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# Cotton Economics

## *Market Outlook, Production, and Policy*



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# 2019 Market Outlook

*Is a picture really worth a thousand words? What does it mean for cotton?*

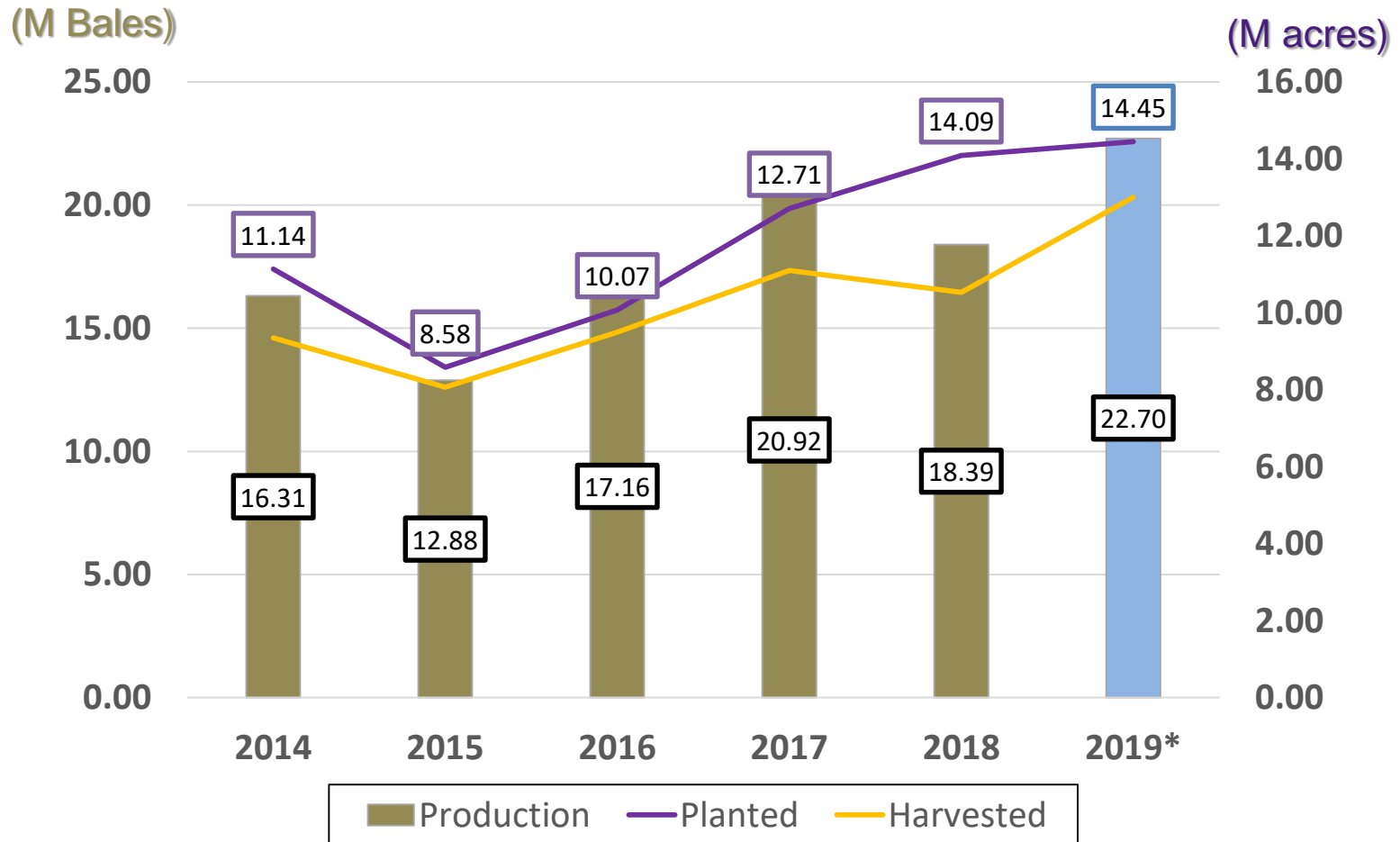
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Source: AgWeb. February 8, 2019.

# U.S. Cotton Production and Acreage

Previous five-year comparison with 2019 NCC planting intentions survey



Source: USDA NASS and NCC.

# Cotton Market

*Fundamentals acting on the supply and use balance sheet*

Total Cotton	2017/18 (M Bales)	2018/19 (M Bales)	Percent Change
Beginning stocks	2.75	4.30	+56.4%
Production	20.92	18.39	-12.1%
Imports	0.00	0.01	--
<b>Total Supply</b>	<b>23.68</b>	<b>22.70</b>	<b>-4.1%</b>
Domestic use	3.23	3.20	-1.0%
Exports	15.85	15.00	-5.4%
<b>Total Use</b>	<b>19.07</b>	<b>18.20</b>	<b>-4.6%</b>
Ending stocks	4.30	4.30	--
Stocks-to-Use Ratio	24.2%	24.7%	

\$0.686/lb

\$0.71-\$0.73/lb

\$0.72

# Cotton Market Direction

*Making the case for bearish or bullish conditions in 2019*

<u><i>Bullish Factors</i></u>	<u><i>Bearish Factors</i></u>
<ul style="list-style-type: none"><li>• Declining world carryover</li></ul>	<ul style="list-style-type: none"><li>• U.S./China trade war</li></ul>
<ul style="list-style-type: none"><li>• Declining Chinese carryover</li></ul>	<ul style="list-style-type: none"><li>• Two import markets effected closed to U.S. cotton</li></ul>
<ul style="list-style-type: none"><li>• Declining world production</li></ul>	<ul style="list-style-type: none"><li>• China and Turkey account for 4 M bales of U.S. exports</li></ul>
<ul style="list-style-type: none"><li>• Trend of increasing world consumption</li></ul>	<ul style="list-style-type: none"><li>• Two textile economics are reducing spinning</li></ul>
<ul style="list-style-type: none"><li>• Smallest Indian crop in 9 years</li></ul>	<ul style="list-style-type: none"><li>• Slowing Chinese economy</li></ul>
<ul style="list-style-type: none"><li>• India to import U.S. cotton</li></ul>	<ul style="list-style-type: none"><li>• Expansion of Brazilian land area for field crops</li></ul>
<ul style="list-style-type: none"><li>• Two large countries reducing stocks</li></ul>	<ul style="list-style-type: none"><li>• U.S. facing 4.5-5 M bale production increase</li></ul>

# 2019 Cotton Market

*Factors that support a bearish assessment of upcoming marketing year*

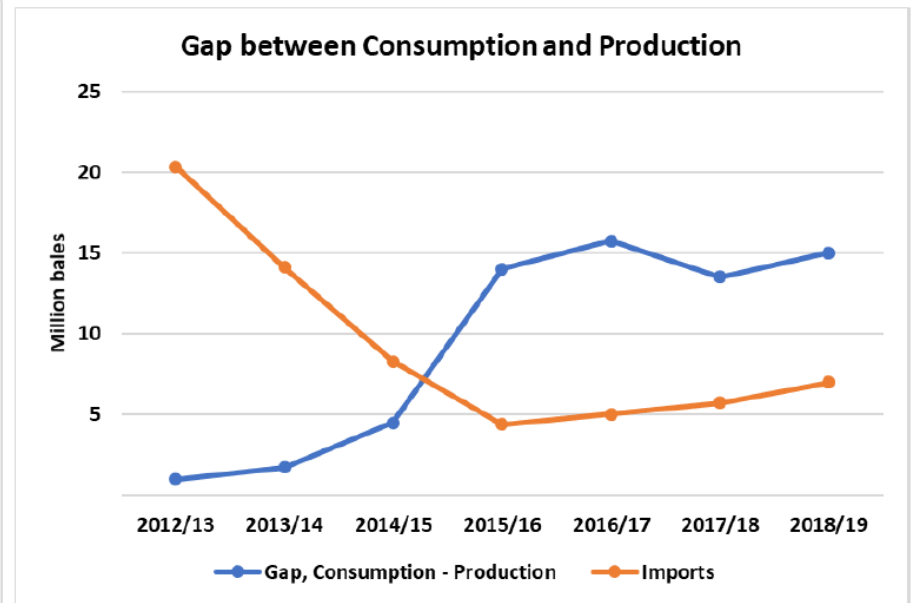
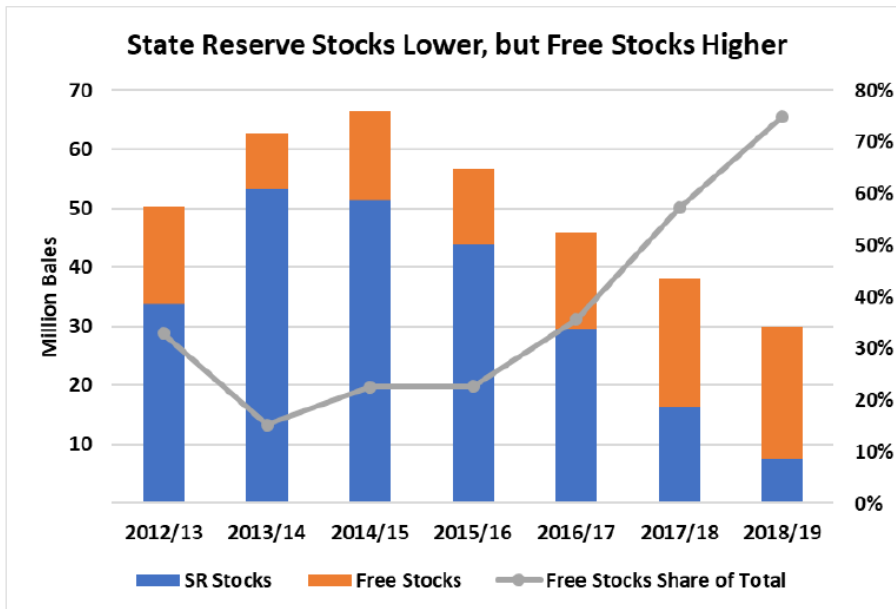
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- 1. Price
  - \$0.72 cotton finds a lot of cotton not priced; will \$0.80 be reached?
- 2. Supply
  - Significant rise in ending stocks
- 3. Tariffs
  - China's retaliatory tariffs weigh on the market
- 4. Competition
  - Brazil is stepping up production of cotton and soybeans
- 5. Interest Rates
  - The Fed has raised rates several times over the past two years
- 6. Trade
  - Exports to China and Turkey are down 20%
- 7. The Economy
  - Global slowdown means less discretionary income



# China's Reserve Stocks Have Decreased

*When will their cotton imports pickup?*



SR stocks are currently estimated at just under 13 million bales. This dramatic reduction was accomplished by 3 years of aggressive selling, with 11.5 million bales sold in the latest annual round of selling which ended in September. China was able to accomplish this due to two factors: first, price reform increased the gap between consumption and production; and second, import access was limited to the WTO TRQ.

# Potential 2019 Cotton Crop

*Compared to 14 M acres and 18.59 M bale crop in 2018*

Acres Planted	Yield 850			Yield 875			Yield 900		
	Abandonment			Abandonment			Abandonment		
	10%	15%	20%	10%	15%	20%	10%	15%	20%
12.0	19.1	18.1	17.0	19.7	18.6	17.5	20.3	19.1	18.0
12.5	19.9	18.8	17.7	20.5	19.4	18.2	21.1	19.9	18.8
13.0	20.7	19.6	18.4	21.3	20.1	19.0	21.9	20.7	19.5
13.5	21.5	20.3	19.1	22.1	20.9	19.7	22.8	21.5	20.3
14.0	22.3	21.1	19.8	23.0	21.7	20.4	23.6	22.3	21.0
14.5	23.1	21.8	20.5	23.8	22.5	21.1	24.5	23.1	21.8
15.0	23.9	22.6	21.3	24.6	23.2	21.9	25.3	23.9	22.5



Denotes the possibility of a larger 2019 cotton crop

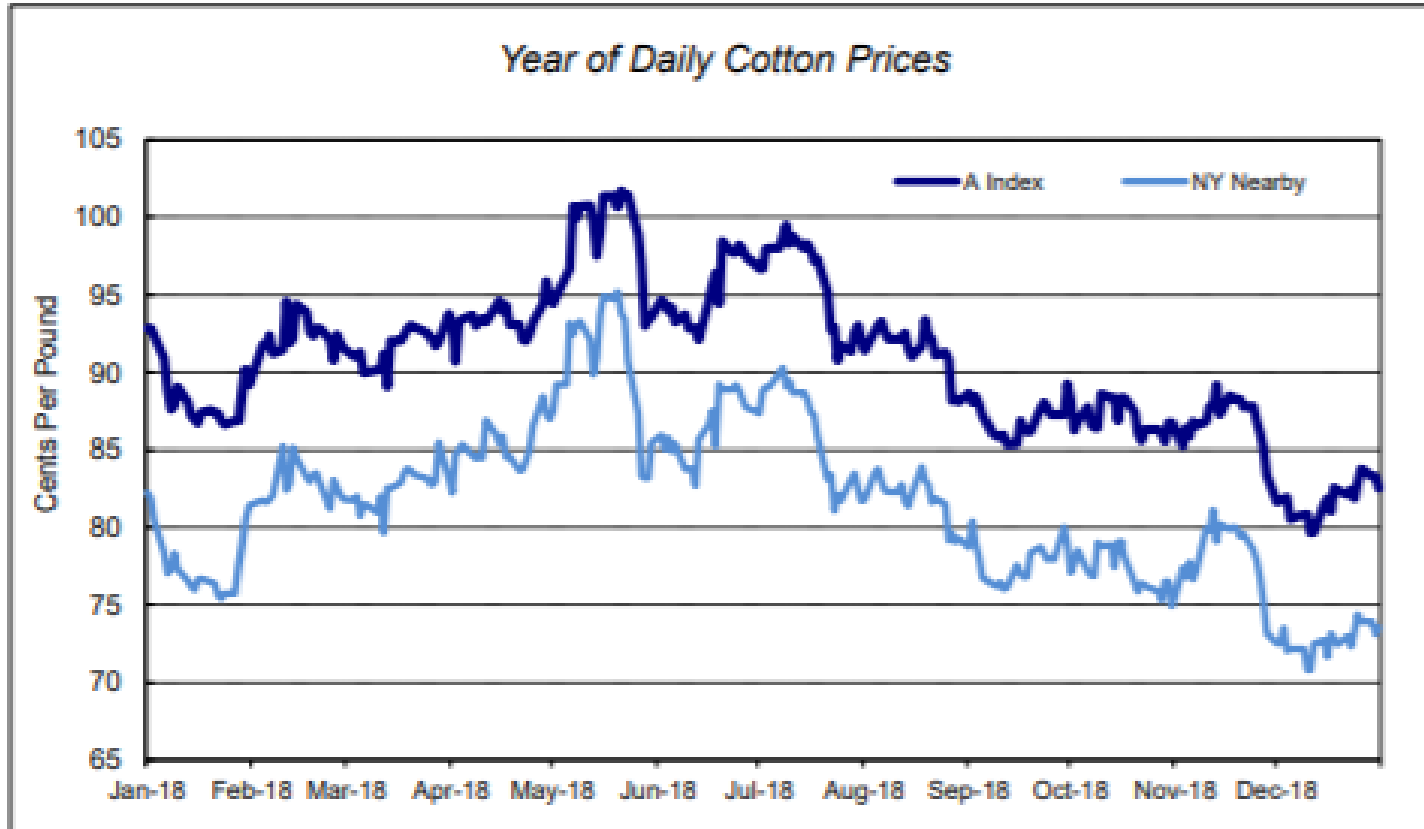


Denotes the possibility of a smaller 2019 cotton crop



# Daily Cotton Prices

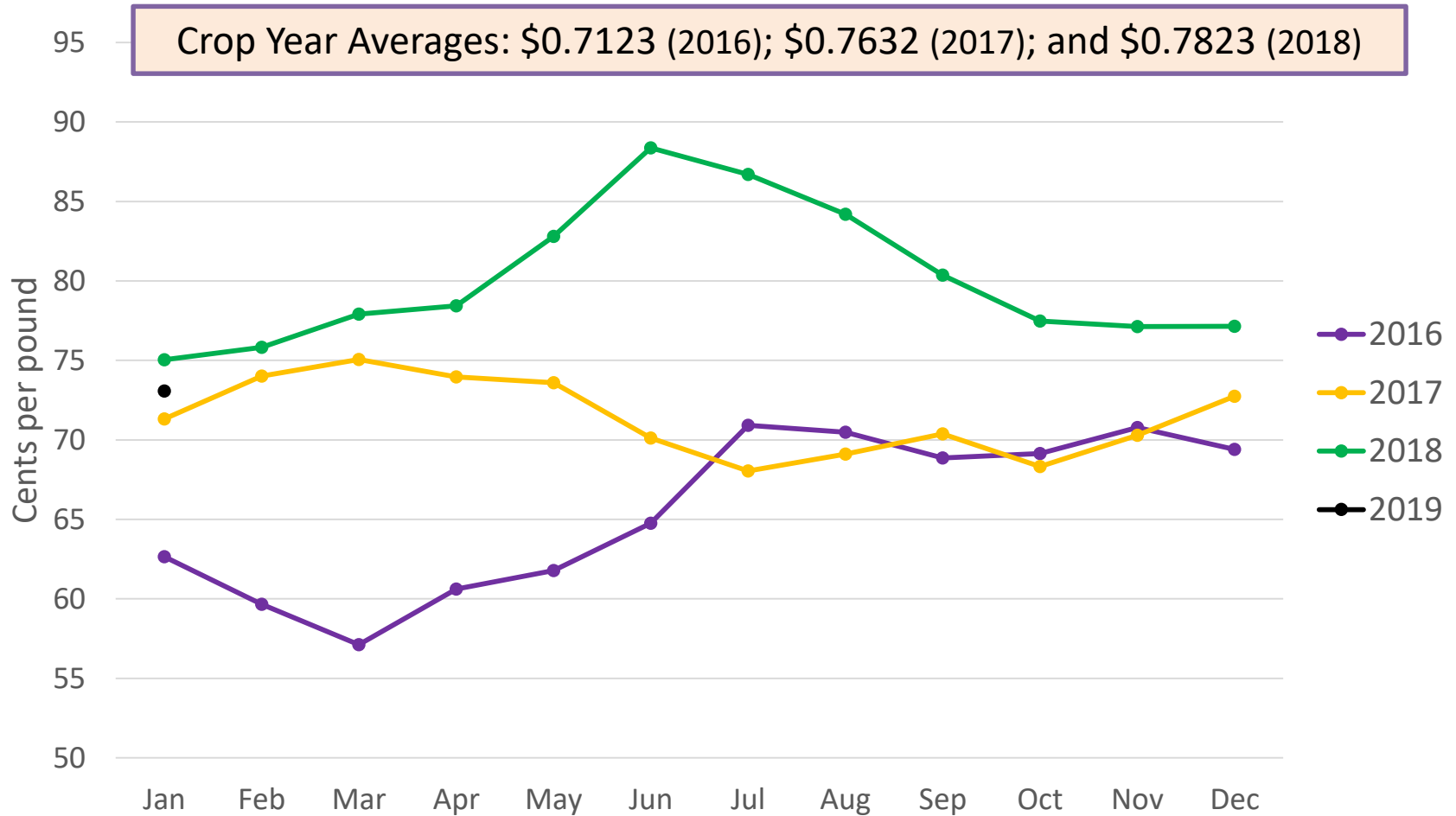
*Year in review of the A Index and NY Nearby Price*



Sources: ICE Futures U.S. & Cotton Outlook

# December Cotton Futures

*Three-year comparison of NYCE Nearby December Contract*



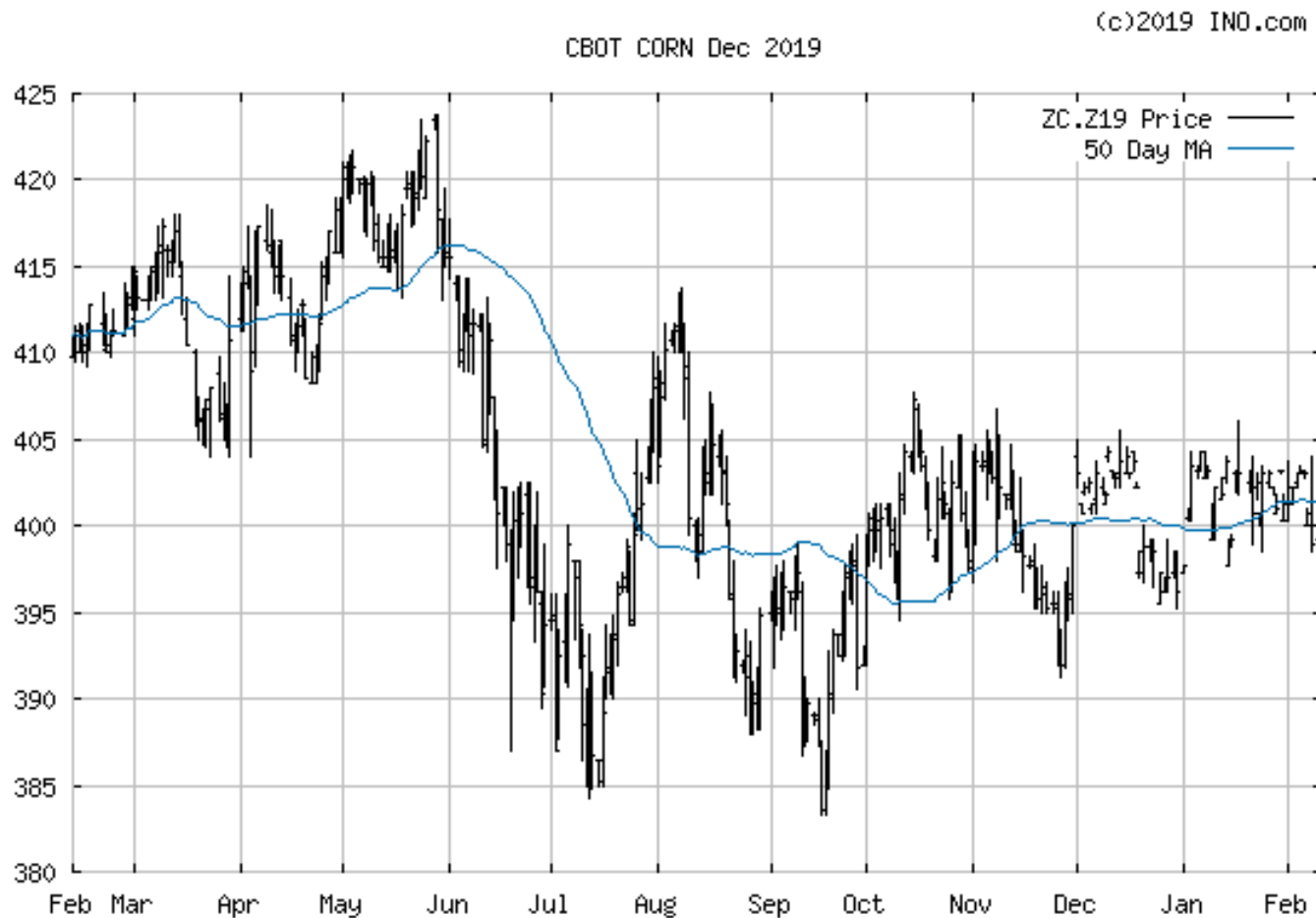
# New Crop Cotton (December 2019) Futures

*Price target range \$0.76 with support is at \$0.72; market trend is lower*



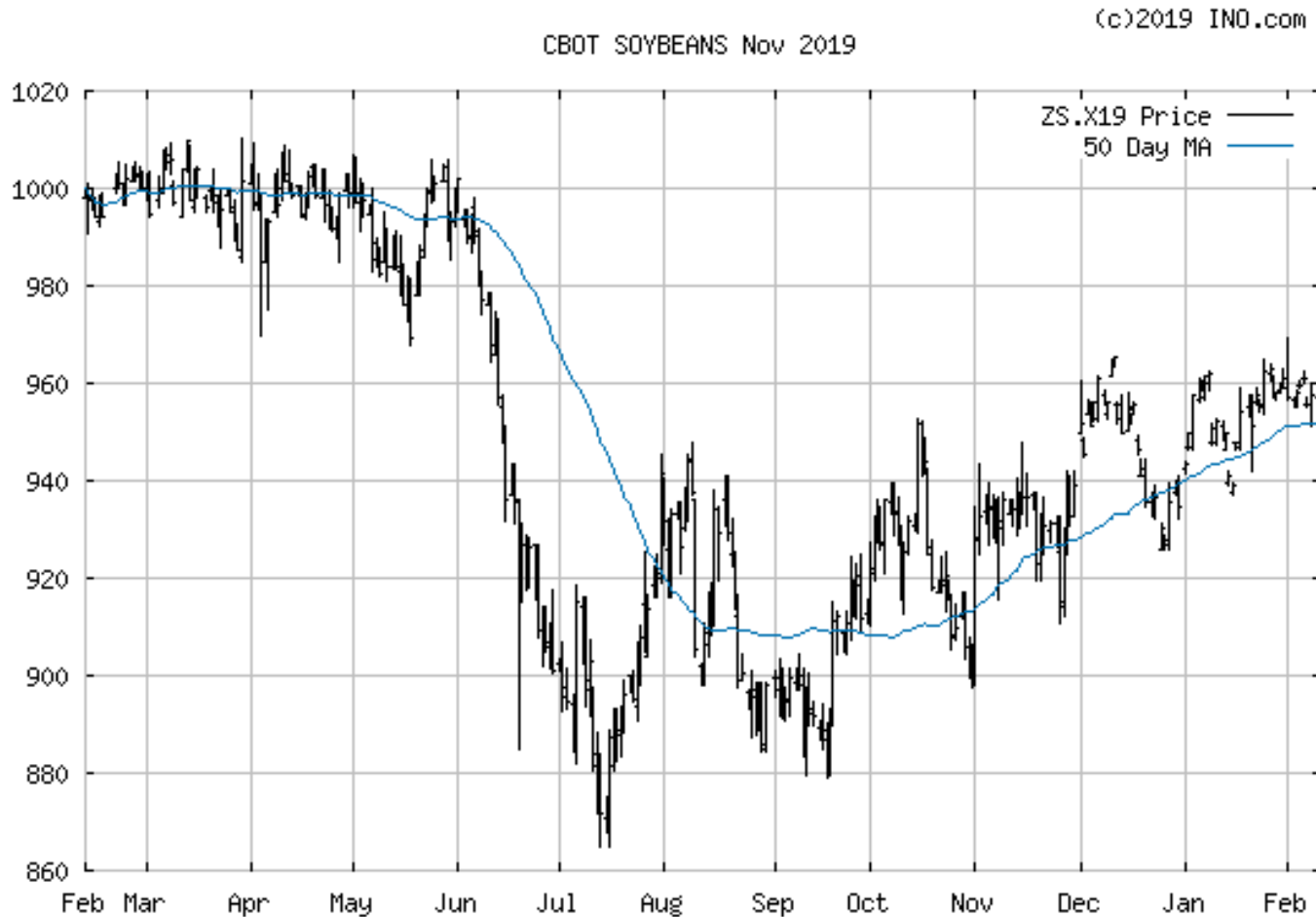
# New Crop Corn (December 2019) Futures

*Price settle at \$3.99; market trend is choppy*



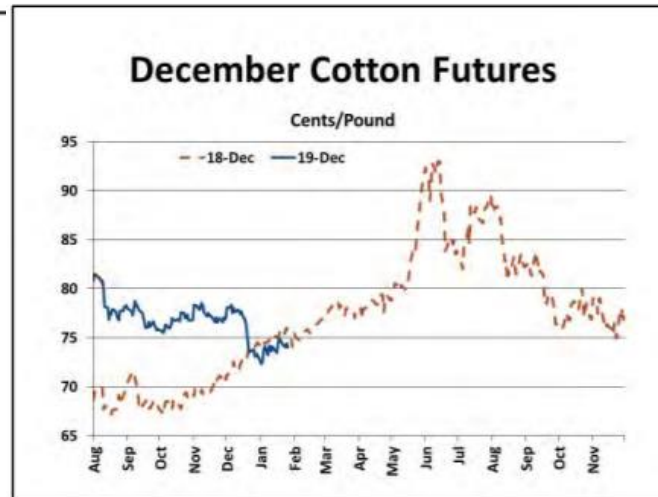
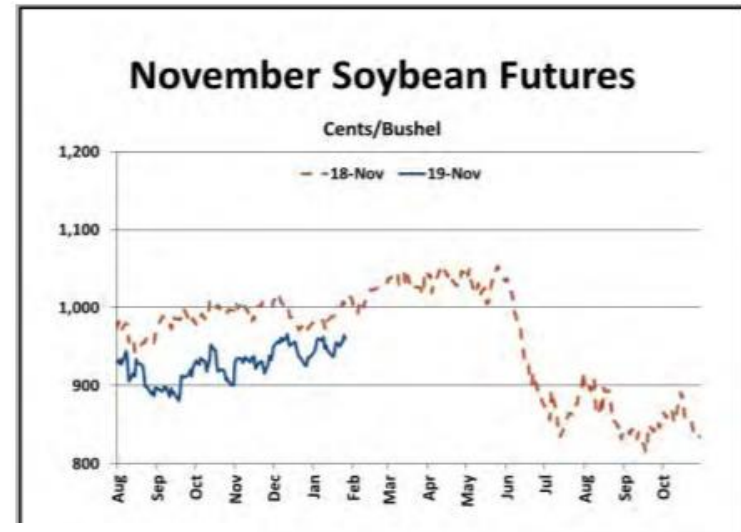
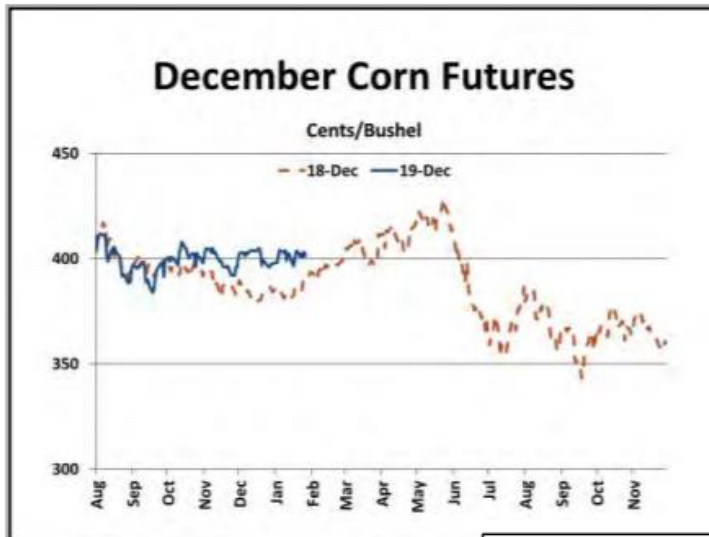
# New Crop Soybeans (November 2019) Futures

*Price settle at \$9.52; market trend is choppy to higher*



# Price of Corn and Soybeans vs. Cotton

*What signals are being sent to producers in 2019?*



# Cotton Price Signals

*What are the relative price of corn and soybeans telling producers?*

2018 Crop Relative Prices					
	02/01/18	03/01/18	04/01/18	05/01/18	Avg
Cotton (Dec18)	0.754	0.772	0.775	0.788	0.772
Corn (Dec18)	3.93	4.04	4.11	4.20	4.07
Soybeans (Nov 18)	10.04	10.38	10.40	10.50	10.33
Corn/Cotton	5.2	5.2	5.3	5.3	5.3
Soybeans/Cotton	13.3	13.4	13.4	13.3	13.4

Current 2019 Crop Relative Prices	
	01/09/19
Cotton (Dec 19)	0.742
Corn (Dec 19)	4.03
Soybeans (Nov 19)	9.61
Corn/Cotton	5.4
Soybeans/Cotton	13.0

↑ Corn has gained relative to cotton  
↓ Cotton has gained relative to soybeans

Corn	Cotton	Ratio
\$3.80	\$0.74	5.14
\$3.85	\$0.74	5.20
\$3.90	\$0.74	5.27
\$3.95	\$0.74	5.34
\$4.00	\$0.74	5.41
\$4.05	\$0.74	5.47
\$4.10	\$0.74	5.54

Soybean	Cotton	Ratio
\$9.50	\$0.74	12.84
\$9.55	\$0.74	12.91
\$9.60	\$0.74	12.97
\$9.65	\$0.74	13.04
\$9.70	\$0.74	13.11

<b>Corn/Cotton</b>	<b>5.40</b>	↑
Soybeans/Cotton	12.89	↓

# Cotton Market Outlook

*Bearish or bullish conditions?*

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- Current price levels for Dec 19 contract
- Will production (acreage) be higher?
- Weaker prices likely on more production
- Trade uncertainties and exports
- Prices of corn, peanuts, and soybeans relative to cotton
- How much will Texas and Georgia plant?



# NCC's 2019 Cotton Acreage Intentions

*Prospective acreage estimated at 14.4 M*

	2018 Actual (Thou.) 1/	2019 Intended (Thou.) 2/	Percent Change
<b>SOUTHEAST</b>	<b>2,886</b>	<b>2,812</b>	<b>-2.6%</b>
Alabama	510	507	-0.6%
Florida	118	111	-6.1%
Georgia	1,430	1,379	-3.6%
North Carolina	430	430	0.1%
South Carolina	300	284	-5.4%
Virginia	98	101	3.5%
<b>MID-SOUTH</b>	<b>1,985</b>	<b>2,256</b>	<b>13.6%</b>
Arkansas	485	555	14.4%
Louisiana	195	238	22.2%
Mississippi	620	734	18.4%
Missouri	325	347	6.9%
Tennessee	360	381	5.9%
<b>SOUTHWEST</b>	<b>8,645</b>	<b>8,833</b>	<b>2.2%</b>
Kansas	165	171	3.4%
Oklahoma	780	788	1.0%
Texas	7,700	7,874	2.3%
<b>WEST</b>	<b>278</b>	<b>286</b>	<b>2.9%</b>
Arizona	150	151	1.0%
California	50	57	14.4%
New Mexico	78	78	-0.6%
<b>TOTAL UPLAND</b>	<b>13,794</b>	<b>14,186</b>	<b>2.8%</b>
<b>TOTAL ELS</b>	<b>248</b>	<b>264</b>	<b>6.3%</b>
Arizona	14	11	-19.9%
California	210	230	9.7%
New Mexico	7	7	-1.4%
Texas	17	15	-10.0%
<b>ALL COTTON</b>	<b>14,042</b>	<b>14,450</b>	<b>2.9%</b>

The mid-south shows the largest percentage increase in acres.

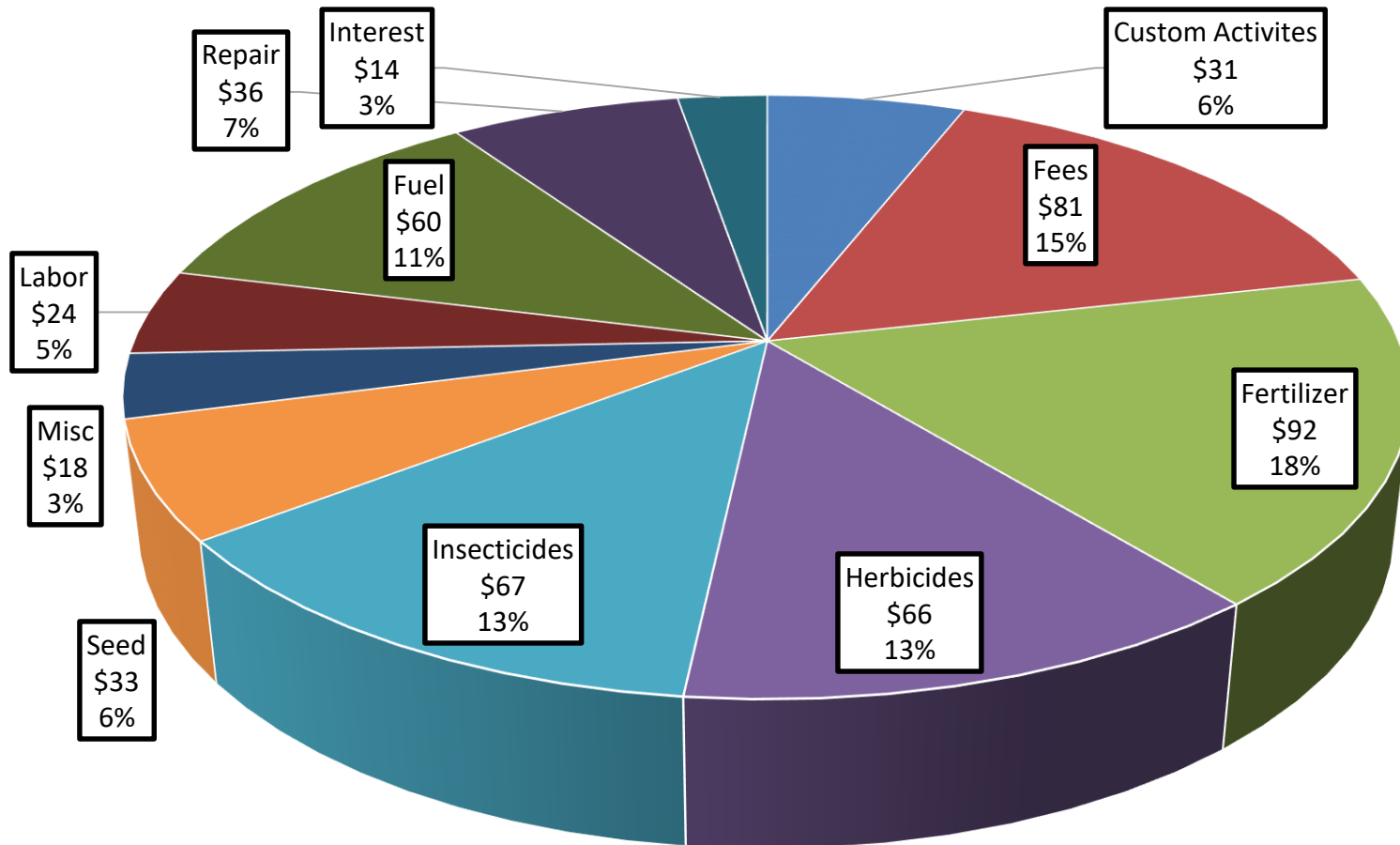


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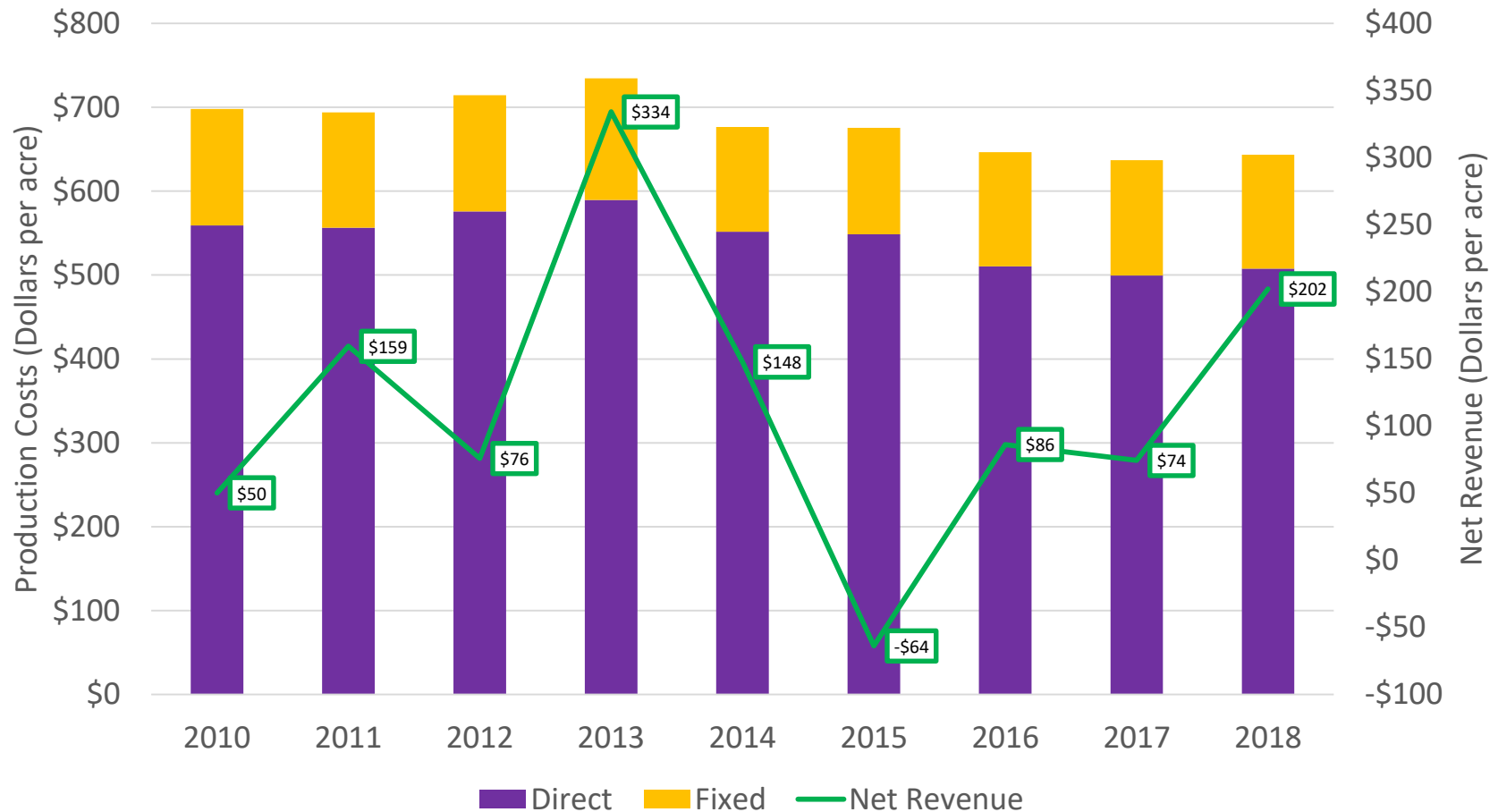
# Cotton Production Costs for 2019

*Irrigated cotton enterprise budget (\$535 per acre direct costs)*



# Net Revenue and Production Expenses - Cotton

*Enterprise costs and returns estimates from the LSU AgCenter*



Midpoint of dryland and irrigated production costs coupled with \$30 general overhead expense per acre. State price and yield for lint and seed obtained via USDA NASS.

# Breakeven Cotton Yield Example for 2019

*Yield necessary to cover specified production expenses per acre (\$0.72)*

*Breakeven Yield (lint pounds/ac) Specified Production Cost per acre for Cotton*

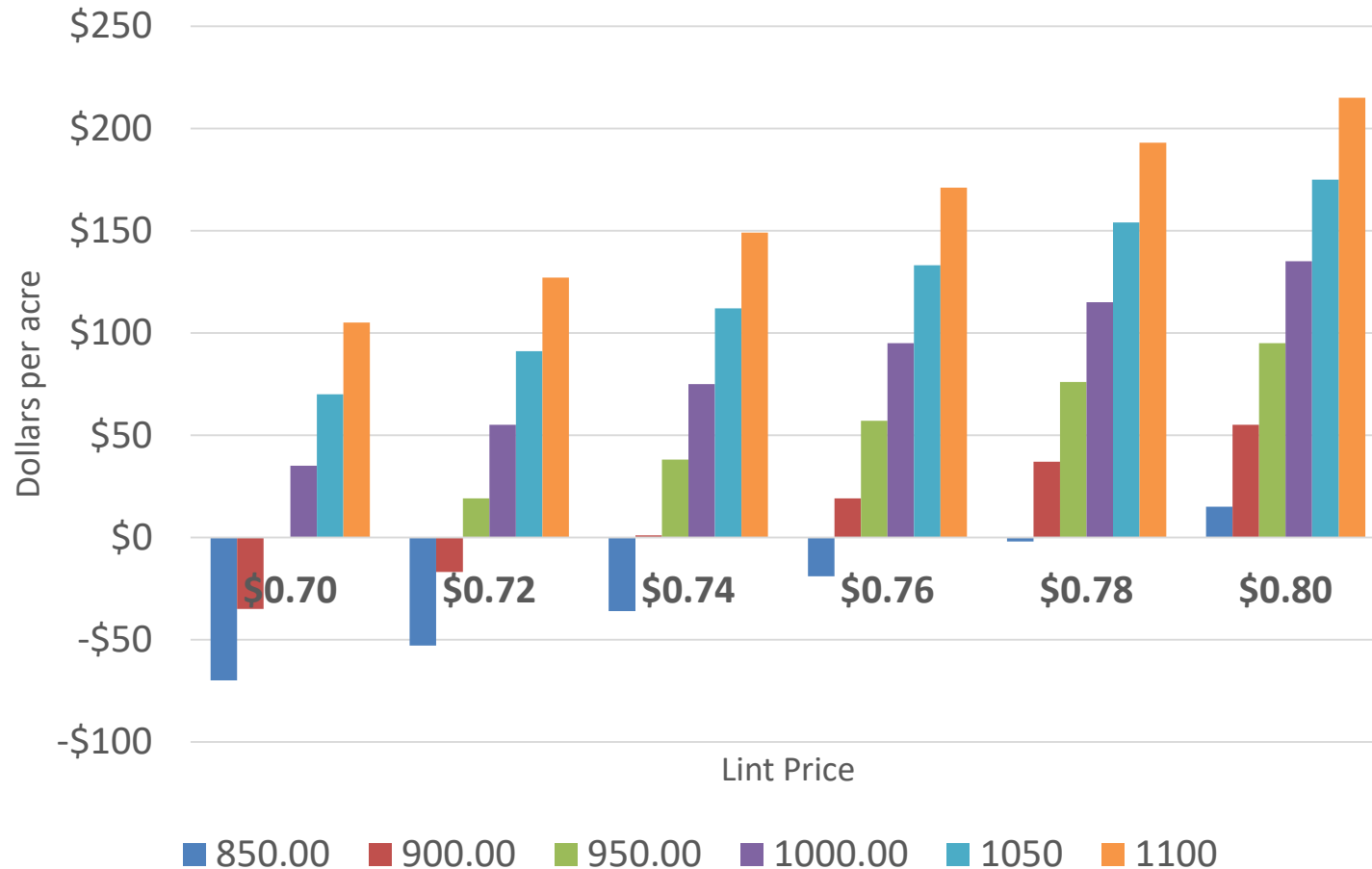
Price/lb	<u>\$425</u>	<u>\$450</u>	<u>\$475</u>	<u>\$500</u>	<u>\$525</u>	<u>\$550</u>	<u>\$575</u>	<u>\$600</u>	<u>\$625</u>	<u>\$650</u>	<u>\$675</u>
<b>\$0.65</b>	653.8	692.3	730.8	769.2	807.7	846.2	884.6	923.1	961.5	1000.0	1038.5
<b>\$0.67</b>	634.3	671.6	709.0	746.3	783.6	820.9	858.2	895.5	932.8	970.1	1007.5
<b>\$0.69</b>	615.9	652.2	688.4	724.6	760.9	797.1	833.3	869.6	905.8	942.0	978.3
<b>\$0.71</b>	598.6	633.8	669.0	704.2	739.4	774.6	809.9	845.1	880.3	915.5	950.7
<b>\$0.73</b>	582.2	616.4	650.7	684.9	719.2	753.4	787.7	821.9	856.2	890.4	924.7
<b>\$0.75</b>	566.7	600.0	633.3	666.7	700.0	733.3	766.7	800.0	833.3	866.7	900.0
<b>\$0.77</b>	551.9	584.4	616.9	649.4	681.8	714.3	746.8	779.2	811.7	844.2	876.6
<b>\$0.79</b>	538.0	569.6	601.3	632.9	664.6	696.2	727.8	759.5	791.1	822.8	854.4
<b>\$0.81</b>	524.7	555.6	586.4	617.3	648.1	679.0	709.9	740.7	771.6	802.5	833.3
<b>\$0.83</b>	512.0	542.2	572.3	602.4	632.5	662.7	692.8	722.9	753.0	783.1	813.3
<b>\$0.85</b>	500.0	529.4	558.8	588.2	617.6	647.1	676.5	705.9	735.3	764.7	794.1
<b>\$0.87</b>	488.5	517.2	546.0	574.7	603.4	632.2	660.9	689.7	718.4	747.1	775.9
<b>\$0.89</b>	477.5	505.6	533.7	561.8	589.9	618.0	646.1	674.2	702.2	730.3	758.4

Non-irrigated direct expenses per acre \$497

Irrigated direct expenses per acre \$557

# Cotton Lint Returns per acre

*Price and yield sensitivity above total specified costs*



# Cotton vs. Corn Net Return Comparison

*Evaluates price, yields, and land rent of competing enterprises for 2019*

## Cotton Net Return Advantage Compared to Corn Net Returns

Cotton Variable Costs = **\$500** per acre  
 Cotton Expected Yield = **1,050** pounds per acre  
 Cotton Share Rent = **20%** crop share  
 Cotton Cash Rent = **\$0** per acre

Corn Variable Costs = **\$430** per acre  
 Corn Expected Yield = **175** bushels per acre  
 Corn Share Rent = **20%** crop share  
 Corn Cash Rent = **\$0** per acre

### Corn Price (\$/bu)

### Cotton Price (\$/lb)

	<b>\$2.90</b>	<b>\$3.15</b>	<b>\$3.40</b>	<b>\$3.65</b>	<b>\$3.90</b>	<b>\$4.15</b>	<b>\$4.40</b>	<b>\$4.65</b>	<b>\$4.90</b>
<b>\$0.55</b>	-14	-49	-84	-119	-154	-189	-224	-259	-294
<b>\$0.57</b>	<b>\$3</b>	-32	-67	-102	-137	-172	-207	-242	-277
<b>\$0.59</b>	<b>\$20</b>	-15	-50	-85	-120	-155	-190	-225	-260
<b>\$0.61</b>	<b>\$36</b>	<b>\$1</b>	-34	-69	-104	-139	-174	-209	-244
<b>\$0.63</b>	<b>\$53</b>	<b>\$18</b>	-17	-52	-87	-122	-157	-192	-227
<b>\$0.65</b>	<b>\$70</b>	<b>\$35</b>	<b>\$0</b>	-35	-70	-105	-140	-175	-210
<b>\$0.67</b>	<b>\$87</b>	<b>\$52</b>	<b>\$17</b>	-18	-53	-88	-123	-158	-193
<b>\$0.69</b>	<b>\$104</b>	<b>\$69</b>	<b>\$34</b>	-1	-36	-71	-106	-141	-176
<b>\$0.71</b>	<b>\$120</b>	<b>\$85</b>	<b>\$50</b>	<b>\$15</b>	-20	-55	-90	-125	-160
<b>\$0.73</b>	<b>\$137</b>	<b>\$102</b>	<b>\$67</b>	<b>\$32</b>	-3	-38	-73	-108	-143
<b>\$0.75</b>	<b>\$154</b>	<b>\$119</b>	<b>\$84</b>	<b>\$49</b>	<b>\$14</b>	-21	-56	-91	-126
<b>\$0.77</b>	<b>\$171</b>	<b>\$136</b>	<b>\$101</b>	<b>\$66</b>	<b>\$31</b>	-4	-39	-74	-109
<b>\$0.79</b>	<b>\$188</b>	<b>\$153</b>	<b>\$118</b>	<b>\$83</b>	<b>\$48</b>	<b>\$13</b>	-22	-57	-92
<b>\$0.81</b>	<b>\$204</b>	<b>\$169</b>	<b>\$134</b>	<b>\$99</b>	<b>\$64</b>	<b>\$29</b>	-6	-41	-76
<b>\$0.83</b>	<b>\$221</b>	<b>\$186</b>	<b>\$151</b>	<b>\$116</b>	<b>\$81</b>	<b>\$46</b>	<b>\$11</b>	-24	-59
<b>\$0.85</b>	<b>\$238</b>	<b>\$203</b>	<b>\$168</b>	<b>\$133</b>	<b>\$98</b>	<b>\$63</b>	<b>\$28</b>	-7	-42

*Values in table equal to cotton net returns minus corn net returns above variable costs*

# Cotton vs. Soybean Net Return Comparison

*Evaluates price, yields, and land rent of competing enterprises for 2019*

## Cotton Net Return Advantage Compared to Soybean Net Returns

Cotton Variable Costs =	<b>\$500</b> per acre	Soybean Variable Costs =	<b>\$365</b> per acre
Cotton Expected Yield =	<b>1,050</b> pounds per acre	Soybean Expected Yield =	<b>55</b> bushels per acre
Cotton Share Rent =	<b>20%</b> crop share	Soybean Share Rent =	<b>20%</b> crop share
Cotton Cash Rent =	<b>\$0</b> per acre	Soybean Cash Rent =	<b>\$0</b> per acre

### Soybean Price (\$/bu)

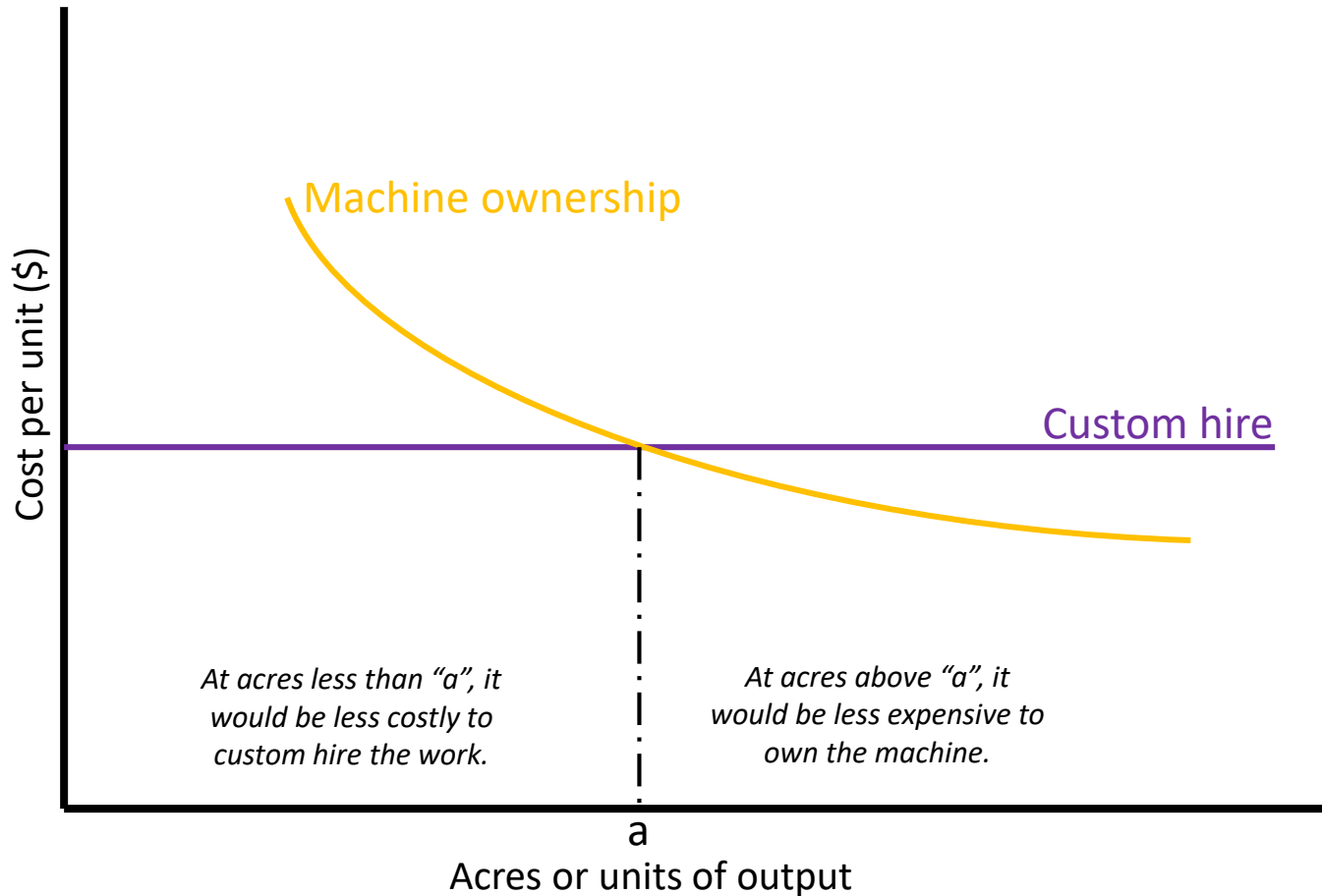
### Cotton Price (\$/lb)

	<b>\$8.75</b>	<b>\$9.00</b>	<b>\$9.25</b>	<b>\$9.50</b>	<b>\$9.75</b>	<b>\$10.00</b>	<b>\$10.25</b>	<b>\$10.50</b>	<b>\$10.75</b>
<b>\$0.55</b>	-58	-69	-80	-91	-102	-113	-124	-135	-146
<b>\$0.57</b>	-41	-52	-63	-74	-85	-96	-107	-118	-129
<b>\$0.59</b>	-24	-35	-46	-57	-68	-79	-90	-101	-112
<b>\$0.61</b>	-8	-19	-30	-41	-52	-63	-74	-85	-96
<b>\$0.63</b>	<b>\$9</b>	-2	-13	-24	-35	-46	-57	-68	-79
<b>\$0.65</b>	<b>\$26</b>	<b>\$15</b>	<b>\$4</b>	-7	-18	-29	-40	-51	-62
<b>\$0.67</b>	<b>\$43</b>	<b>\$32</b>	<b>\$21</b>	<b>\$10</b>	-1	-12	-23	-34	-45
<b>\$0.69</b>	<b>\$60</b>	<b>\$49</b>	<b>\$38</b>	<b>\$27</b>	<b>\$16</b>	<b>\$5</b>	-6	-17	-28
<b>\$0.71</b>	<b>\$76</b>	<b>\$65</b>	<b>\$54</b>	<b>\$43</b>	<b>\$32</b>	<b>\$21</b>	<b>\$10</b>	-1	-12
<b>\$0.73</b>	<b>\$93</b>	<b>\$82</b>	<b>\$71</b>	<b>\$60</b>	<b>\$49</b>	<b>\$38</b>	<b>\$27</b>	<b>\$16</b>	<b>\$5</b>
<b>\$0.75</b>	<b>\$110</b>	<b>\$99</b>	<b>\$88</b>	<b>\$77</b>	<b>\$66</b>	<b>\$55</b>	<b>\$44</b>	<b>\$33</b>	<b>\$22</b>
<b>\$0.77</b>	<b>\$127</b>	<b>\$116</b>	<b>\$105</b>	<b>\$94</b>	<b>\$83</b>	<b>\$72</b>	<b>\$61</b>	<b>\$50</b>	<b>\$39</b>
<b>\$0.79</b>	<b>\$144</b>	<b>\$133</b>	<b>\$122</b>	<b>\$111</b>	<b>\$100</b>	<b>\$89</b>	<b>\$78</b>	<b>\$67</b>	<b>\$56</b>
<b>\$0.81</b>	<b>\$160</b>	<b>\$149</b>	<b>\$138</b>	<b>\$127</b>	<b>\$116</b>	<b>\$105</b>	<b>\$94</b>	<b>\$83</b>	<b>\$72</b>
<b>\$0.83</b>	<b>\$177</b>	<b>\$166</b>	<b>\$155</b>	<b>\$144</b>	<b>\$133</b>	<b>\$122</b>	<b>\$111</b>	<b>\$100</b>	<b>\$89</b>
<b>\$0.85</b>	<b>\$194</b>	<b>\$183</b>	<b>\$172</b>	<b>\$161</b>	<b>\$150</b>	<b>\$139</b>	<b>\$128</b>	<b>\$117</b>	<b>\$106</b>

*Values in table equal to cotton net returns minus soybean net returns above variable costs*

# Machinery Management Considerations

*Calculating the machinery investment for a round bale picker*

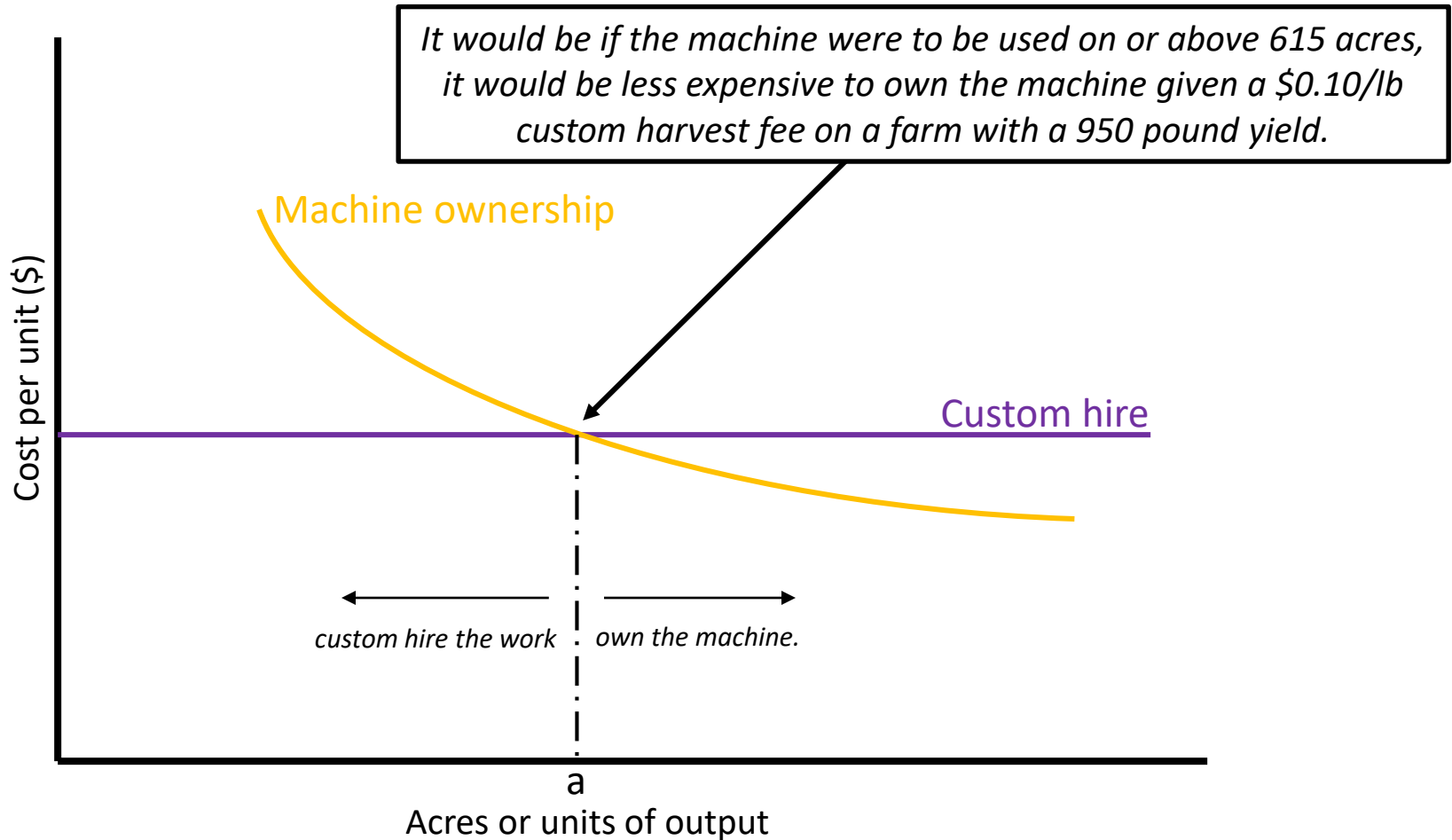


Source: Kay, Edwards, and Duffy, 2017.



# Machinery Management Considerations

*Calculating the machinery investment for a round bale picker*



Source: Kay, Edwards, and Duffy, 2017.

# Cotton Harvest Systems

*Cost of operations and ownership of specialized equipment*

Unit Item	Price	CRF \$/ac	Fuel \$/ac	Repair \$/ac	Labor \$/ac	Total \$/ac
<b>-----JD 7660 Basket Picker (\$74.15)-----</b>						
Basket Picker	\$450,000	\$30.13	\$6.07	\$6.66	\$3.69	\$46.55
Boll Buggy	\$26,200	\$1.75	--	\$0.78	--	\$2.53
Tractor	\$127,500	\$4.11	\$3.61	\$0.98	\$1.42	\$10.13
Mod. Builder	\$35,000	\$2.34	--	\$1.04	--	\$3.38
Tractor	\$127,500	\$4.11	\$3.63	\$0.98	\$2.84	\$11.56
<b>-----JD 7760 Round Bale Picker (\$60.65)-----</b>						
Round Picker	767,000	\$36.78	\$6.18	\$8.13	\$1.78	\$52.88
Tractor Hauler	127,500	\$2.94	\$2.60	\$0.70	\$1.53	\$7.77

Diesel fuel priced at \$2.50/gallon; interest rate at 6%; basket picker priced at \$450,000; bale picker priced at \$767,000; operator labor set at \$15.30/hour

# Cotton Acres

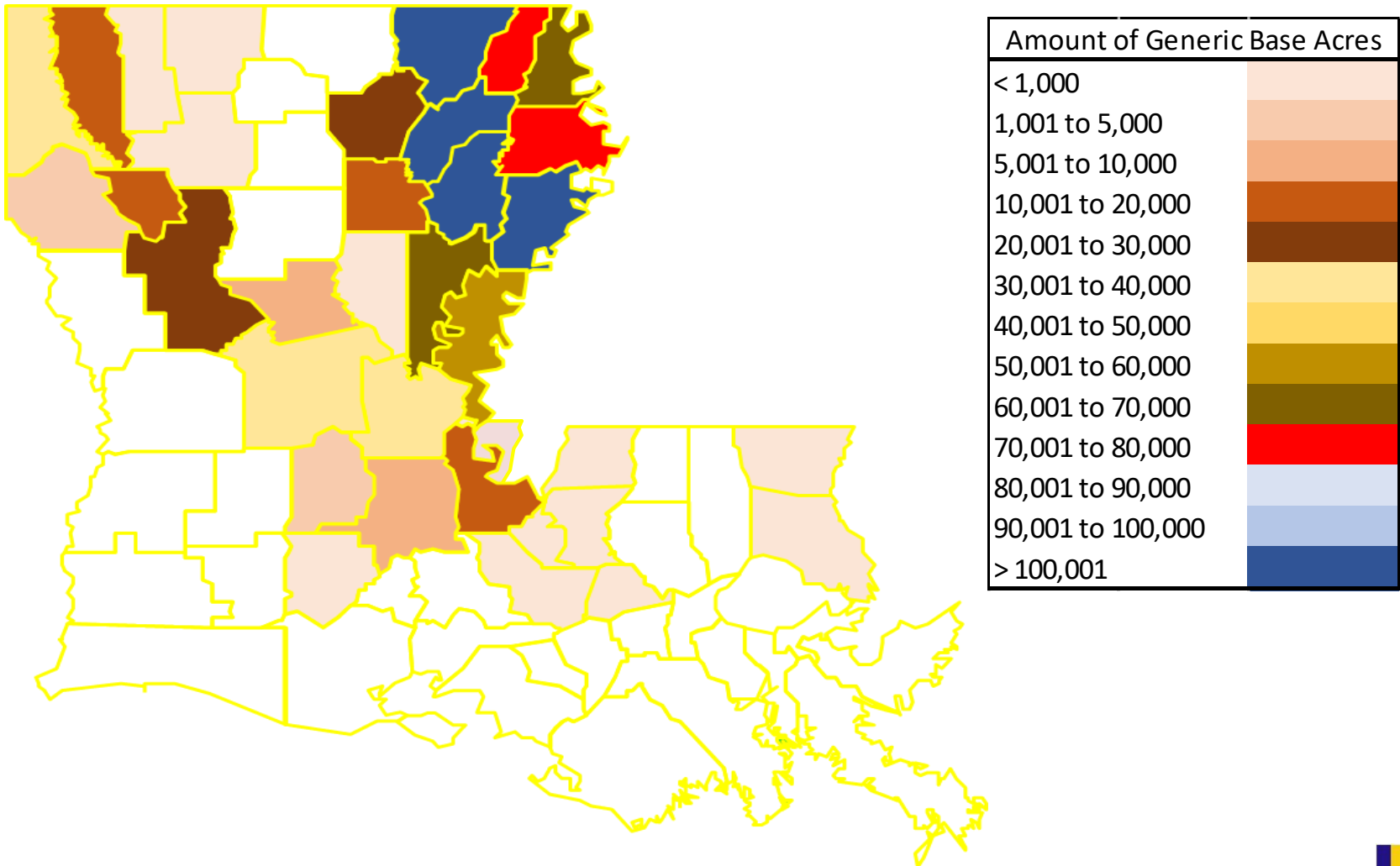
*How can risk be mitigated on these planted acres?*

- CTAP; CGCS; and MAL
  - The CTAP (2014) and CGCS (2015 and 2016) programs were similar to the direct payments of the previous farm bill
  - MAL available for duration of the farm bill with rate between \$0.45-\$0.52 per pound
- Seed Cotton ARC-CO/PLC
  - 2018 via the BBA of 2018 and subsequent crop year per the new Farm Bill
  - Generic base, reallocated generic base, and unassigned base acres...
- Crop Insurance options
  - Traditional Revenue Protection and Yield Protection policies for the 2018 CY
    - 1,606 RP policies on 141,670 acres
    - 1,277 YP and CAT policies on 45,683 acres
  - STAX
    - Both STAX and SCO insurance programs consider area-wide yield and/or revenue performance in calculating an indemnity payment (when applicable)
    - Number of STAX insurance companion policies sold
      - 2015 CY = 232 policies on 45,401 acres
      - 2016 CY = 261 policies on 50,322 acres
      - 2017 CY = 306 policies on 84,619 acres
      - 2018 CY = 359 policies on 85,593 acre

Base Contract: ICE December Cotton 2019 (CTZ19)			
	Projected Price	Price Volatility	Harvest Price
	<b>\$0.74</b> per Pound	<b>0.14</b>	Not Yet Available
Status	In Discovery	In Discovery	Yet To Start
Start Date	1/15/2019	1/15/2019	N/A
End Date	2/14/2019	2/14/2019	N/A

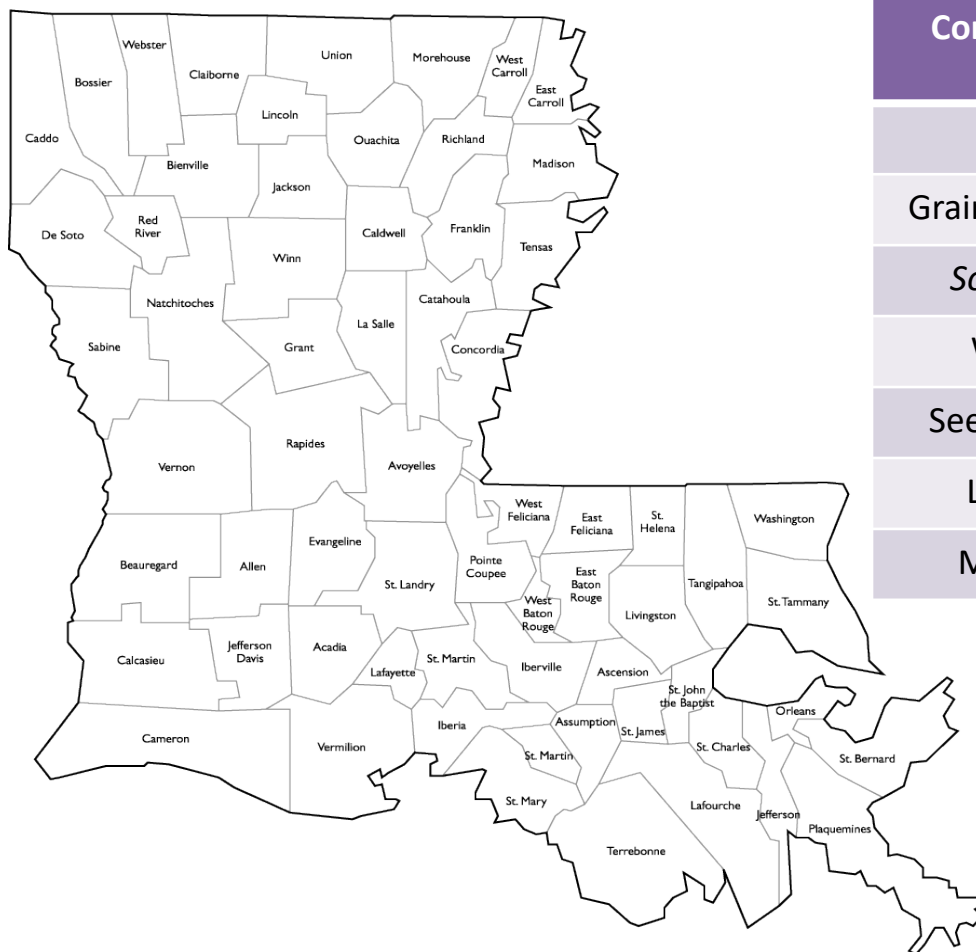
# Generic Base Acres by Parish

USDA FSA (2015)



# 2018 CY Payment Projections for PLC

National MYA prices obtained from USDA in December 2018



Commodity	PLC Payment Rate	Payment/ac
Corn	\$0.10/bu	\$15.00
Grain Sorghum	\$0.55/bu	\$38.50
Soybeans	\$--	\$--
Wheat	\$0.35/bu	\$10.50
Seed Cotton	\$0.0140/lb	\$33.60
LG Rice	\$3.30/cwt	\$181.50
MG Rice	\$1.80/cwt	\$99.00

Farm's PLC payment yields: corn 150; grain sorghum 70; soybeans 40; wheat 30; rice 55; and seed cotton 2,400.

# Seed Cotton PLC Payment Estimator Guide

## 2018 crop year decision aid from the LSU AgCenter

Reference Price (\$/lb)	\$0.367
Lint Program Yield (lbs)	1000.0
Seed Cotton Program Yield (lbs)	2400
Seed Cotton Price Floor (\$/lb)	\$0.250

Producer's Specified Estimates of Marketing Year Production of Lint and Cottonseed			
Total U.S. Lint Production (lbs)	980000000	Weighted Lint Coeff.	0.429825 "Effective Price for Seed Cotton Calculation"
Total U.S. Seed Production (lbs)	1300000000	Weighted Seed Coeff.	0.570175 "Effective Price for Seed Cotton Calculation"

Example PLC Payment for Seed Cotton per base acre (subject to lint and seed production levels)

Lint Price (\$/lb)	Cottonseed Price (\$/ton)																		
	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
\$0.52	\$222.93	\$217.12	\$211.30	\$205.49	\$199.67	\$193.85	\$188.04	\$182.22	\$176.41	\$170.59	\$164.77	\$158.96	\$153.14	\$147.33	\$141.51	\$135.70	\$129.88	\$124.06	\$118.25
\$0.53	\$214.16	\$208.35	\$202.53	\$196.72	\$190.90	\$185.09	\$179.27	\$173.45	\$167.64	\$161.82	\$156.01	\$150.19	\$144.37	\$138.56	\$132.74	\$126.93	\$121.11	\$115.30	\$109.48
\$0.54	\$205.40	\$199.58	\$193.76	\$187.95	\$182.13	\$176.32	\$170.50	\$164.69	\$158.87	\$153.05	\$147.24	\$141.42	\$135.61	\$129.79	\$123.97	\$118.16	\$112.34	\$106.53	\$100.71
\$0.55	\$196.63	\$190.81	\$185.00	\$179.18	\$173.36	\$167.55	\$161.73	\$155.92	\$150.10	\$144.29	\$138.47	\$132.65	\$126.84	\$121.02	\$115.21	\$109.39	\$103.57	\$97.76	\$91.94
\$0.56	\$187.86	\$182.04	\$176.23	\$170.41	\$164.60	\$158.78	\$152.96	\$147.15	\$141.33	\$135.52	\$129.70	\$123.89	\$118.07	\$112.25	\$106.44	\$100.62	\$94.81	\$88.99	\$83.17
\$0.57	\$179.09	\$173.27	\$167.46	\$161.64	\$155.83	\$150.01	\$144.20	\$138.38	\$132.56	\$126.75	\$120.93	\$115.12	\$109.30	\$103.49	\$97.67	\$91.85	\$86.04	\$80.22	\$74.41
\$0.58	\$170.32	\$164.51	\$158.69	\$152.87	\$147.06	\$141.24	\$135.43	\$129.61	\$123.80	\$117.98	\$112.16	\$106.35	\$100.53	\$94.72	\$88.90	\$83.09	\$77.27	\$71.45	\$65.64
\$0.59	\$161.55	\$155.74	\$149.92	\$144.11	\$138.29	\$132.47	\$126.66	\$120.84	\$115.03	\$109.21	\$103.40	\$97.58	\$91.76	\$85.95	\$80.13	\$74.32	\$68.50	\$62.69	\$56.87
\$0.60	\$152.79	\$146.97	\$141.15	\$135.34	\$129.52	\$123.71	\$117.89	\$112.07	\$106.26	\$100.44	\$94.63	\$88.81	\$83.00	\$77.18	\$71.36	\$65.55	\$59.73	\$53.92	\$48.10
\$0.61	\$144.02	\$138.20	\$132.39	\$126.57	\$120.75	\$114.94	\$109.12	\$103.31	\$97.49	\$91.67	\$85.86	\$80.04	\$74.23	\$68.41	\$62.60	\$56.78	\$50.96	\$45.15	\$39.33
\$0.62	\$135.25	\$129.43	\$123.62	\$117.80	\$111.99	\$106.17	\$100.35	\$94.54	\$88.72	\$82.91	\$77.09	\$71.27	\$65.46	\$59.64	\$53.83	\$48.01	\$42.20	\$36.38	\$30.56
\$0.63	\$126.48	\$120.66	\$114.85	\$109.03	\$103.22	\$97.40	\$91.59	\$85.77	\$79.95	\$74.14	\$68.32	\$62.51	\$56.69	\$50.87	\$45.06	\$39.24	\$33.43	\$27.61	\$21.80
\$0.64	\$117.71	\$111.90	\$106.08	\$100.26	\$94.45	\$88.63	\$82.82	\$77.00	\$71.19	\$65.37	\$59.55	\$53.74	\$47.92	\$42.11	\$36.29	\$30.47	\$24.66	\$18.84	\$13.03
\$0.65	\$108.94	\$103.13	\$97.31	\$91.50	\$85.68	\$79.86	\$74.05	\$68.23	\$62.42	\$56.60	\$50.79	\$44.97	\$39.15	\$33.34	\$27.52	\$21.71	\$15.89	\$10.07	\$4.26
\$0.66	\$100.17	\$94.36	\$88.54	\$82.73	\$76.91	\$71.10	\$65.28	\$59.46	\$53.65	\$47.83	\$42.02	\$36.20	\$30.39	\$24.57	\$18.75	\$12.94	\$7.12	\$1.31	\$0.00
\$0.67	\$91.41	\$85.59	\$79.77	\$73.96	\$68.14	\$62.33	\$56.51	\$50.70	\$44.88	\$39.06	\$33.25	\$27.43	\$21.62	\$15.80	\$9.99	\$4.17	\$0.00	\$0.00	\$0.00
\$0.68	\$82.64	\$76.82	\$71.01	\$65.19	\$59.37	\$53.56	\$47.74	\$41.93	\$36.11	\$30.30	\$24.48	\$18.66	\$12.85	\$7.03	\$1.22	\$0.00	\$0.00	\$0.00	\$0.00
\$0.69	\$73.87	\$68.05	\$62.24	\$56.42	\$50.61	\$44.79	\$38.97	\$33.16	\$27.34	\$21.53	\$15.71	\$9.90	\$4.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.70	\$65.10	\$59.29	\$53.47	\$47.65	\$41.84	\$36.02	\$30.21	\$24.39	\$18.57	\$12.76	\$6.94	\$1.13	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.71	\$56.33	\$50.52	\$44.70	\$38.89	\$33.07	\$27.25	\$21.44	\$15.62	\$9.81	\$3.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.72	\$47.56	\$41.75	\$35.93	\$30.12	\$24.30	\$18.49	\$12.67	\$6.85	\$1.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.73	\$38.80	\$32.98	\$27.16	\$21.35	\$15.53	\$9.72	\$3.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.74	\$30.03	\$24.21	\$18.40	\$12.58	\$6.76	\$0.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.75	\$21.26	\$15.44	\$9.63	\$3.81	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.76	\$12.49	\$6.67	\$0.86	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.77	\$3.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

# Seed Cotton Program – PLC

Program payment projections as of December 2018

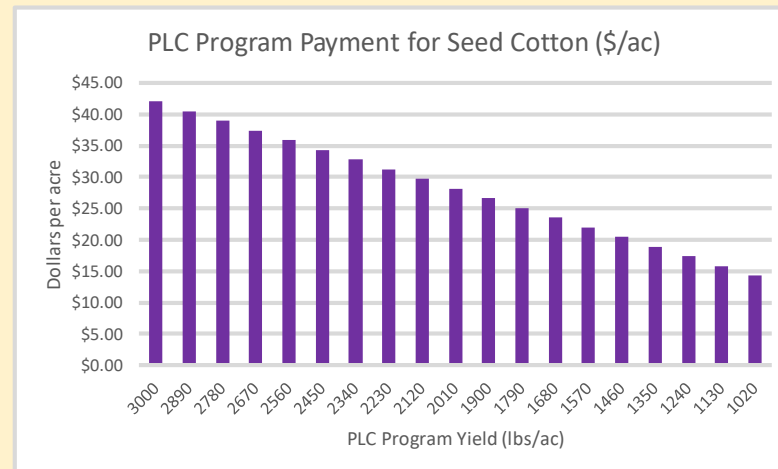
## PLC Payment Estimator

### Seed Cotton

Expected MYA Price	<b>\$0.3530</b>	(\$/lb)
Reference Price	\$0.3670	(\$/lb)
Loan Rate	\$0.2500	(\$/lb)
Will a PLC Payment Trigger?	Yes	
PLC Payment Rate	\$0.0140	(\$/lb)

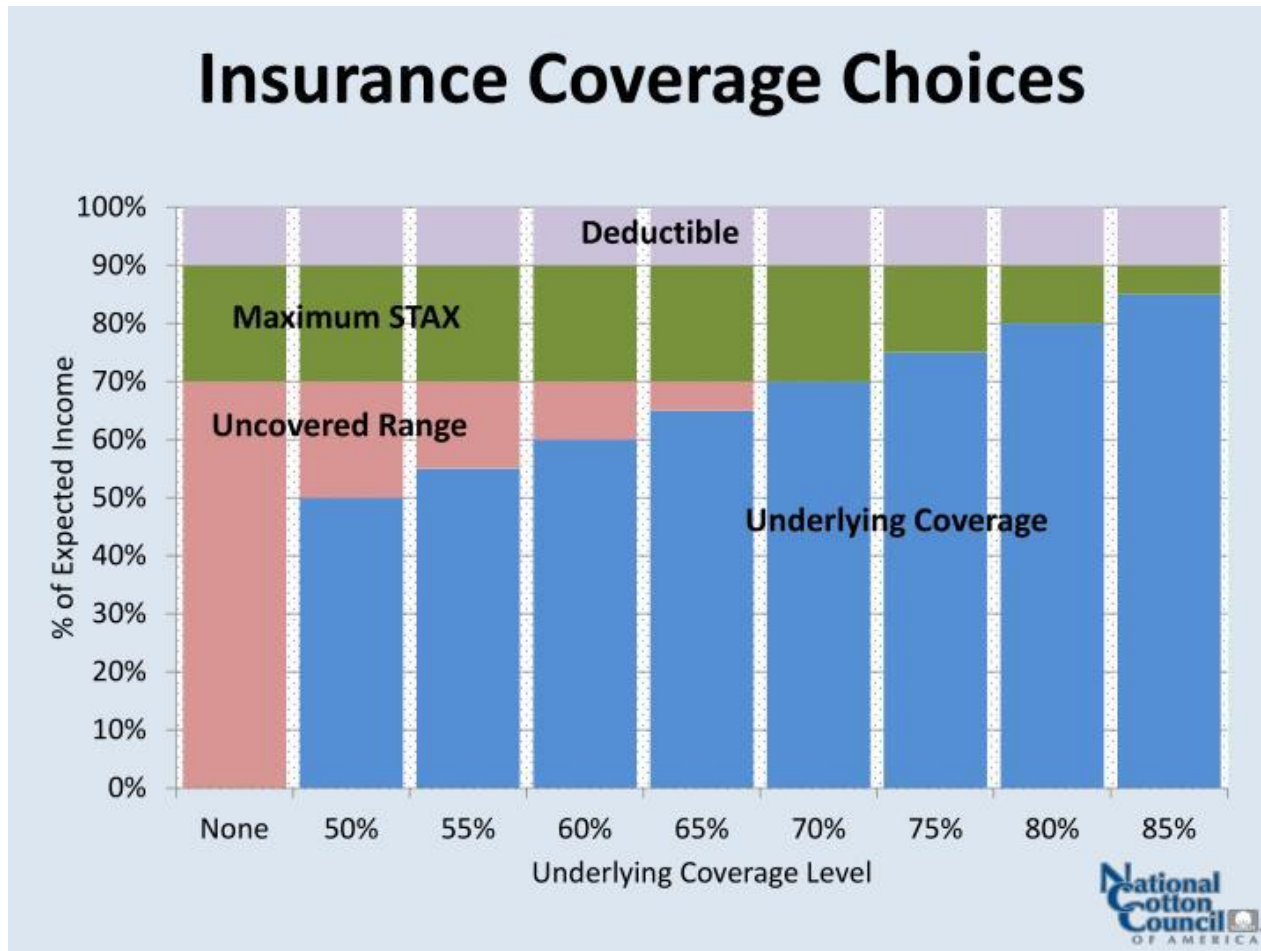
Yield	PLC Pymt.
3000	\$42.00
2890	\$40.46
2780	\$38.92
2670	\$37.38
2560	\$35.84
2450	\$34.30
2340	\$32.76
2230	\$31.22
2120	\$29.68
2010	\$28.14
1900	\$26.60
1790	\$25.06
1680	\$23.52
1570	\$21.98
1460	\$20.44
1350	\$18.90
1240	\$17.36
1130	\$15.82
1020	\$14.28

Varying PLC Program Yield and Corresponding PLC Payment per ac



# Stacked Income Protection Plan (STAX)

Coverage range illustration

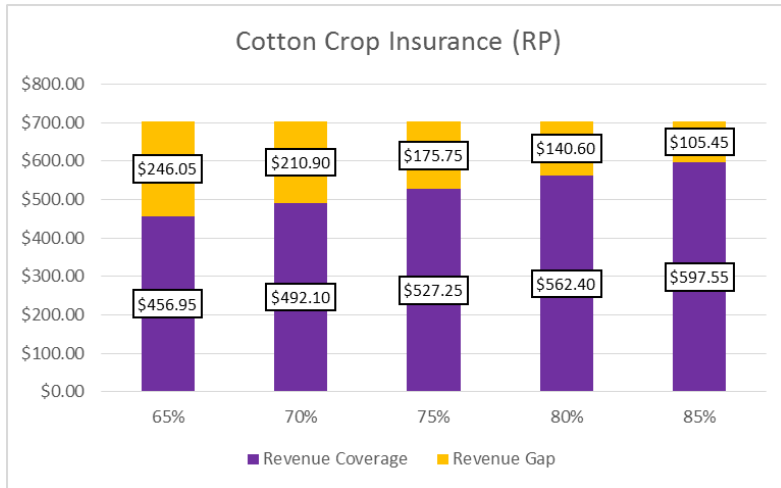


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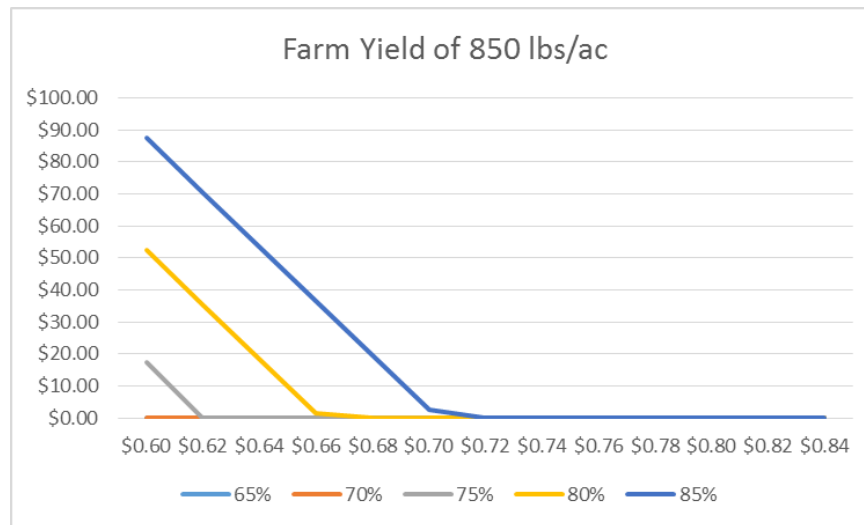


# Revenue Protection (RP) Crop Insurance

Coverage range illustration to determine indemnity trigger price for policy



Cotton					
Projected Price	\$0.74	\$0.74	\$0.74	\$0.74	\$0.74
Farm APH	950	950	950	950	950
Revenue Level	\$703.00	\$703.00	\$703.00	\$703.00	\$703.00
Coverage Level	65%	70%	75%	80%	85%
Revenue Coverage	\$456.95	\$492.10	\$527.25	\$562.40	\$597.55
Revenue Gap	\$246.05	\$210.90	\$175.75	\$140.60	\$105.45
Actual Yield	850	850	850	850	850
Price to Trigger	\$0.54	\$0.58	\$0.62	\$0.66	\$0.70
Harvest Price	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72
Yield to Trigger	634.7	683.5	732.3	781.1	829.9







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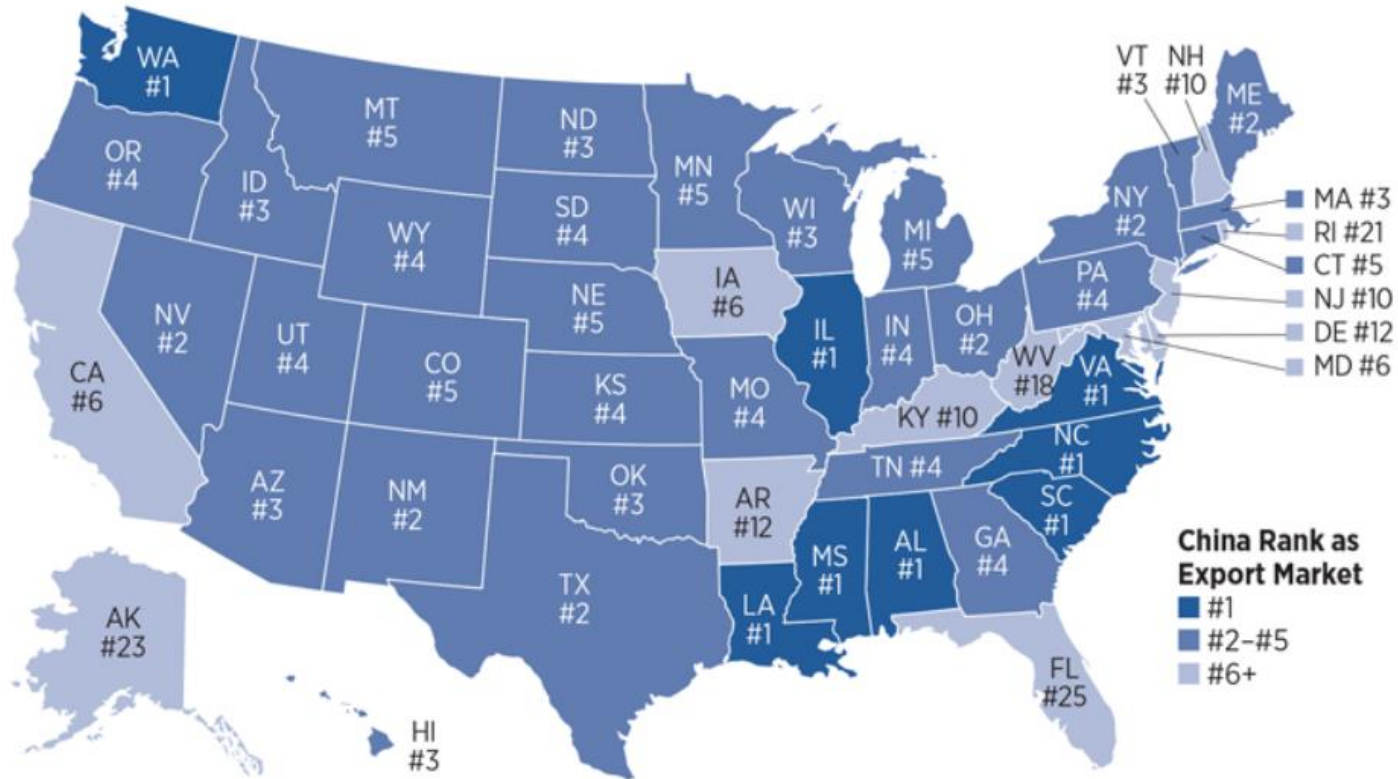
**Louisiana State University Agricultural Center**

Louisiana Agricultural Experiment Station / Louisiana Cooperative Extension Service

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# The Importance of China to State Ag Exports

*How China ranks as an agricultural export market, by state*



**SOURCE:** U.S. Department of Agriculture, Foreign Agricultural Service, "Global Agricultural Trade System," <https://apps.fas.usda.gov/gats/default.aspx> (accessed August 8, 2018).

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