Corn & Soybean Outlook: Delayed Soybean Planting Decisions: June 17 Edition

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June 17, 2019 USDA Crop Progress Report

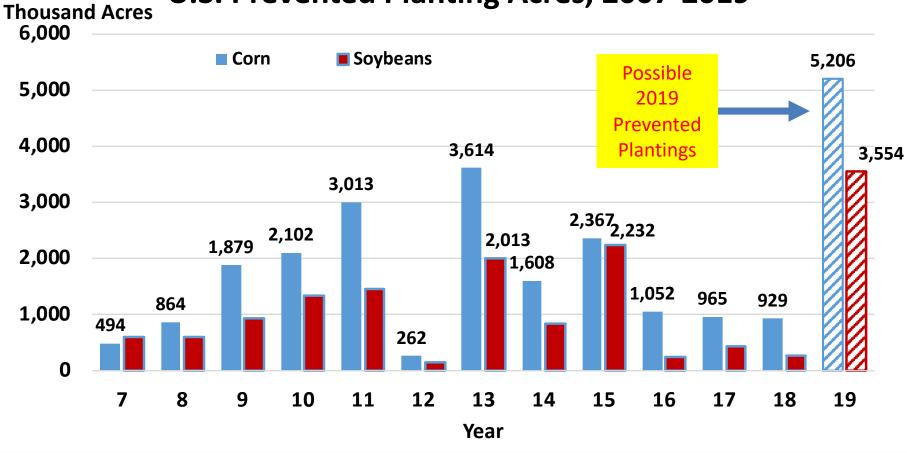
- U.S. (18 States) 92% of Corn Planted
 - Indiana 84%, Illinois 88%, Ohio 68%, Wisconsin 87%
- U.S. (18 States) 77% of Soybeans Planted
 - Indiana 64%, Illinois 70%, Ohio 46%, Missouri 57%

Delayed Corn & Soybean Planting Throughout the Corn Belt

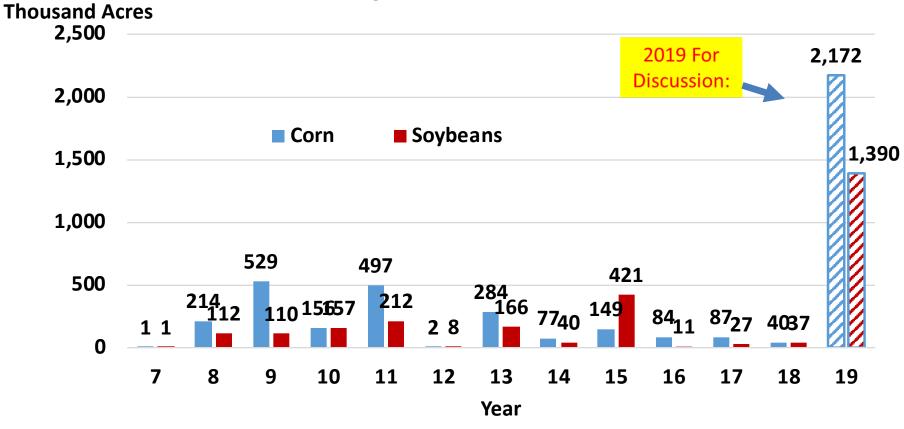
The situation

- As of 6/9, approximately 15.8 (17% of March intentions) million acres of intended U.S. corn acreage not planted
- As of 6/9, approximately 33.8 (40% of March intentions) million acres of intended U.S. soybean acreage not planted
- As of 6/16, Crop Progress report said U.S. Corn Planting was 92% complete
- Does that mean 47% of the 15.8 million corn acres were planted last week?
- How much planting progress was really made last week?
- USDA's *Crop Progress* report is designed to indicate when farmers quit planting corn, not the same as actually completing their March intentions





Prevented Planting Acres in Illinois, Indiana & Ohio



2019 Possible Unplanted Acres by % and Total??

| | Percent o | Percent of Intentions | | Possible Unplanted Acres?? | |
|----------|-----------|-----------------------|-----------|----------------------------|--|
| | Corn | Soybeans | Corn | Soybeans | |
| Illinois | 8.9% | 5.6% | 997,000 | 397,000 | |
| Indiana | 10.9% | 7.0% | 598,000 | 589,000 | |
| Ohio | 16.5% | 8.2% | 577,000 | 404,000 | |
| | | | 2,172,000 | 1,390,000 | |

These estimates are for discussion...USDA likely to resurvey key states for August *Crop Production report*

2019 U.S. Planted Acreage Estimates (Million Acres)

| | <u>Corn</u> | <u>Soybeans</u> |
|------------------------------|-------------|-----------------|
| USDA March Intentions | 92.8 | 84.6 |
| Prevent Plant | -5.2 | -3.5 |
| Switch Corn to Beans | -2.3 | +2.3 |
| Million Acre Shift | -7.5 | -1.2 |
| 2019 Net Planted Estimate | 85.3 | 83.4 |

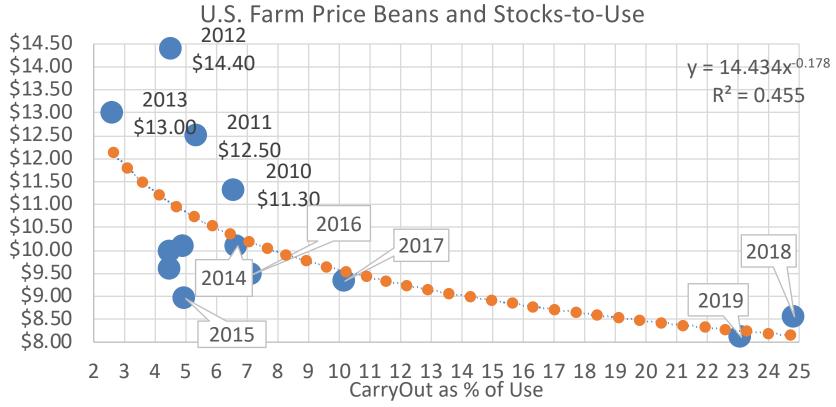
| | USDA | USDA | Purdue | Purdue vs |
|-------------------------|---------------|----------------|----------------|-----------------|
| | <u>May 10</u> | <u>June 11</u> | <u>June 17</u> | USDA May |
| Planted Acres | 92.8 | 89.8 | 85.3 | -7.5 |
| Harvested Acres | 85.4 | 82.4 | 78.3 | -7.1 |
| Yield per acre | 176.0 | 166.0 | 168.0 | -8.0 |
| Total Production | 15,030 | 13,678 | 13,161 | -1,869 |
| Stocks/Use % | 16.9 | 11.8 | 9.6 | |
| | \$3.30 | \$3.80 | \$4.67 | |

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Assuming 78.3 Million Harvested Corn Acres in the U.S At Various Yield Estimates

| Yield/Acre | 170 | 168 | 166 | 164 |
|------------------------|--------|-----------------------------------|-------------------------|--------|
| Total Production | 13,318 | 13,161 | 13,005 | 12,848 |
| Carryout (Billion Bu.) | 1.43 | 1.35 | 1.25 | 1.13 |
| Stocks/Use % | 10.1 | 9.6 | 8.9 | 8.1 |
| Est'd. U.S. Avg. Price | \$4.48 | \$4.67 Purdue Current Dec Futures | \$4.91 \$4.68 | \$5.25 |

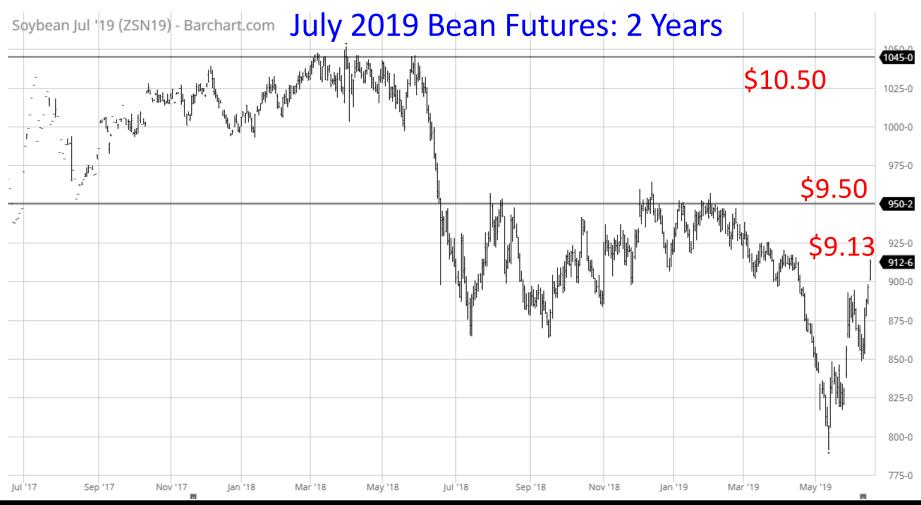
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Current bean stock/use above 20% is so large that even somewhat smaller acres and 3 bushel yield reduction only drops stocks/use to about 17% giving U.S. farm price in the high \$8.00 to low \$9.00. It will take bigger reductions in acreage and/or yield to move beans significantly higher!







Implications for Prices!

- Corn prices will need to increase to a level to ration a short supply
- How much is still to be determined
- Markets are talking "short production" now and production uncertainty will continue through the summer/fall
- Summer/fall weather really matters
- Once supply is better known, markets will consider demand which is overall weak
- Weather matters for beans as well
- But soybean prices have only a small probability of needing to ration usage. The exception could be a negotiated settlement with China with an agreement to buy large volumes of U.S beans.

Review: Late Planting Soybean Insurance Coverage

Soybeans in Indiana

- Final Planting Date of June 20 for full insurance coverage is rapidly approaching
- Can still plant & insure soybeans from June 21 through July 15, but coverage reduced
- Insurance coverage declines 1%/day during the June 21-July 15 period
- Example: Coverage for soybeans planted June 25th would be reduced by 5%
 - 85% coverage becomes 80.75% coverage (95% X 85% = 80.75%), but you still pay the 85% premium

Current Planting Options for Acreage Intended for Soybeans

- 1. Go ahead and plant soybeans,
 - a) Risk of reduced yields
 - b) Insurance coverage declining 1% per day, starting on June 21
- 2. Take the full soybean prevented planting payment (beginning June 21), which is equal to 60% of original soybean revenue guarantee, and avoid soybean production variable costs

Soybean Prevented Planting Example

- 1. Assume Trend Adjusted-APH soybean yield of 65 bushel per acre
- 2. Crop insurance projected price of \$9.54 per bushel (Feb. avg. of Nov. futures)
- 3. Revenue Protection (RP) coverage level of 85%
- 4. Computation of revenue guarantee and prevented planting payment:
 - Revenue guarantee = (65 bu. x \$9.54 x 0.85) = \$527.09 per acre
 - Full Prevented Planting (PP) Payment = \$527.09 x 0.60 = \$316.25 per acre
 - PP payment minus land maintenance cost of \$30/acre = \$286.25 per acre
 - Compare this value to your return above variable costs from growing beans

Prevented Planting Compared to Planting Soybeans Profitability

- Scenario One
 - Take full prevented planting payment for soybeans & leave land idle
- Scenario Two
 - Crops planted on June 20, 25% decline in soybean yields
 - Full crop insurance coverage is still available for soybeans
 - June 20 is the last day for full soybean crop insurance coverage
- Scenario Three
 - Crops planted on June 30, 35% decline in soybean yields
 - Soybean crop insurance coverage declines 10% (1% for each day past 6/20)

Possible Planting & Yield Scenarios High Productivity Soils in Indiana, Per Acre Costs & Yields

| | Scenario One <u>Prev. Planting</u> | Scenario Two <u>20-June</u> | Scenario Three <u>30-June</u> |
|-----------------------------|--|-----------------------------------|-------------------------------------|
| Variable Cost for Soybeans | \$30 (land maint.) | \$270 | \$274 |
| Reduction in Soybean Yields | NA | 25% | 35% |
| Soybean Yield | NA | 49 | 42 |

Possible Planting & Yield Scenarios (85% RP Coverage) High Productivity Soils in Indiana

| | Scenario | Scenario | Scenario |
|--|--|-------------|----------|
| | One | Two | Three |
| | Prev. Plant. | June 20 | June 30 |
| Nov. 2019 Soybean Futures | \$9.40 | \$9.40 | \$9.40 |
| Mid-Oct WC IN Soybean Basis | \$0.64 | \$0.64 | \$0.64 |
| Expected Fall Delivery Cash Soybean Price | \$8.76 | \$8.76 | \$8.76 |
| Expected Soybean Yield | NA | 49 | 42 |
| Expected Gross Soybean Revenue | \$316 | \$429 | \$368 |
| Expected Net Soybean Revenue | \$286 At 75% insurance coverage, yo | \$159 ur | \$94 |
| Planting Soybeans Advantage | net PP revenue drops to \$249 | | |
| Over Prevented Planting Payment | NA NA | -\$127 | -\$192 |

What Are We Missing in This Analysis?

Additional Considerations

- 1. Need to plant to qualify for MFP_2019 payment(s)
 - How large will MFP_2019 payment(s) be?
 - If MFP_2019 is \$50/acre, by how much do soybean prices need to rally to make planting soybeans competitive with prevented planting payments?
 - » On June 20th with 49 bu. expected yield
 - (\$127-\$50)/49 = \$1.57 rally needed in Nov. soybean futures with -\$0.64 fall basis
- 2. If you plant, you qualify for Harvest Price Option (HPO). This is not as important as it is for corn. Current Nov. soybean futures are still below Feb. crop insurance projected price.
- 3. If you plant soybeans late, it's likely to reduce your APH for 2020.

Download the slides from this video on our website

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Also, find links to delayed planting crop production management videos from Purdue Extension on our web site



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