# Crop Marketing Update: Know Your Revenue Streams

August 17, 2022

Dr. S. Aaron Smith, Associate Professor and Extension Economist
Department of Agricultural and Resource Economics
University of Tennessee Institute of Agriculture

Email: <u>aaron.smith@utk.edu</u>

Web Page: <a href="https://cropeconomics.tennessee.edu">https://cropeconomics.tennessee.edu</a>





# Trading Ranges

- December Cotton
  - -82.5 to 133.7 cents
- December Corn
  - \$5.62 to \$7.66
- November Soybeans
  - \$12.89 to \$15.84
- July 2023 Wheat
  - -\$7.91 to \$11.58

Growing season futures price ranges.

























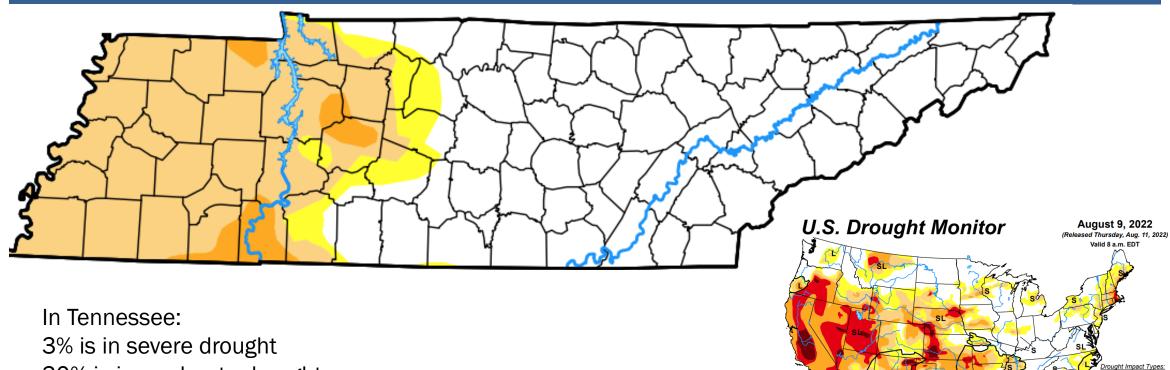
### **August WASDE Summary**

- National corn, soybean, upland cotton, and winter wheat yields were projected at 175.4 bu/acre, 51.9 bu/acre, 837 lbs/acre, and 47.9 bu/acre.
- National estimated planted (and harvested) acreage for corn, soybeans, and cotton were: 89.8 million acres (81.8 million); 88.0 million acres (87.2 million); and 12.48 million acres (7.13 million). Cotton abandonment is projected at 42.8%, well above previous projections.
- Tennessee yields: 130 bu/acre (corn), 44 bu/acre (soybean), 869 lbs/acre (cotton), and 71 bu/acre (wheat).
- Tennessee harvested acres: corn 920,000 acres; wheat 365,000; 1.77 million; and cotton 315,000.





# U.S. Drought Monitor, August 9, 2022



3% is in severe drought 30% is in moderate drought 5% is abnormally dry

Drought is concentrated in the west.





SL

Richard Tinker

✓ Delineates dominant impacts
S = Short-Term, typically less than
6 months (e.g. agriculture, grasslands)

L = Long-Term, typically greater than

D3 Extreme Drought

droughtmonitor.unl.edu

#### Overview

- Cost of Production
- Production Estimates
- Crop Insurance
- Pre-Harvest Sales
- Gross Revenue Outcomes
- Current Position
- Other Considerations







## **Update Your Cost of Production**

- Budgeted investment in the 2022 corn crop varied tremendously.
  - How much of the inputs were applied and what are the costs incurred to date?
  - What are the projected remaining costs to bring the crop to market?

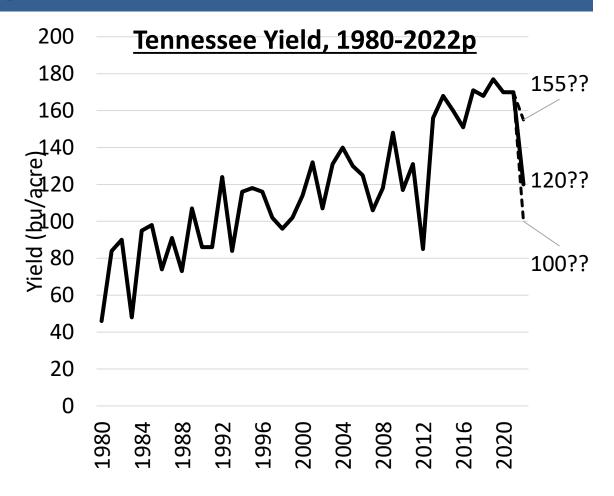
Variable Expenses		\$/acre
	Seed	115.00
	Fertilizer & Lime	300.00
	Chemical	65.00
	Crop Scout or Consultant	15.00
	Repair & Maintenance	43.00
	Fuel, Oil & Filter	40.00
	Operator Labor	15.00
	Crop Insurance	25.00
	Operating Interest	25.00
Total Variable Expenses		643.00
Fixed Expenses		<u>\$/acre</u>
	Capital Recovery	125.00
	General Overhead	25.00
	Cash Rent	104.00
	Management Labor	25.00
Total Fixed Expenses		279.00
Total Expenses		922.00





## What are my current production estimates?

- Production estimates will be all over the map ranging from complete write offs to minimal yield losses.
  - Projecting a yield range will allow producers to estimate potential gross revenue.







# What is the base level of protection that is provided by your crop insurance policy?

- Communication with your crop insurance agent during a drought is essential.
- Know each insured unit's revenue guarantee.
  - For example, for corn, \$5.90 (projected price) x 175 (APH) x 80% provides a revenue guarantee of \$826/acre.
- Calculate your "Trigger Yield".
  - The yield where indemnity payments would commence.
    - December futures contract \$5.99 (\$826/\$5.99 = 138 bu/acre).
- Harvest price?
- Base level crop insurance protection should be considered when evaluating current and future market-based transactions.





#### **Pre-Harvest Sales**

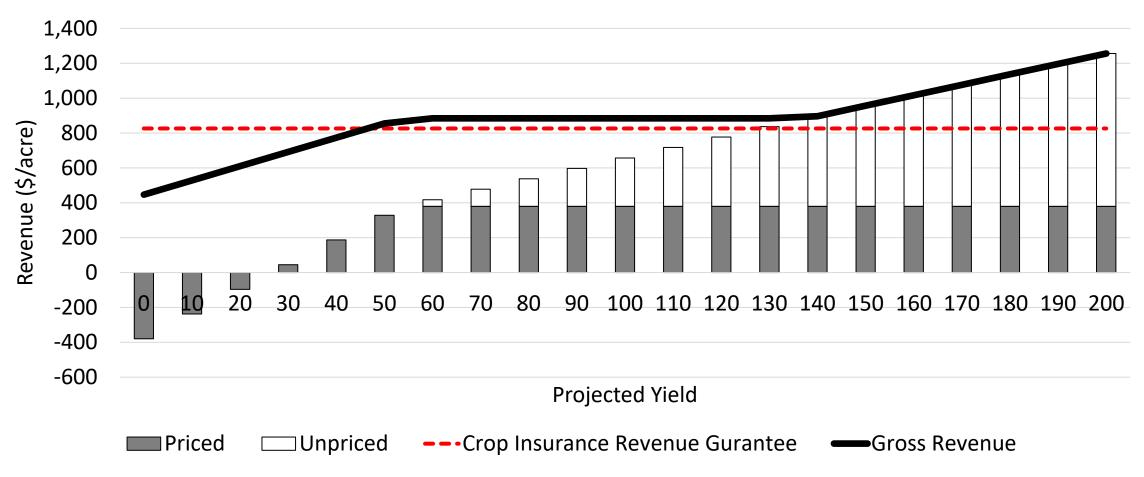
- How much production is currently priced?
- How was it priced?
  - Cash forward contracts, options etc.
- Are there quality concerns?
  - Mycotoxins
- Does forward priced production exceeds projected production?







#### **Gross Revenue Estimates**



Crop Insurance: Projected Price = \$5.90; APH = 175 bu; Buy-Up 80%; Revenue Guarantee \$826/acre; Trigger Yield 138 bu. Market: Current Harvest Futures Price = \$5.99; Priced 53.6 bu; Average Price Contracted \$7.08.





## **Current Position**

<b>Current Market Estimates</b>		
Acres	280	Acres
Current Harvest Futures Price	\$5.99	\$/bu
Basis	\$0.35	\$/bu
Projected Yield	100	bu/acre
Cost of Production	\$922.00	\$/acre
Crop Insurance Expected Actual Revenue	\$599.00	\$/acre
<b>Crop Insurance (Each Insured Unit)</b>		
APH	175	bu/acre
Projected Price	\$5.90	\$/bu
Buy-up	80%	%
Revenue Gaurantee	\$826.00	\$/acre
<u>Sales</u>	Bushels	Price
1-Mar-22	5,000	\$6.50
31-May-22	5,000	\$7.25
15-Jun-22	5,000	\$7.50
Total Sales	15,000	
Average Price		\$7.08

<b>Pricing Position</b>		
Estimated Production	28,000	bu
Priced	15,000	bu
Unpriced	13,000	bu
Projected Revenue		
Indemnity Payment	\$227.00	\$/acre
Pre-Harvest Sales	\$379.46	\$/acre
Harvest /Post Harvest Sales	\$294.36	\$/acre
Gross Revenue	\$900.82	\$/acre
Net returns	-\$21.18	\$/acre
Net returns	-\$5,930.00	\$

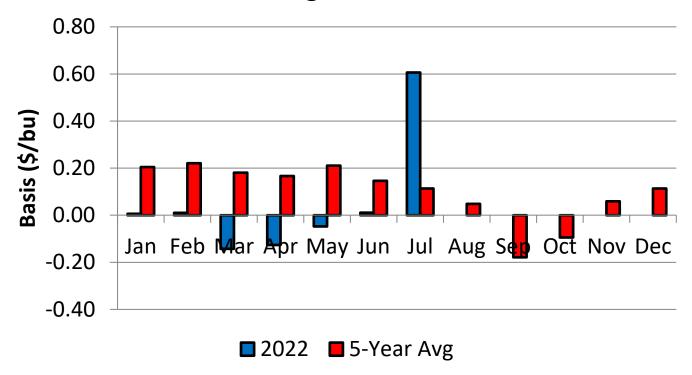




#### Other Considerations

- Forage / Feed
- Quality / Dockage
- Options Strategies
- Storage and Basis

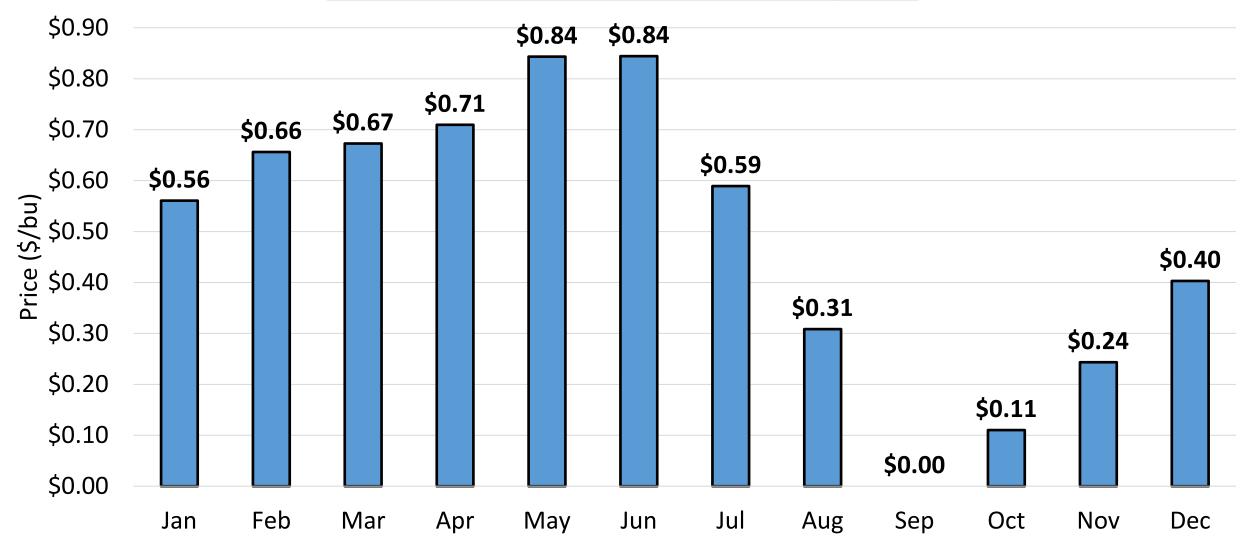
#### Northwest Tennessee Average Monthly Corn Basis (Elevators and Barge Points), 5-Year Average and 2022







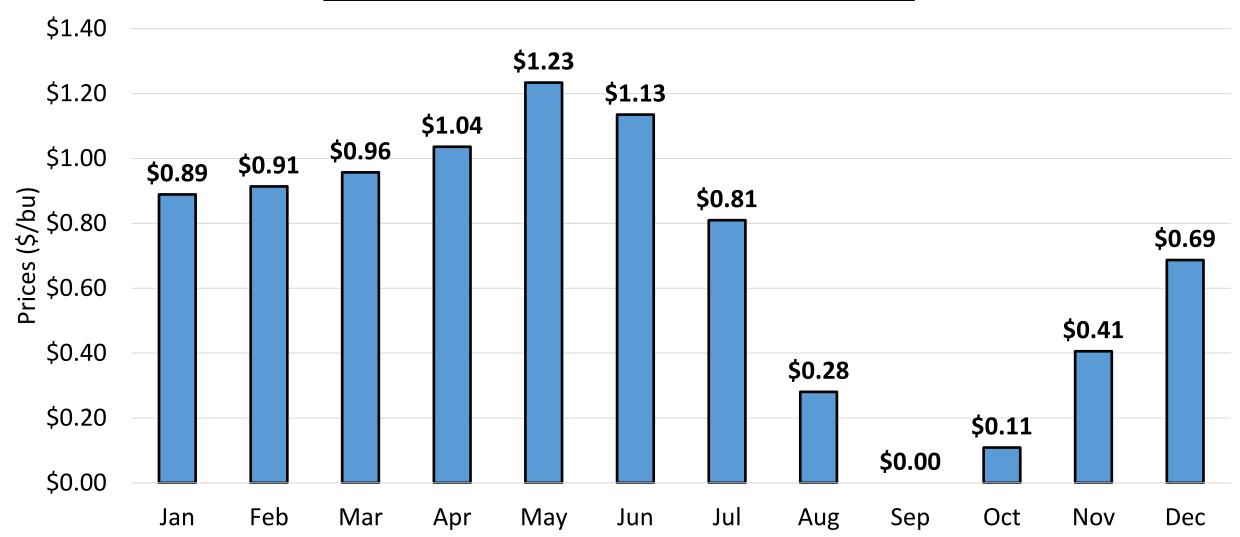
# Tennessee Corn Average Cash Price Improvement from September by Month, 2013/14 to 2020/21 Marketing Years







# Tennessee Soybean Average Cash Price Improvement from September by Month, 2013/14 to 2020/21 Marketing Years







Thank You!

August 17, 2022

Dr. S. Aaron Smith Associate Professor and Extension

**Economist** 

Department of Agricultural and Resource Economics

University of Tennessee Institute of Agriculture

Email: <u>aaron.smith@utk.edu</u>

Web Page: <a href="https://cropeconomics.tennessee.edu">https://cropeconomics.tennessee.edu</a>

#### SUPPORTING MATERIALS



