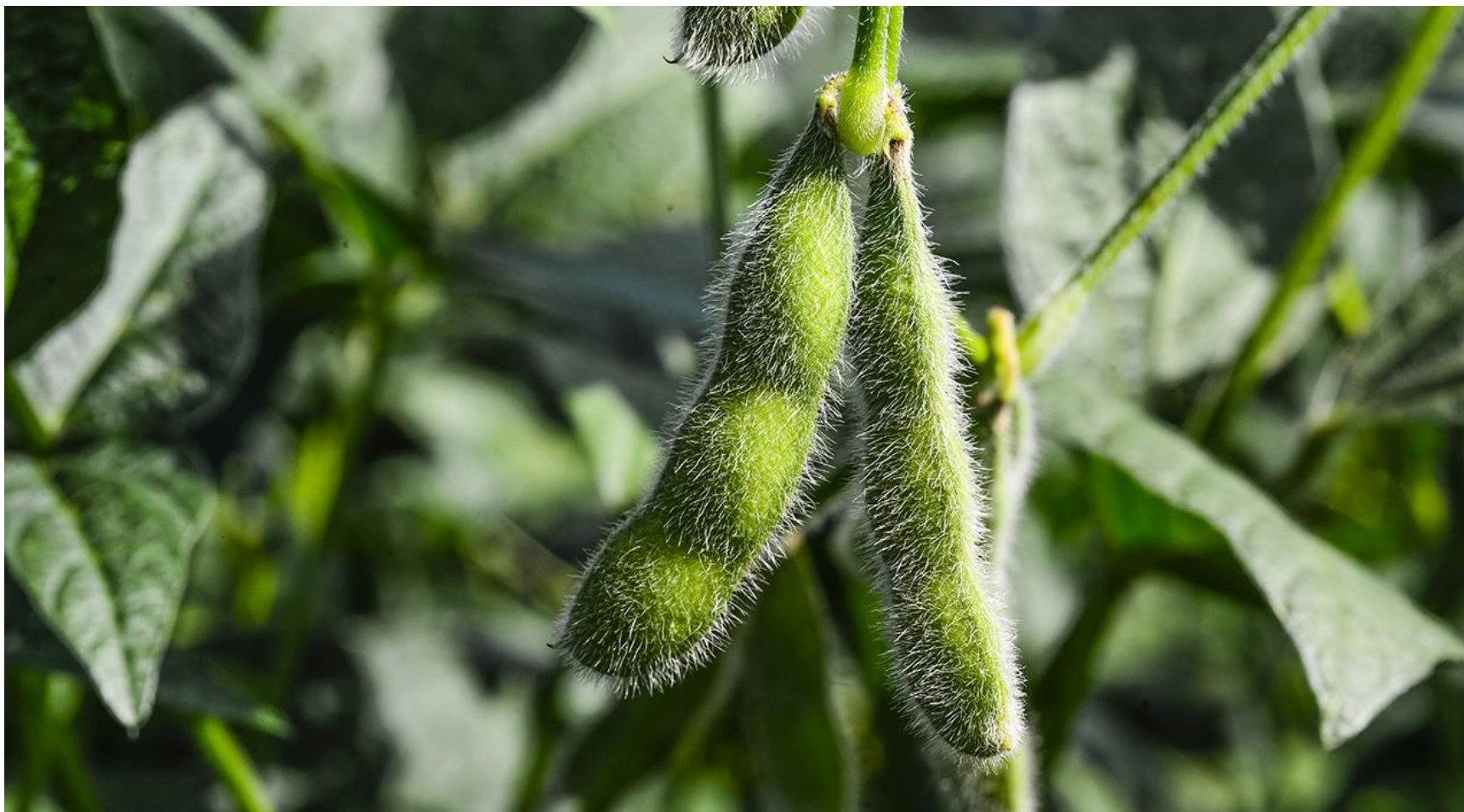


# Section N: Soybean Drying

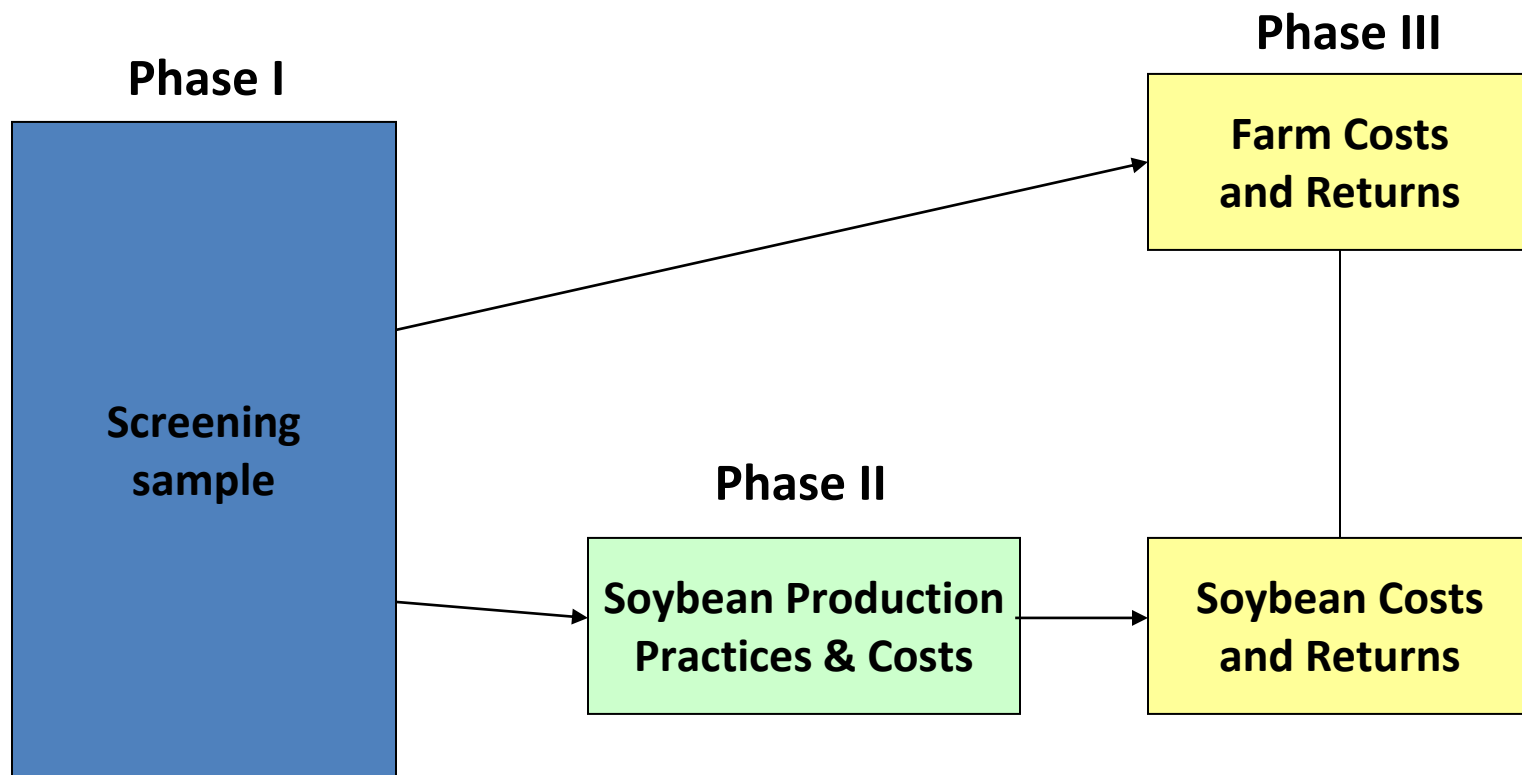


# Purpose

- This section collects data necessary to estimate drying costs associated with soybeans.
- Drying costs are part of the total costs of producing soybeans and will be added to the other costs collected in Phase 2 and Phase 3.



# Commodity Data in the 2023 ARMS



# Why Collect ARMS Commodity Data



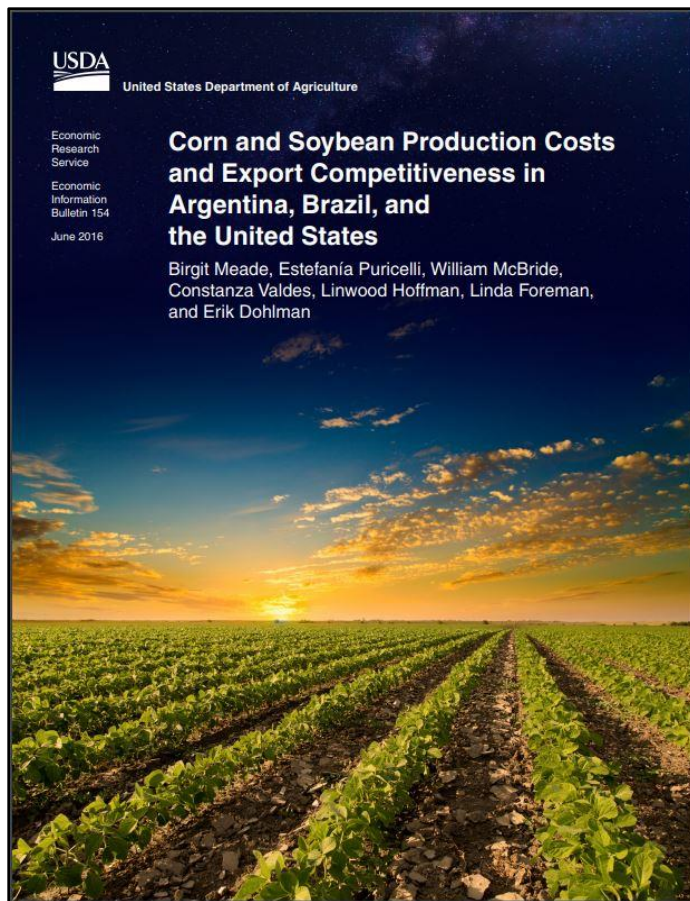
ARMS commodity data support cost-of-production reporting mandated in successive Farm Bill legislation since 1973—U.S. Code Title 7, Chapter 35 A, Subchapter II



ARMS commodity data support in-depth research into production agriculture issues important to commodity producers, consumers, and policy-makers

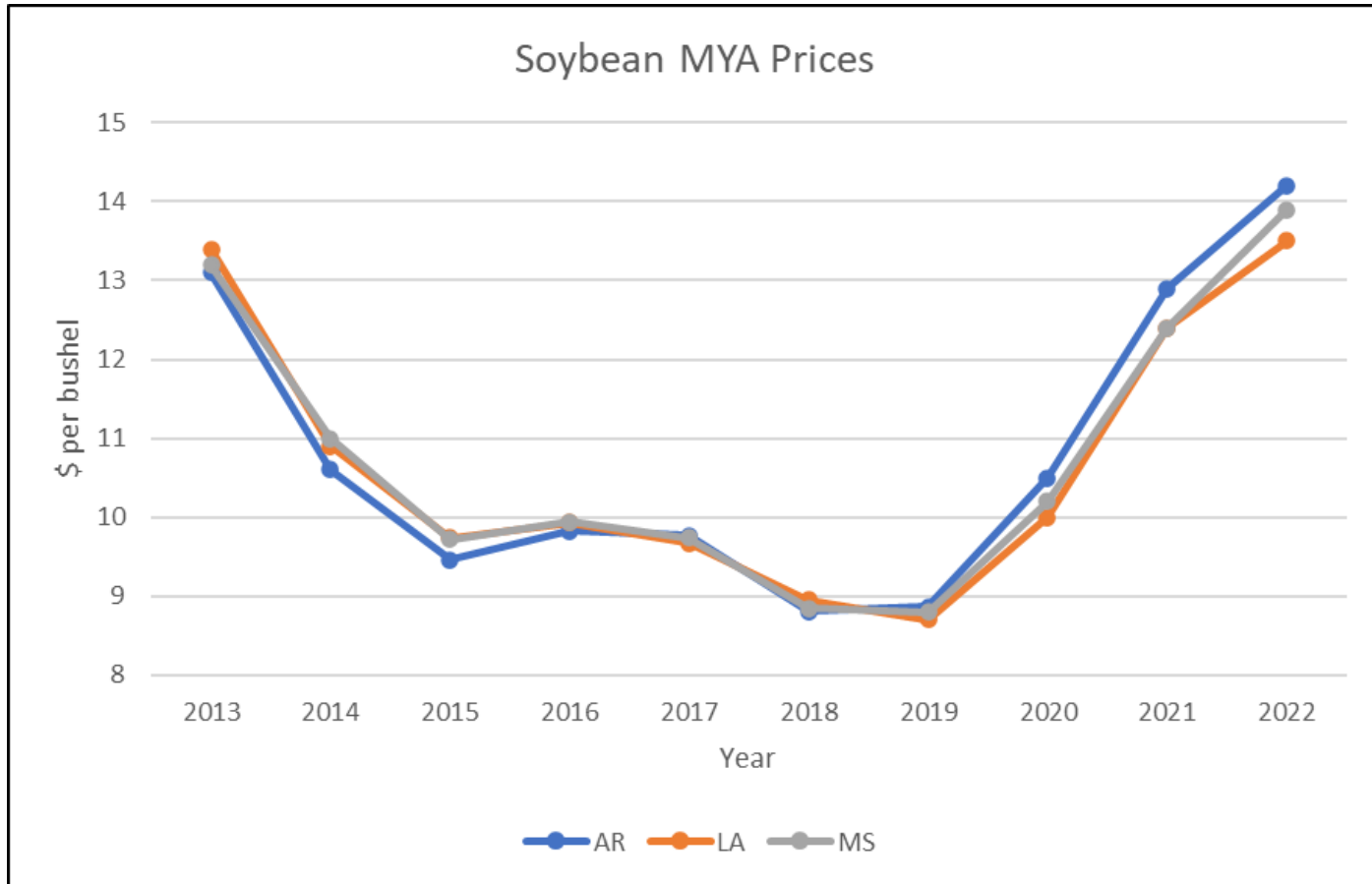


# Commodity Research Reports



# Section N: Soybean Drying

## Higher Soybean Prices in 2023



Source: National Agricultural Statistics Service, Agricultural Prices

# Section N: Soybean Drying

- All questions refer to drying the 2023 soybean crop.
- Crop harvested in 2023 - refer to total soybean production in Section B, item code 138

SECTION B ACREAGE, PRODUCTION, and CASH SALES										
<p>1. Were any crops harvested from this operation or did this operation receive any income from these crops in 2023? <i>(Include your landlord's share and crops grown under contract. Exclude crops grown on land rented to others.)</i></p> <p>0104 <sup>1</sup> <input type="checkbox"/> Yes - Continue <sup>3</sup> <input type="checkbox"/> No - Go to Item 3</p> <p>2. Report the acreage and production of crops harvested from this operation in 2023. Report quantity harvested in the unit specified, by crop. For income received from cash sales in 2023, report the dollar amount this operation received from any year's production after subtracting marketing expenses. <i>(Exclude contract sales or removals and landlord's share of sales in column 5.)</i></p>										
1 CROP	2 How many acres were HARVESTED?		3 What was the total production? <i>(Include landlord share and amount used on operation.)</i>			4 How much of this operation's share of the total production was (will be) used on this operation for feed, seed, etc.?			5 How much was received in Cash Sales from any year's production? <i>(Exclude contract sales and landlord's share.)</i>	
	(Acres)		(Total Amount)			(Amount Used on Operation)			(Dollars)	
<b>FIELD CROPS</b>										
Corn for grain . . . . .	0105		0106		Bu. 0107		Bu. 0108	\$		.00
Corn for silage or greenchop . . . . .	0109		0110		Tons 0111		Tons 0112	\$		.00
Cotton, all types . . . . .	0113		0114		Lbs.		0116	\$		.00
Peanuts . . . . .	0117		0118		Lbs. 0119		Lbs. 0120	\$		.00
Potatoes <i>(report sweet potatoes in all other crops)</i> . . . . .	0121	Acres Tenths	0122		Cwt. 0123		Cwt. 0124	\$		.00
Rice . . . . .	0125		0126		Cwt. 0127		Cwt. 0128	\$		.00
Sorghum for grain or seed . . . . .	0129		0130		Bu. 0131		Bu. 0132	\$		.00
Sorghum for silage . . . . .	0133		0134		Tons 0135		Tons 0136	\$		.00
Soybeans . . . . .	0137		0138		Bu. 0139		Bu. 0140	\$		.00

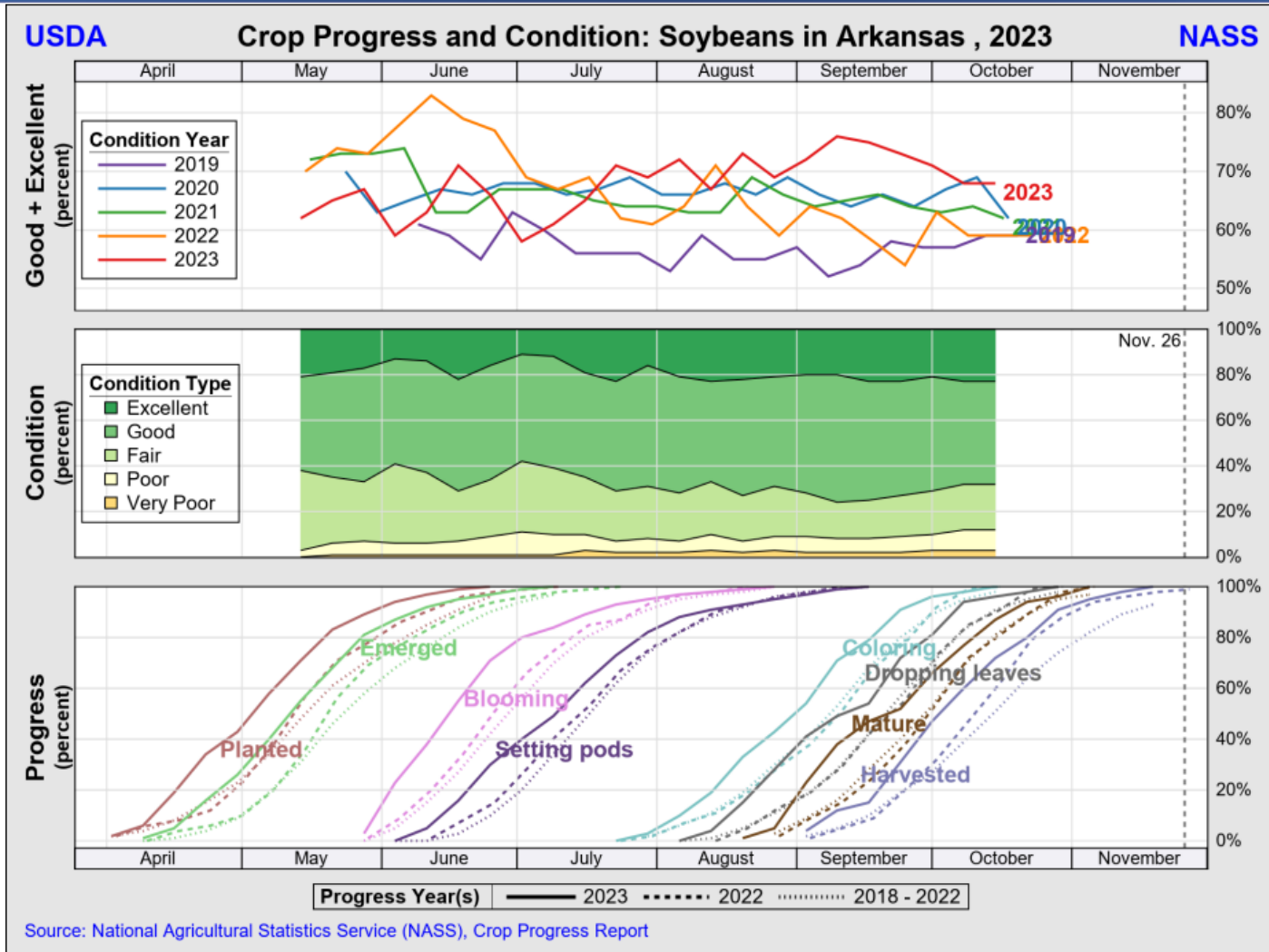
# Section N: Soybean Drying

- Q3: Soybean drying depends on weather conditions, planting dates, among other factors

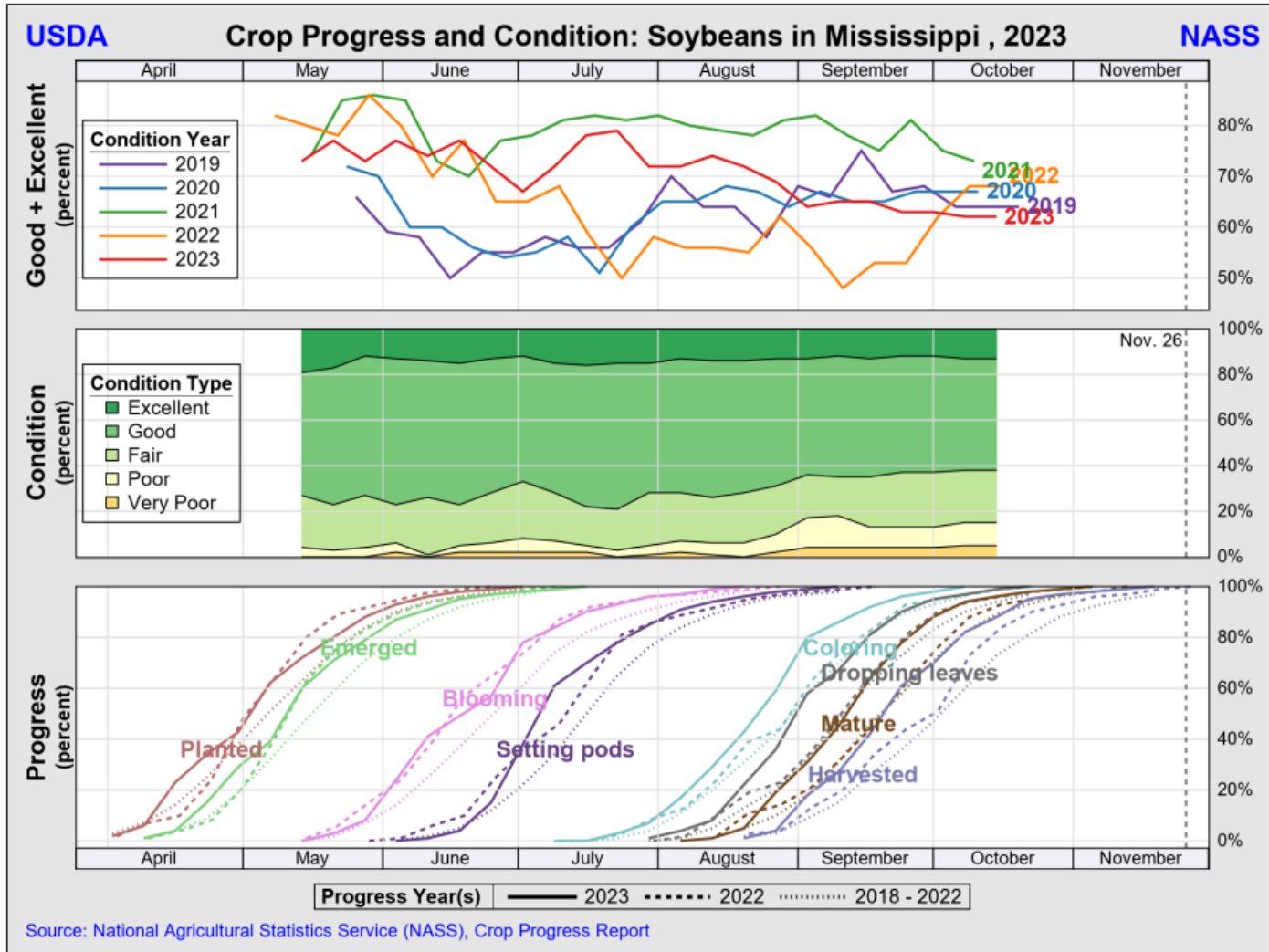
3. How much of the 2023 soybean crop was (please report on a dry basis)		Bushels	OR	Percent	
a. custom dried? . . . . .	1864		1865		%
b. dried by this operation? . . . . .	1870		1871		%
c. not dried? . . . . .	1876		1877		%
<b>a + b + c = 100%</b>					



# Section N: Soybean Drying

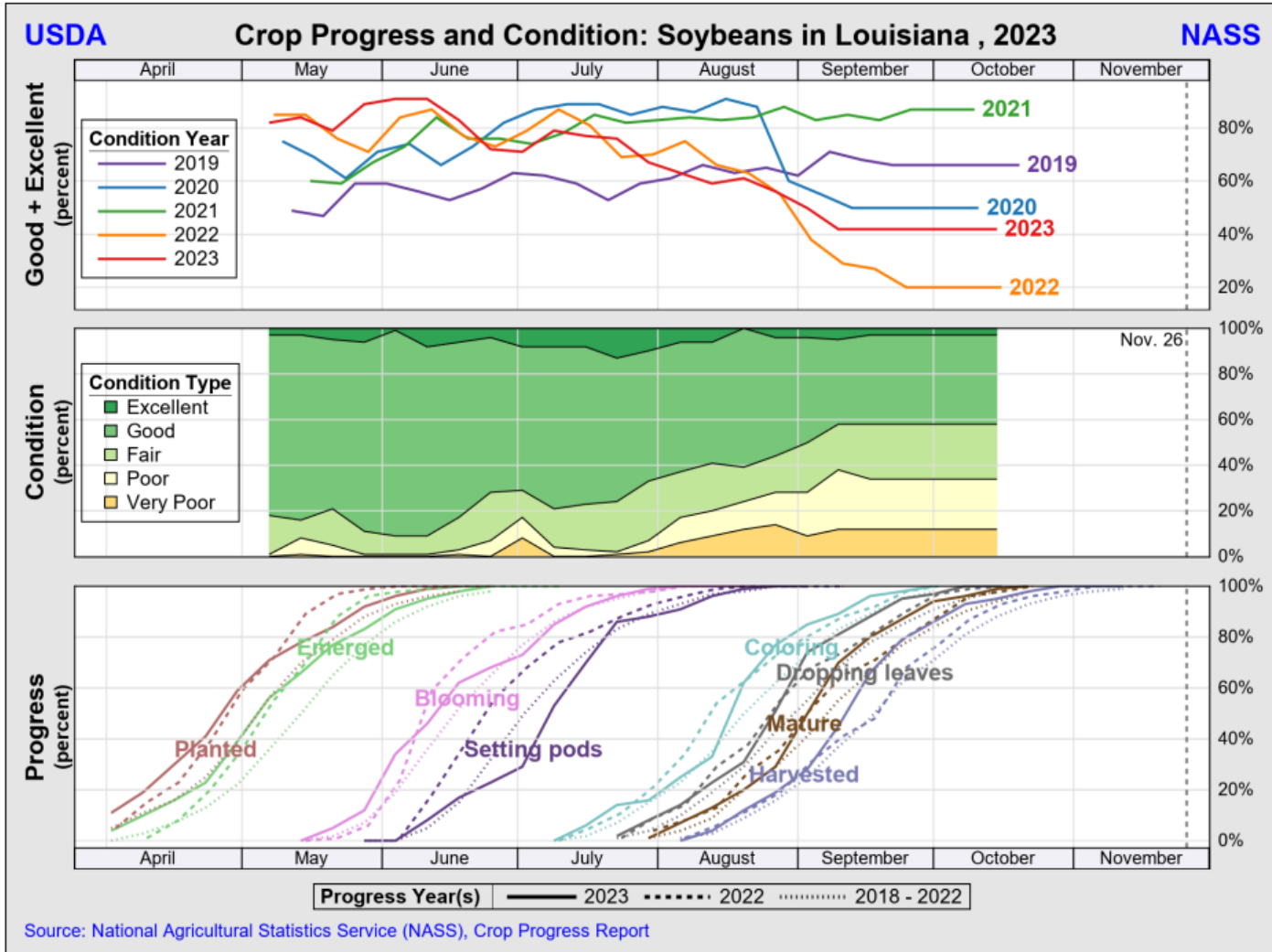


# Section N: Soybean Drying



[https://www.nass.usda.gov/Charts and Maps/Crop Progress & Condition/023/MS\\_2023.pdf](https://www.nass.usda.gov/Charts_and_Maps/Crop_Progress_&_Condition/023/MS_2023.pdf)

# Section N: Soybean Drying



[https://www.nass.usda.gov/Charts and Maps/Crop Progress & Condition/2023/LA\\_2023.pdf](https://www.nass.usda.gov/Charts_and_Maps/Crop_Progress_&_Condition/2023/LA_2023.pdf)

# Section N: Soybean Drying

- Q5: If unheated air was used to dry the crop, record as a code 5 - electricity.

5. What fuel type was used to dry the majority of the 2023 soybean crop? . . .	1 diesel 2 gasoline 3 LP gas 4 natural gas 5 electricity 6 other	. . . . . 1859	<table border="1"><thead><tr><th>Code</th></tr></thead><tbody><tr><td> </td></tr></tbody></table>	Code	
Code					

# Section N: Soybean Drying

- Q6: Report moisture percentage of soybeans at harvest—the optimum harvest moisture range of soybeans is 13 to 15 percent for maximum weight and minimum field losses

6. On average, what was the moisture percentage of the 2023 soybean crop at harvest? 2213

Percentage Points		
	.	%

# Section N: Soybean Drying

- Q8: Report continuous flow and batch drying facilities only if done outside of bins, otherwise report as bin facilities

8. What type of facility was used to dry the majority of the 2023 soybean crop? . . . . .

- |  |
|--|
| 1 bins   |
| 2 continuous flow dryer ( <i>outside of bins</i> ) |
| 3 batch dryer ( <i>outside of bins</i> )           |

. . . . . 1837

Code

# Section N: Soybean Drying

## On-Farm Drying Methods

As mentioned earlier, there are different factors that should be taken into account while drying soybeans. Therefore, drying systems that were designed for other grain can be used to dry soybeans but only after careful selection of the appropriate air temperature and relative humidity levels. Drying systems that facilitate extreme high temperatures for air-drying (130°F-150°F) should be avoided when drying soybeans to minimize seedcoat cracks. **Batch and continuous-flow drying systems are less desirable in drying soybeans because the heat input is difficult to reduce, not to mention they require more handling than is required for in-bin drying systems.** Consequently, bin-drying systems, i.e., natural-air drying and low-temperature drying, are usually the best options for drying soybeans.

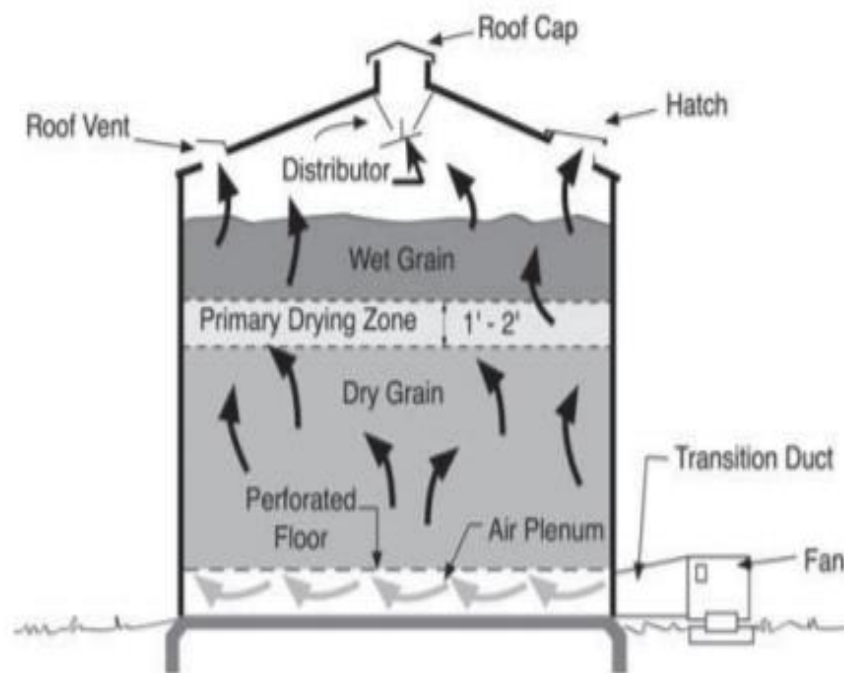


Figure 15-4. Natural-air drying bin.

# Questions?

