacific Niño 3.4 SST Model Outlook

How El Niño can Impact Crops



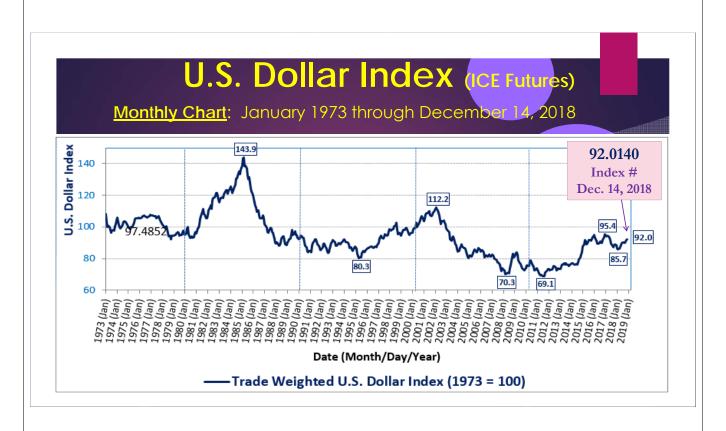
In particular, when El Niño conditions are present, the U.S. can generally expect:

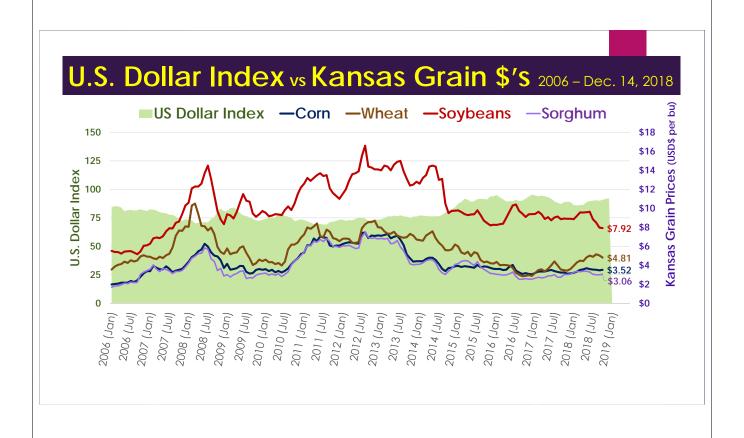
- Warmer-than average temperatures in the western and northern U.S.
- Wetter-than-average conditions in parts of the U.S. Gulf Coast and Florida.
- Drier-than-average conditions in the Ohio Valley and Pacific Northwest.

"History shows that it's uncommon to have subpar national crop production results for corn in soybeans except in the few cases where very hot, dry weather occurs during the critical crop development phase in June and July," Lehnertz says. "If predictions are correct, this could signal higher-than-expected corn and soybean yields this year."

Yet Still MORE Events to Come....

- 9) 2019 U.S. HRW Wheat Harvest (June-July 2019)
 - Q. <u>Yields</u>: What are the odds of a "normal-to-large" 2019 U.S. HRW <u>crop yield & production</u> vs a "short" crop ???
 - Q. <u>Protein Quality</u>: What are the odds of a "normal-to-low" <u>protein crop</u> in 2019 for U.S. HRW wheat vs a "high" protein crop ???
 - These outcomes have serious market implications in Kansas!







U.S. Corn Supply-Use

- 2018 U.S. Corn Production ≥ 2017 Crops
- "Moderate-Large" End Stocks are limiting U.S. Corn Price\$'s
- Low \$'s supporting "New Crop" MY 2018/19 Corn Use

```
• Ethanol ^{2018/19} = 5.600 bln bu (Near record – vs 5.605 bb last year)
```

- Livestock Feed $^{2018/19} = 5.500$ bln bu (10 year high vs 5.858 bb in 2007/08)
- o Exports $^{2018/19}$ = 2.450 bln bu (vs 2.438 bb in '17/18 & 2.294 in '15/16)
- o Other FSI $^{2018/19}$ = 1.480 bln bu (Record high vs 1.453 bb last 2 years)

WATER STATE

U.S. Grain Sorghum Supply-Use

- 2018 U.S. Grain Sorghum Production = 2017 Crops
- "Poor" Exports are limiting U.S. Sorghum Price\$'s
- Low \$'s supporting "New Crop" MY 2018/19 Sorghum Use

```
o Feed Use ^{2018/19} = 150 mln bu (1) ^{2017/18} & 133 mb^{2016/17})
```

- o FSI (Ethanol+) $^{2018/19}$ = 110 mln bu (vs 100 mb $^{2017/18}$ & 115 mb $^{2016/17}$)
- o Exports $^{2018/19}$ = 100 mln bu ($\sqrt{$}$ vs 205 mb $^{2017/18}$ & 238 mb $^{2016/17}$)
- o Total Use $^{2018/19}$ = 360 mln bu (vs 364 mb $^{2017/18}$ & 485 mb $^{2016/17}$)



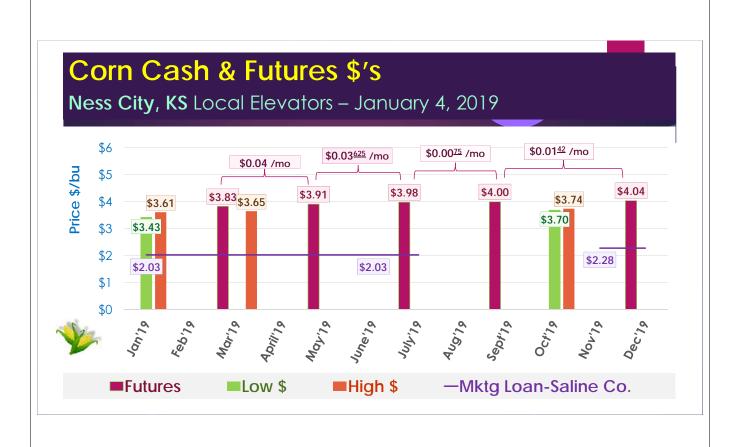
U.S. Corn & Sorghum Stocks.....

- Corn: "Moderate" Stocks & % S/U
 - o End Stocks ^{2018/19} ⇒ 1.781 bln bu (*vs 2.140 bb last year*)
 - o **% Stocks/Use** ^{2018/19} ⇒ 11.9% S/U (*vs 14.5% Stx/Use last year*)
- Grain Sorghum: "Low" Price\$'s (Hurt by trade issues)
 - o **End Stocks** ^{2018/19} ⇒ 39 mln bu (₹ *Exports;* 12 *Ethanol* & Feed Use)
 - o **% Stocks/Use** ^{2018/19} ⇒ 10.8% S/U (*vs 9.6% Stx/Use last year*)

KANSAS STATE







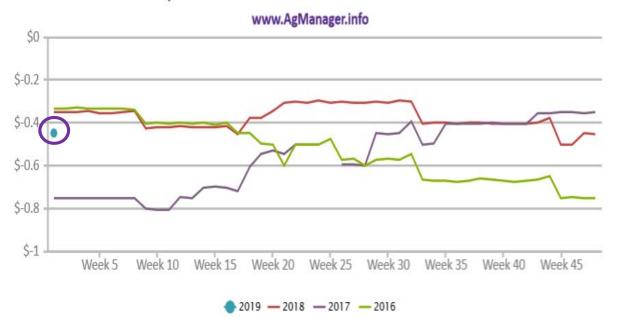




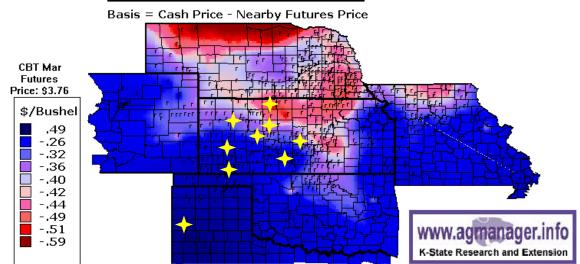
GARDEN CITY, KS: Corn Basis - GARDEN CITY COOP

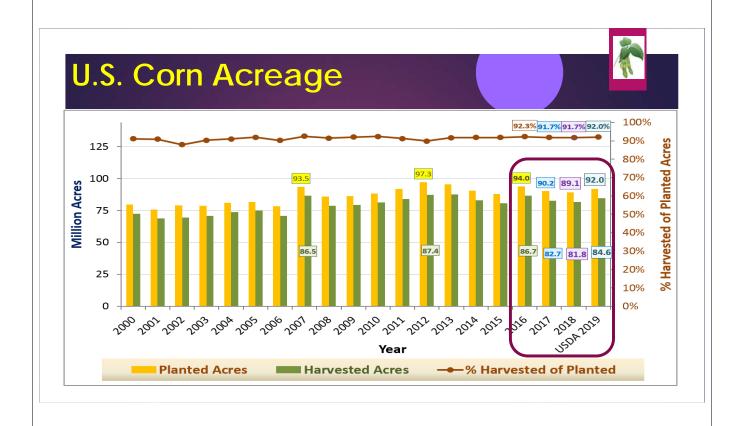


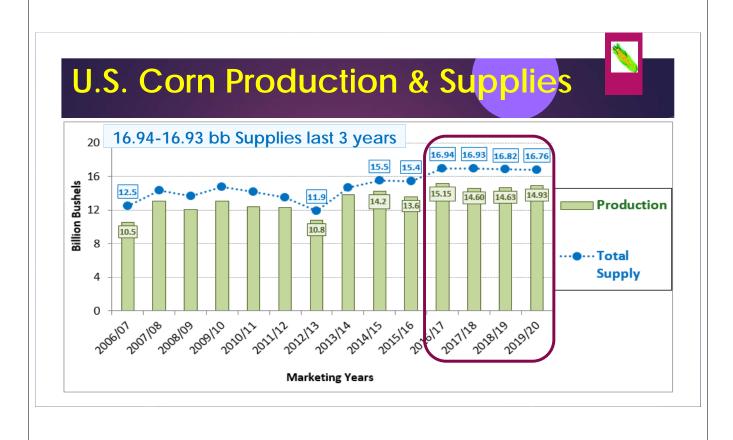
HAYS , KS: Corn Basis - MIDLAND MARKETING

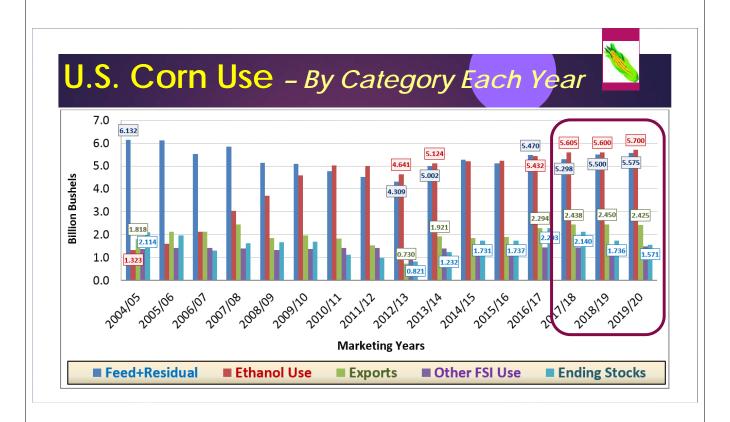


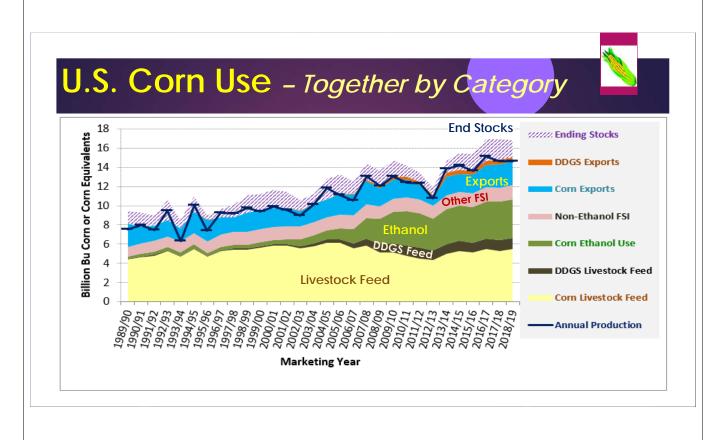
Corn Basis, 01-02-2019

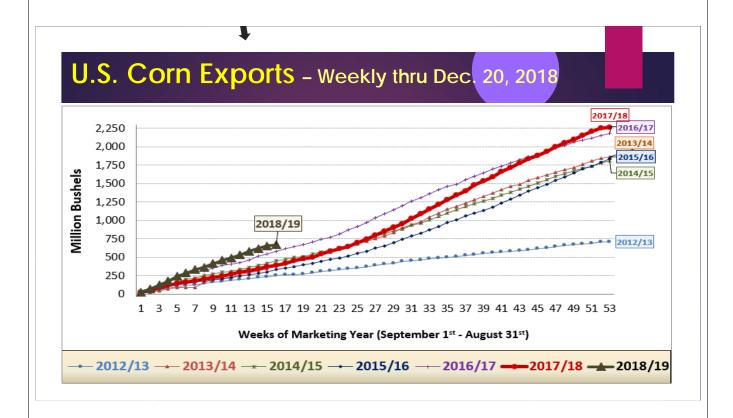










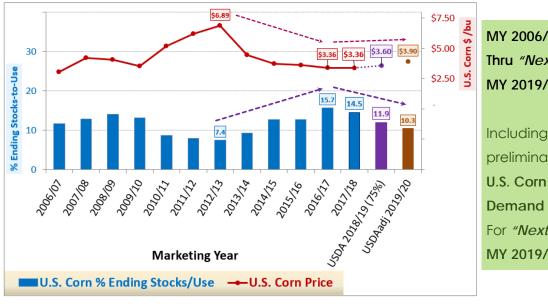




U.S. Corn % Stocks/Use vs Price\$

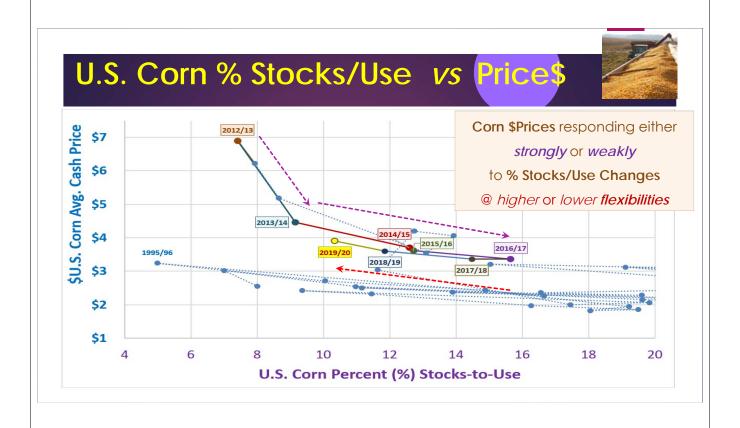


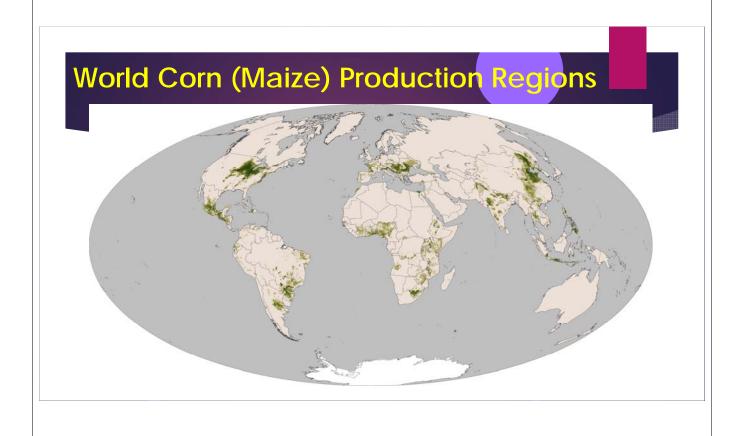
U.S. Corn % Stocks/Use vs Price\$

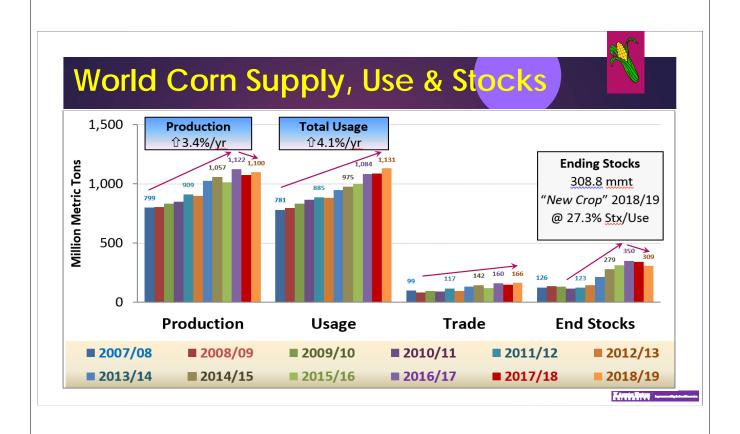


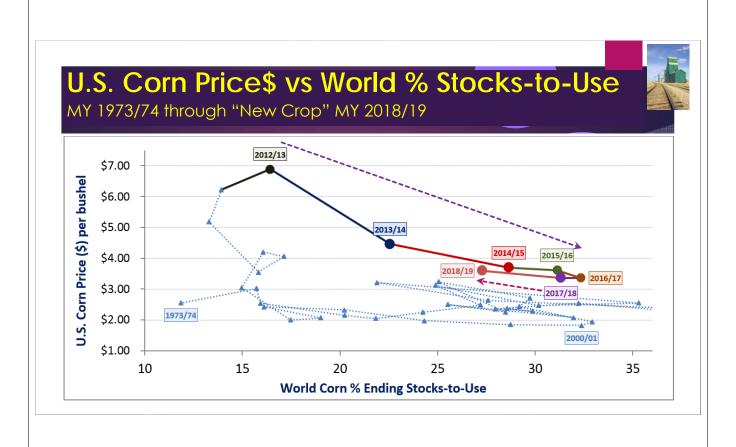
MY 2006/07 Thru "Next Crop" MY 2019/20

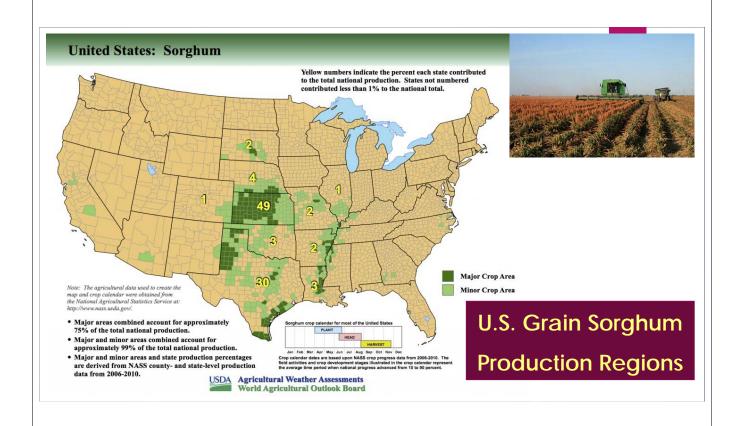
preliminary U.S. Corn Supply-**Demand & Prices** For "Next Crop" MY 2019/20

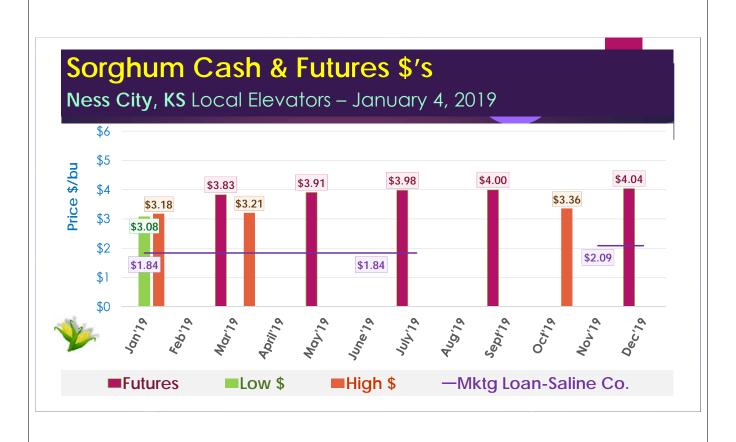




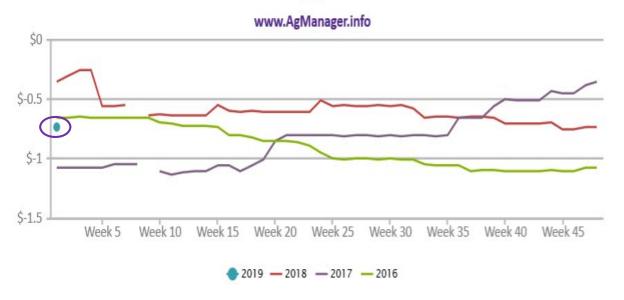




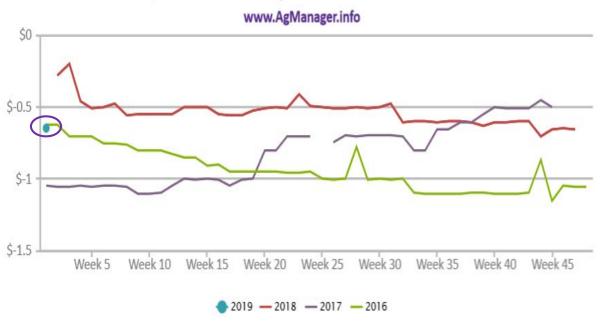




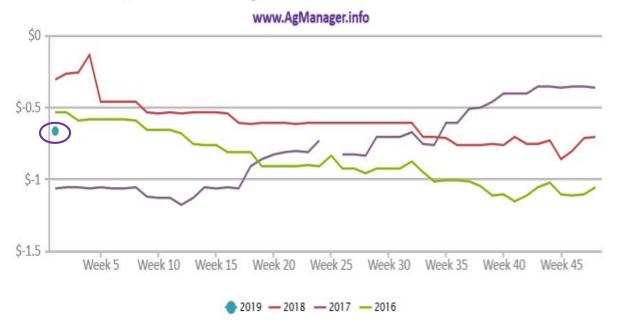
NESS CITY, KS: Grain Sorghum Basis - DE BONDURANT GRAIN CO



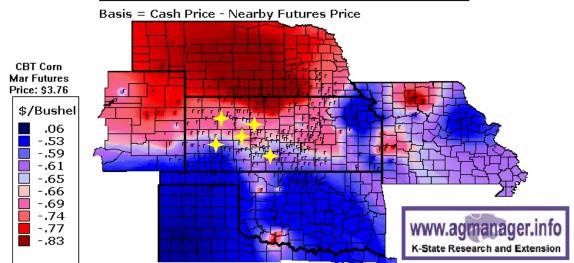
GARDEN CITY, KS: Grain Sorghum Basis - GARDEN CITY COOP

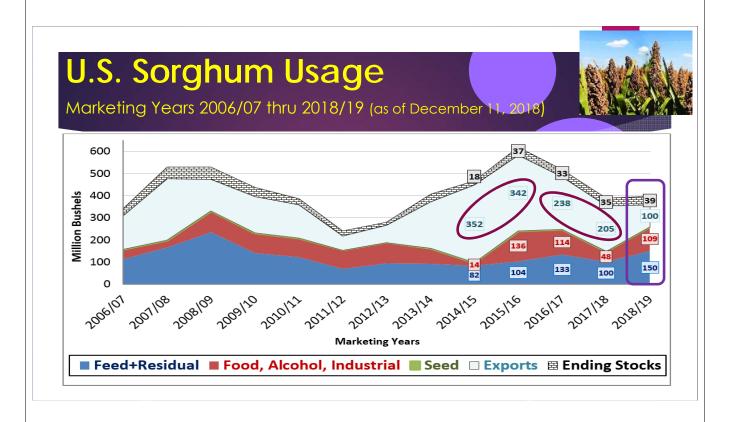


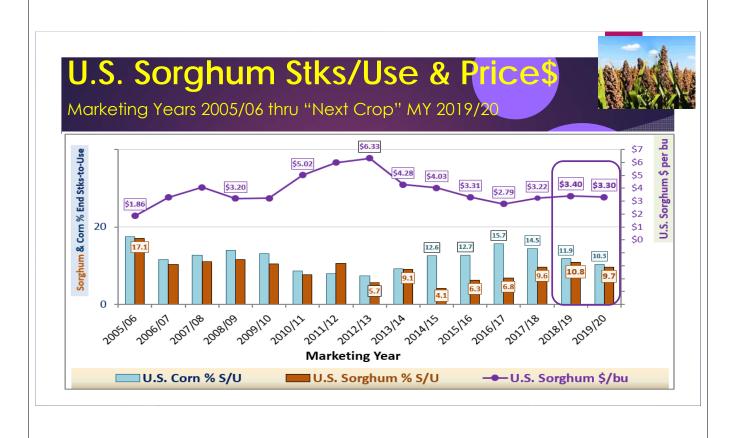
HAYS , KS: Grain Sorghum Basis - MIDLAND MARKETING



Grain Sorghum Basis, 01-02-2019









World Wheat Market Prospects:

Still Large Supplies ⇒ But less of a "Buyer's Market"

- <u>Lower Production BUT Record</u> Usage Forecast for 2018/19
 - 1st year lower after 5 consecutive record high World wheat crops
- Smaller 2018 crops: E.U., Australia, Russia, Ukraine, China, Pakistan
- More "competitive buying pressure" in World Trade
 - <u>"Tight" supplies</u> among Top 7 World Wheat Exporters
 - NOT MUCH evidence "YET" of "stronger" U.S. wheat exports

EANGAR STATE

U.S. Wheat Supply-Use

- Market support from World crop problems & higher protein in the 2018 U.S. HRW crop
 - Marginally *lower* U.S. & World Wheat Stocks
- Markets still expect <u>U.S. Wheat Exports</u> to increase "some"

```
• Exports <sup>2018/19</sup> = 1.000 bln bu (vs 778 mb - 1.291 bb range since 2008/09)
```

- o Food Use $^{2018/19}$ = 970 mln bu (vs Level+ Use since MY 2012/13)
- o Feed Use $^{2018/19}$ = 110 mln bu (vs 50 mb $^{2017/18}$ vs 113-365 mb since 2012/13)
- o **HRW Exports** ^{2018/19} = 320 mln bu (vs 371 mb & 455 mb last 2 years)

U.S. Wheat Stocks.....

- All U.S. Wheat: "Lower but Large" Stocks
 - o End Stocks ^{2018/19} ⇒ 974 mln bu (vs 1.099 bb last year)
 - \circ % Stocks/Use $^{2018/19}$ \Rightarrow 45.3% S/U (vs 55.5% Stx/Use last year)
- <u>U.S. HRW Wheat</u>: "Still Large" Carryover (also lower)
 - o **End Stocks** ^{2018/19} ⇒ 468 mln bu (vs 581 mb last year)
 - o **% Stocks/Use** ^{2017/18} ⇒ 60.0% S/U (vs 76.0% Stx/Use last year)



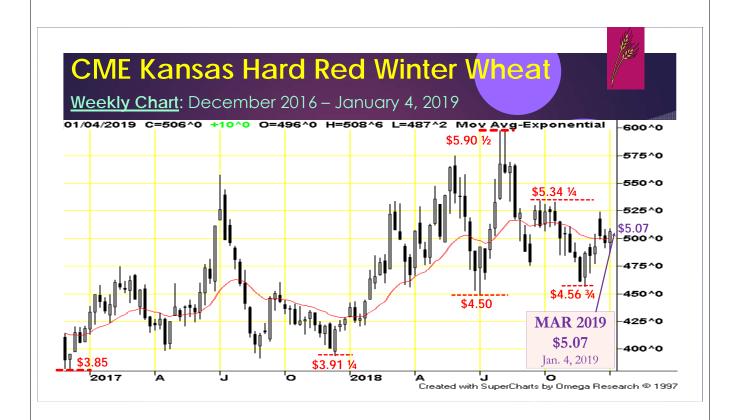
2018 U.S. Wheat Quality & Grades



- HRW Wheat ²⁰¹⁸ = 12.3% protein 61.1 lb test, 1.2% defects o Versus 11.4% protein, 60.8 lb test wt, 1.1% defects in 2017
- SRW Wheat ²⁰¹⁸ ⇒ 10.1% protein, 57.5 lb test, 1.3% defects of Versus 9.5% protein, 58.8 lb test wt, 1.7% defects in 2017
- Soft White Wheat ²⁰¹⁸ ⇒ 9.3% protein, 61.7 lb test, 0.6% defects
 Versus 9.6% protein, 60.9 lb test wt, 0.6% defects in 2017
- HRS Wheat ²⁰¹⁸ ⇒ 14.6% protein, 61.7 lb test, 0.8% defects
 - o Versus 14.6% protein, 61.2 lb test wt, 1.0% defects in 2017

WANTED STATE





NESS CITY, KS: Hard Red Winter Wheat Basis - DE BONDURANT GRAIN CO



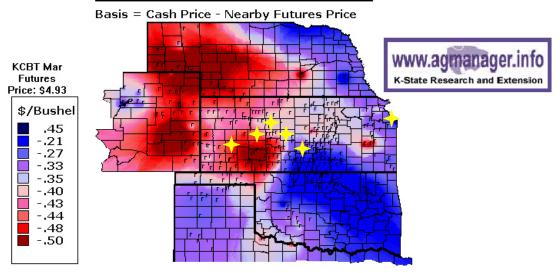
GARDEN CITY, KS: Hard Red Winter Wheat Basis - GARDEN CITY COOP

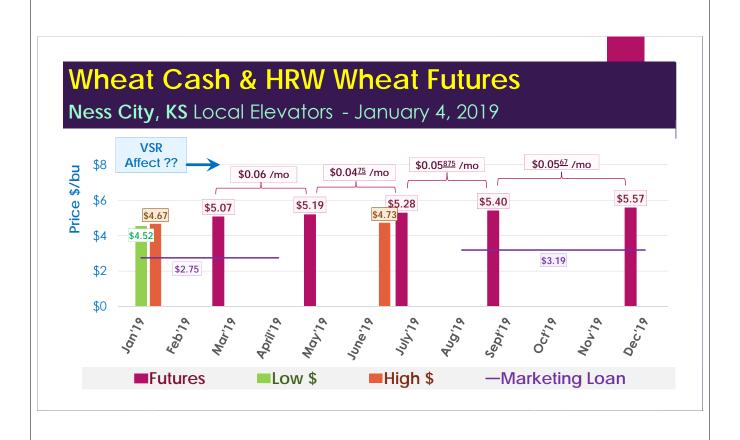


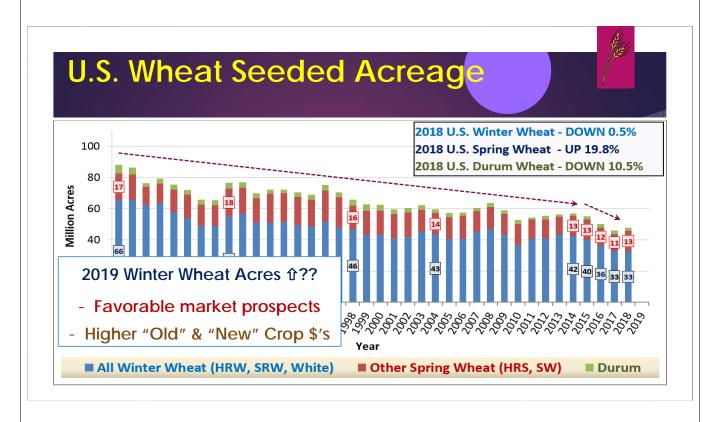
HAYS , KS: Hard Red Winter Wheat Basis - MIDLAND MARKETING

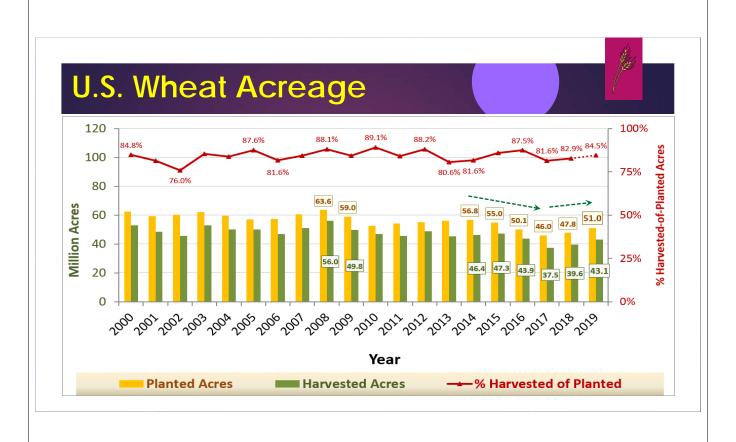


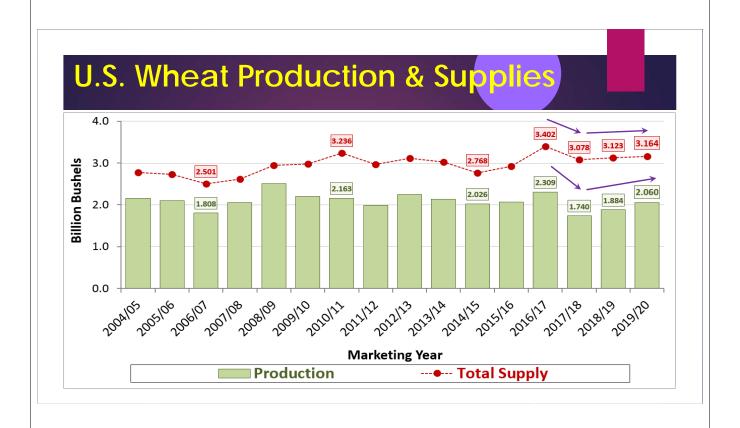
Wheat Basis, 01-02-2019

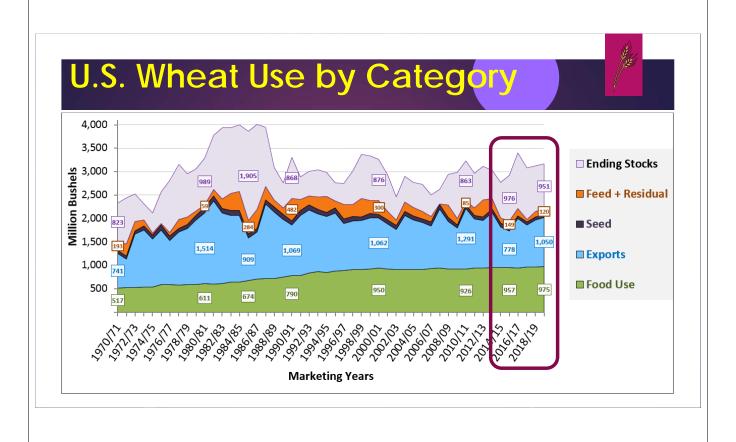


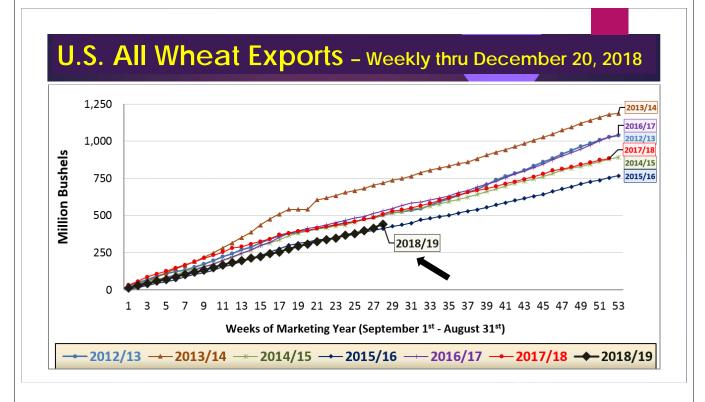


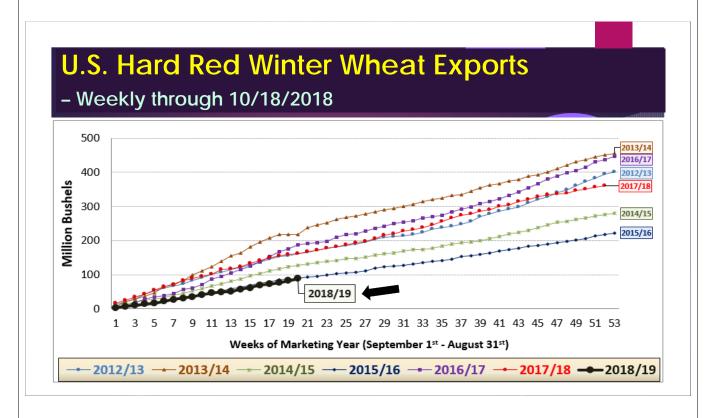








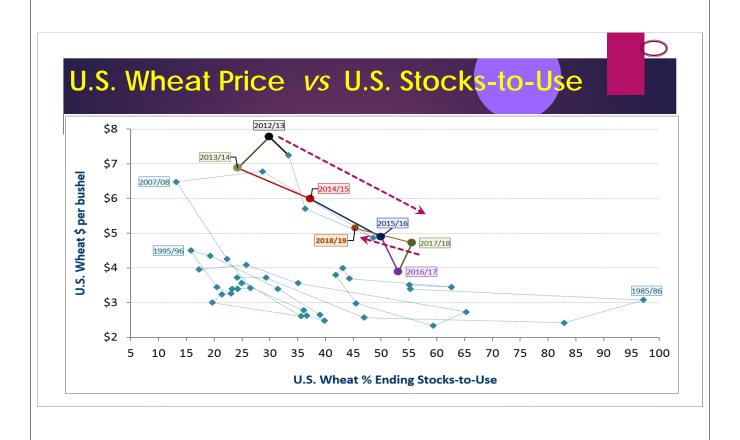


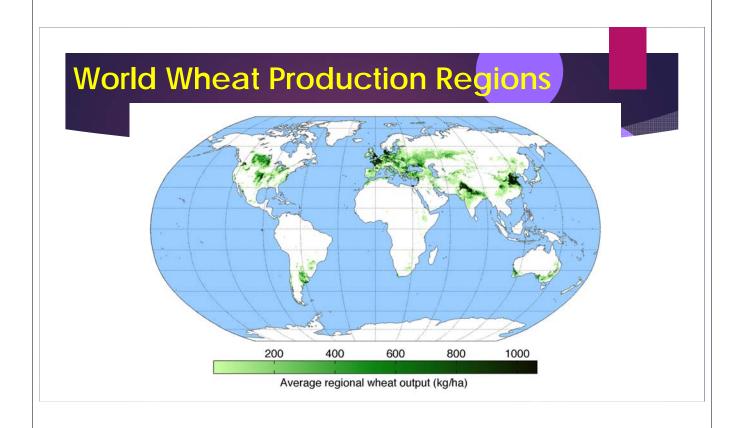


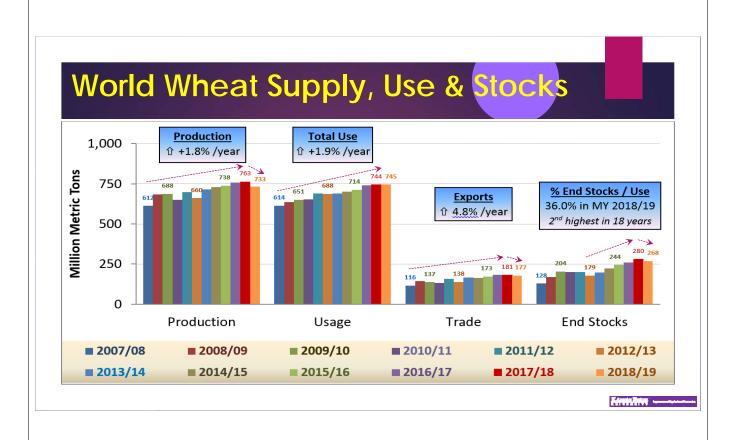




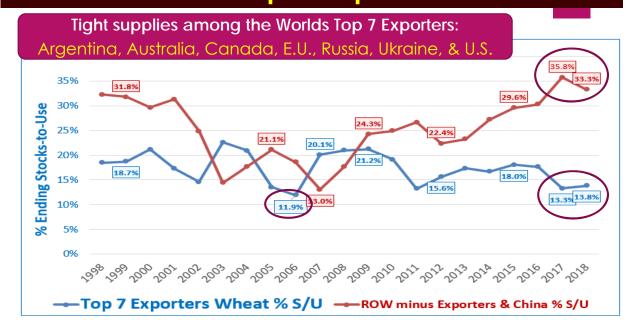


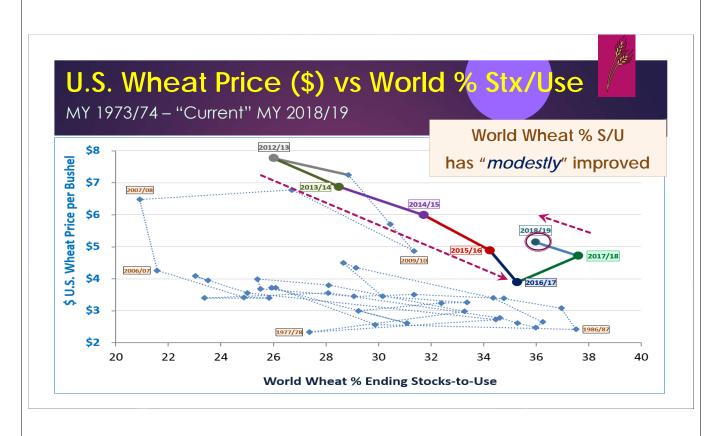


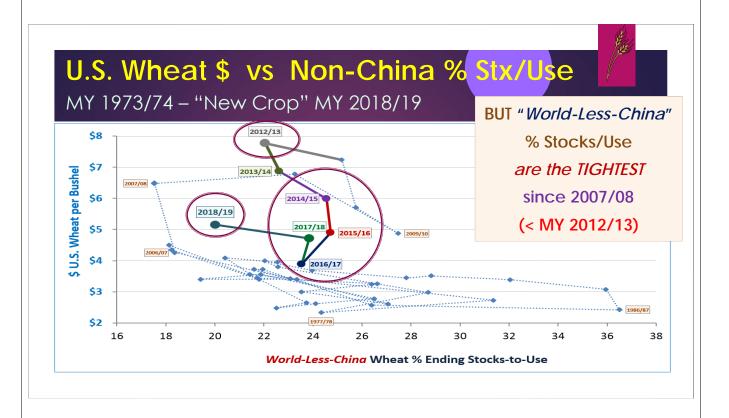




Wheat Stx/Use: Top 7 Exporters vs ROW









U.S. Soybean Market Prospects in 2019

A. <u>U.S.-China Trade Dispute</u>

HAS has LIMITED U.S. export shipments & forward purchases
 #HAS affected U.S. Soybean prices

B. <u>USDA forecasts U.S. Exports</u> to be *large* <u>despite</u> Tariffs

 Foreign buyer "switching" between U.S. & South America, & some "trans-shipments" have occurred among countries

C. Market Focus in Winter-Spring 2018-19

• So. America 2019 crop prospects - their response to high 2018 \$'s



U.S. Soybean Supply-Use

- 2019 U.S. Soybean Production

 Record** 4.600 billion bu.
- Large U.S. & Global Soybean Stocks limit U.S. Price\$'s
- Low Price\$'s DO support "Current" MY 2018/19 Use ***
 - o Soy Crush $^{2018/19}$ = 2.080 bln bu (New Record vs 2.055 bb last year)
 - o **Exports** ^{2018/19} = 1.900 bln bu (*Down* vs 2.129 & 2.166 bb last 2 years)
 - o Total Use 2018/19 = 4.107 bln bu (Down vs 4.296 & 4214 bb last 2 years)
 - o SBM Exports $^{2018/19} = 13.750$ mln tons (vs 14.826 & 11.580 mln tons last 2 years)



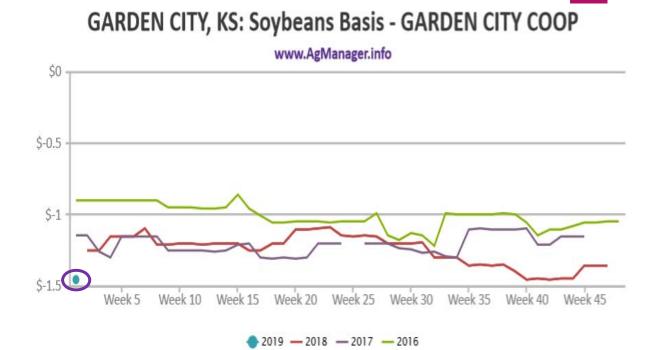
U.S. Soybean & Cotton Stocks.....

- Soybean: "Large" Stocks & % S/U
 - o End Stocks ^{2018/19} ⇒ 955 mln bu (High vs 438 mb last year)
 - o **% Stocks/Use** ^{2018/19} ⇒ 23.25% S/U (High vs 10.20% last year)
- Cotton: "Large" 2018 Crop & "Growing" Stocks
 - o **Production** ^{2018/19} ⇒ 18.6 mln bales (20.9 & 17.2 mb last 2 years)
 - o **End Stocks** ^{2018/19} ⇒ 4.4 mln bales (4.3 & 2.75 mb last 2 years)
 - o % Stocks/Use ^{2018/19} ⇒ 24.0% S/U (22.55% & 15.1% last 2 years)

KANSAS SPANS

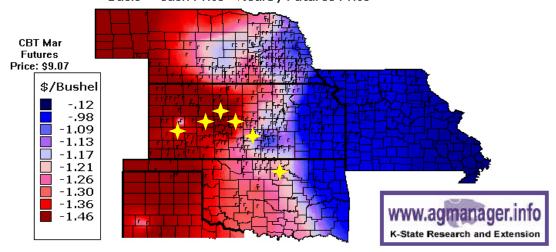


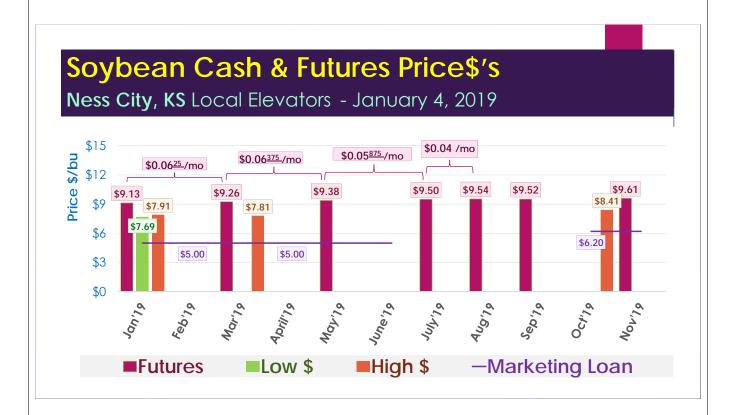


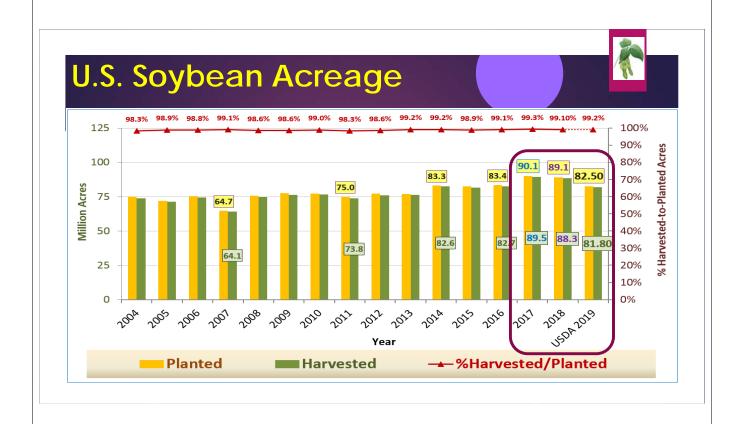


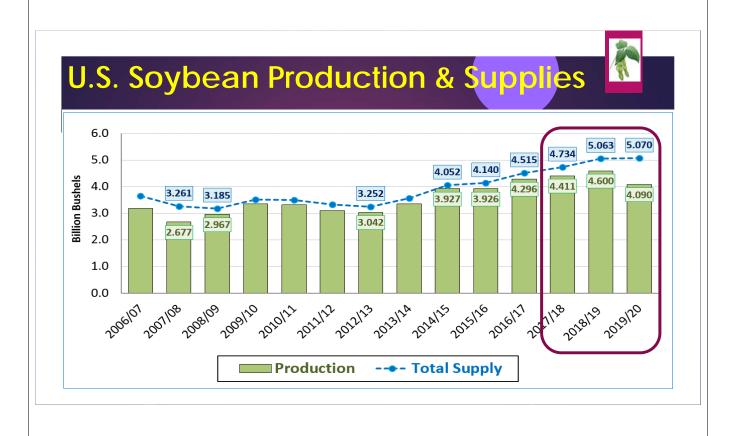
Soybean Basis, 01-02-2019

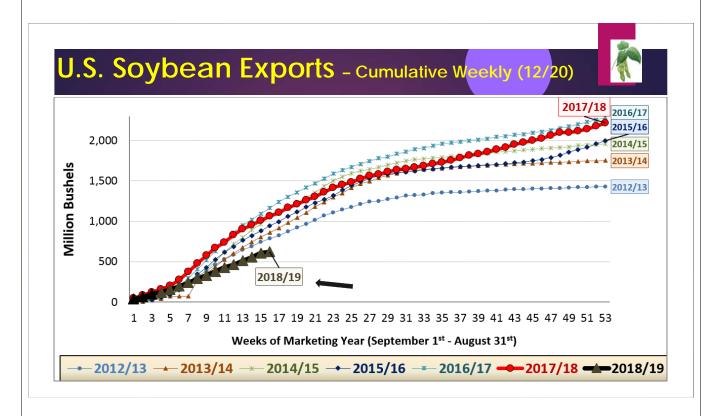
Basis = Cash Price - Nearby Futures Price

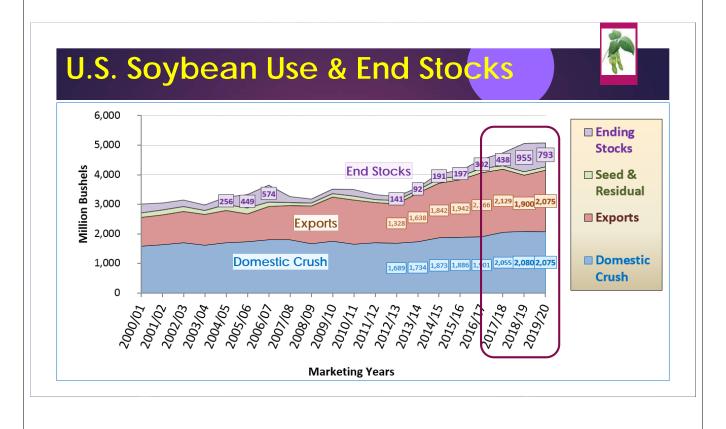








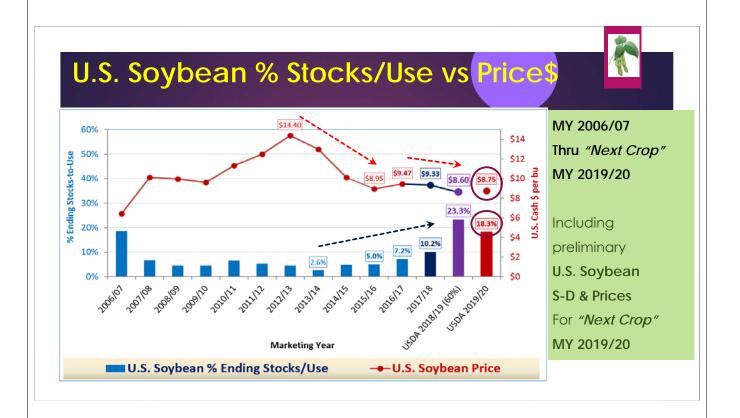


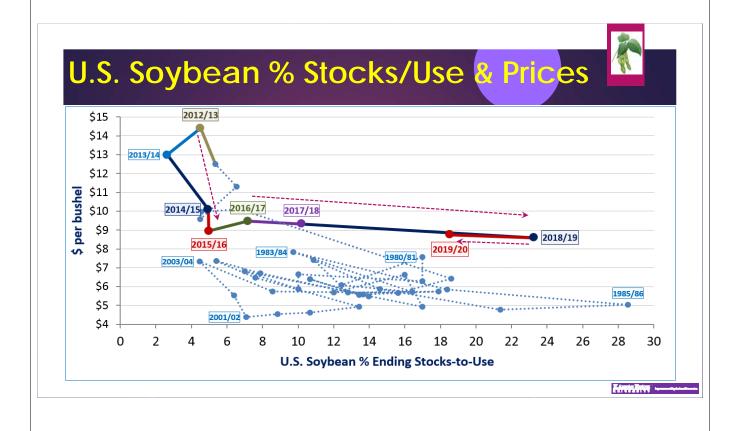


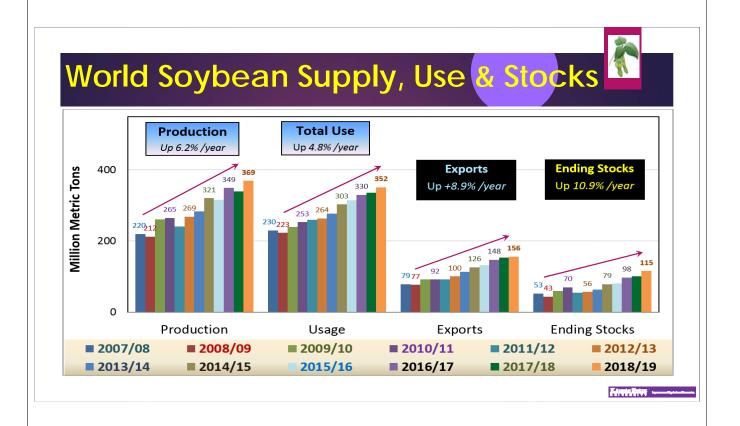
U.S. Soybean Ending Stocks & % Stx/Use

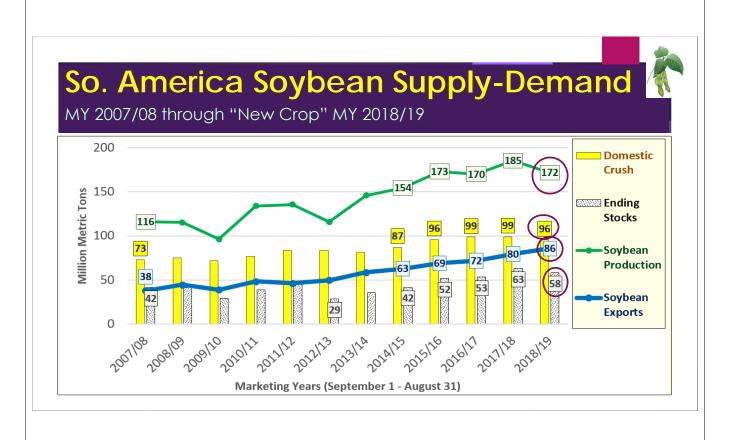


U.S. Soybean \$ vs U.S. Stocks-to-Use MY 1973/74 through "Current" MY 2018/19 + KSU "Alt" Scenarios MY 2006/07 70% 60% Through "Current" % Ending Stocks-to-Use 50% U.S. Cash \$ per bu MY 2018/19 40% \$8 23.3% 30% \$6 20% \$4 Including possible 10% "Higher" & "Lower" Late Substitute Training Low texports Tribles Trans USA ADBITE HERIO Stralle God Day 19 See **U.S. Soybean Export Scenario Outcomes** "Current" MY 2018/19 **Marketing Year** U.S. Soybean % Ending Stocks/Use -- U.S. Soybean Price









Soybean Costs in the U.S. and Brazil Dollars per acre Dollars per acre 400 400 Production Transportation* 300 300 200 200 100 100 0 0 Paraná Paraná Mato Grosso Mato Grosso lowa

2017

* Costs to ship from farm to port. Sources: Gavilon and USDA.

2012

Cortney Cowley Federal Reserve Bank of KC Omaha Branch



