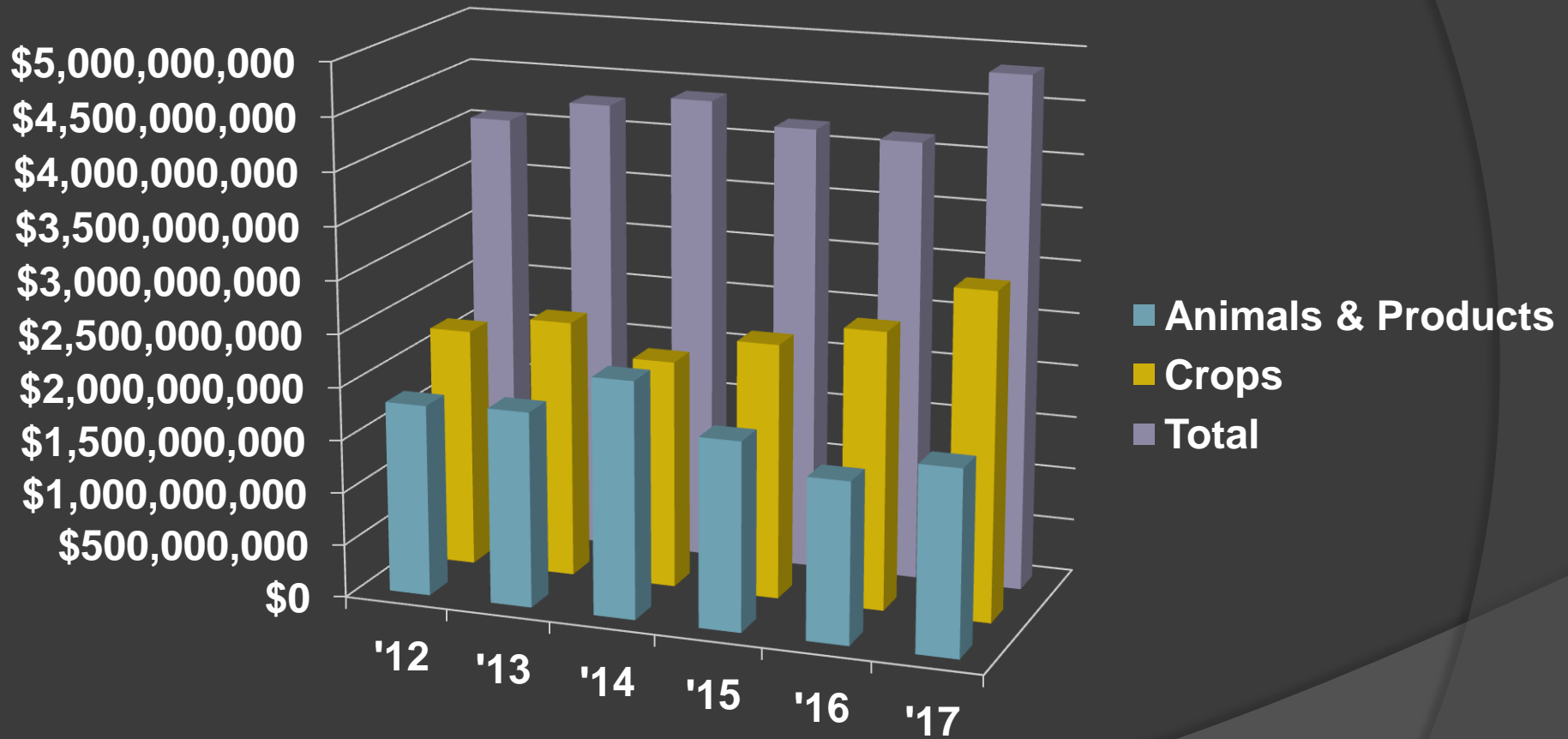
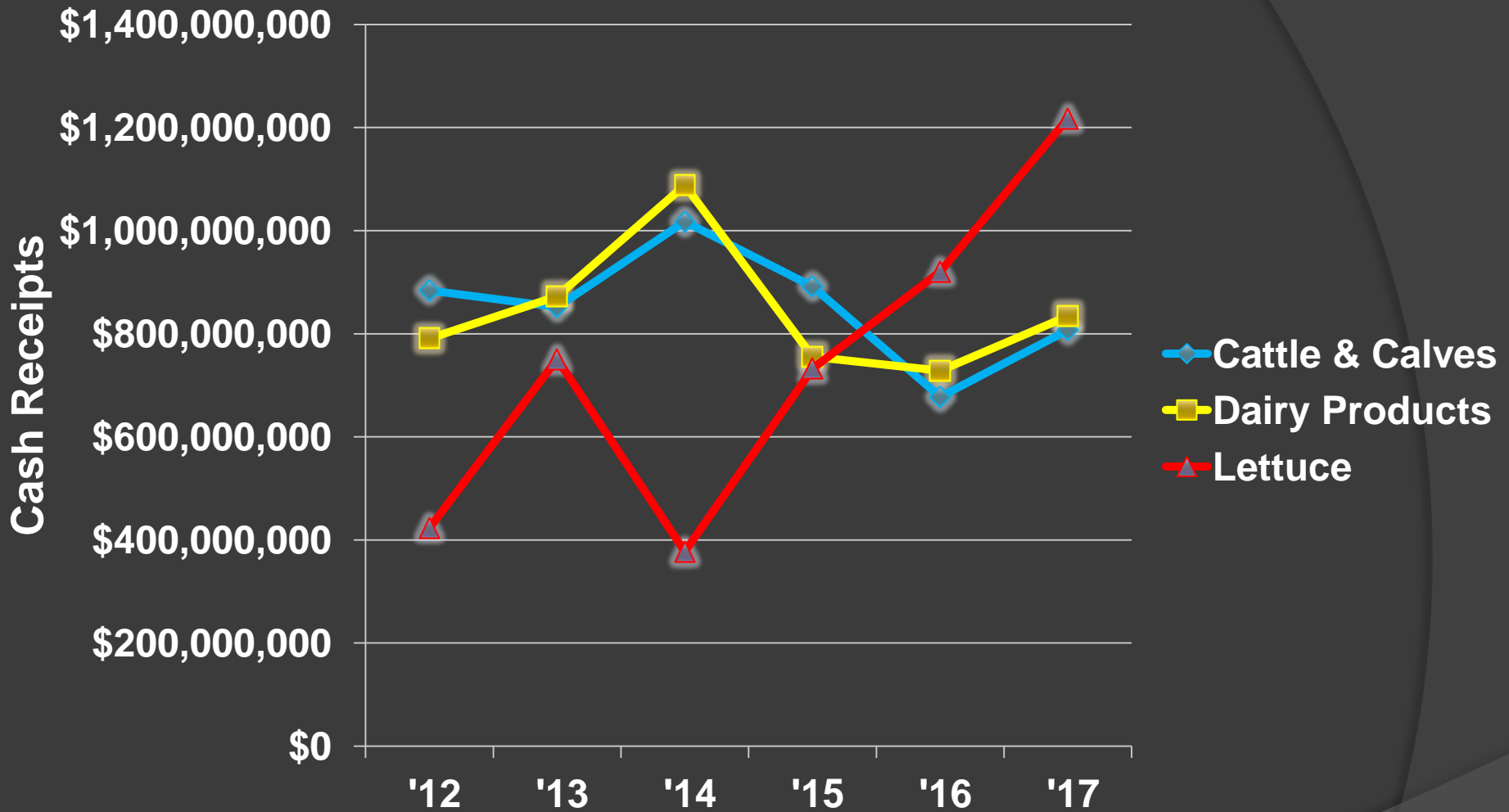


# Arizona Ag Commodities

**Larry Kreger Jr.**  
**Credit Analyst**  
**Farm Credit West**

# Cash Receipts by Sector



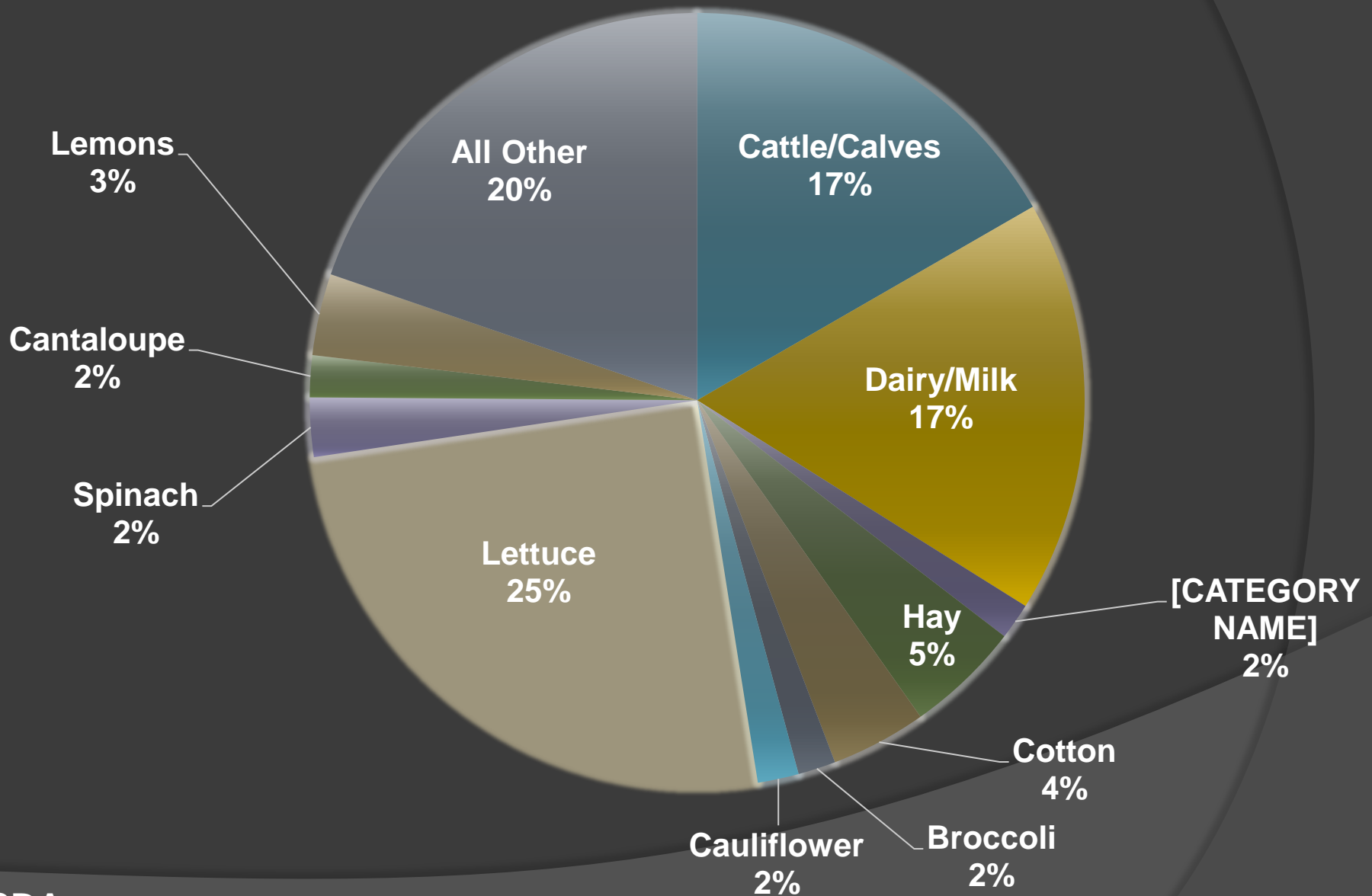


**Cattle & Calves = 21% decrease in receipts from 2014-2017**

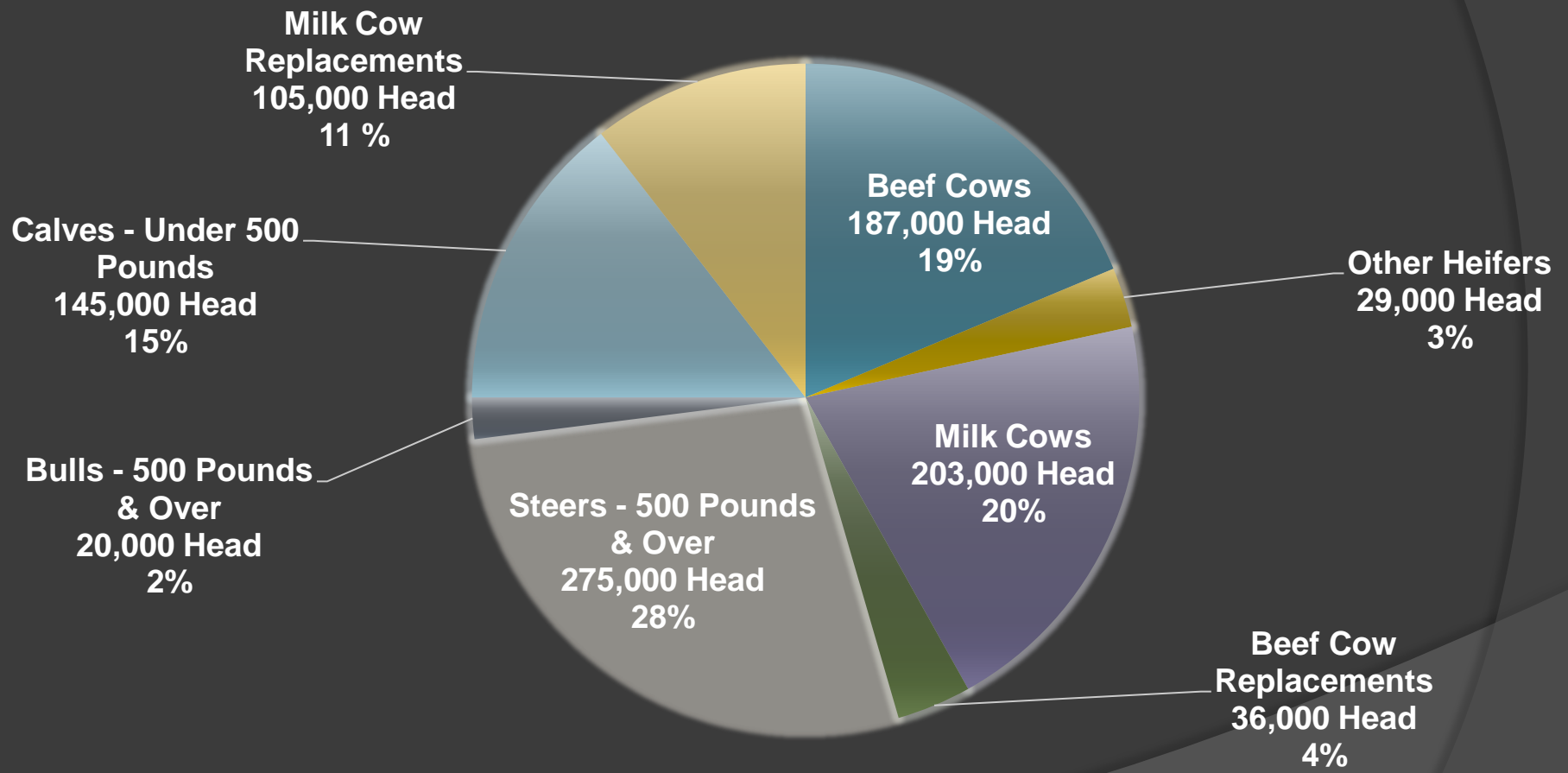
**Dairy Products = 23% decrease in receipts from 2014-2017**

**Lettuce = 323% increase in receipts from 2014-2017**

# 2017 Cash Receipts by Commodity

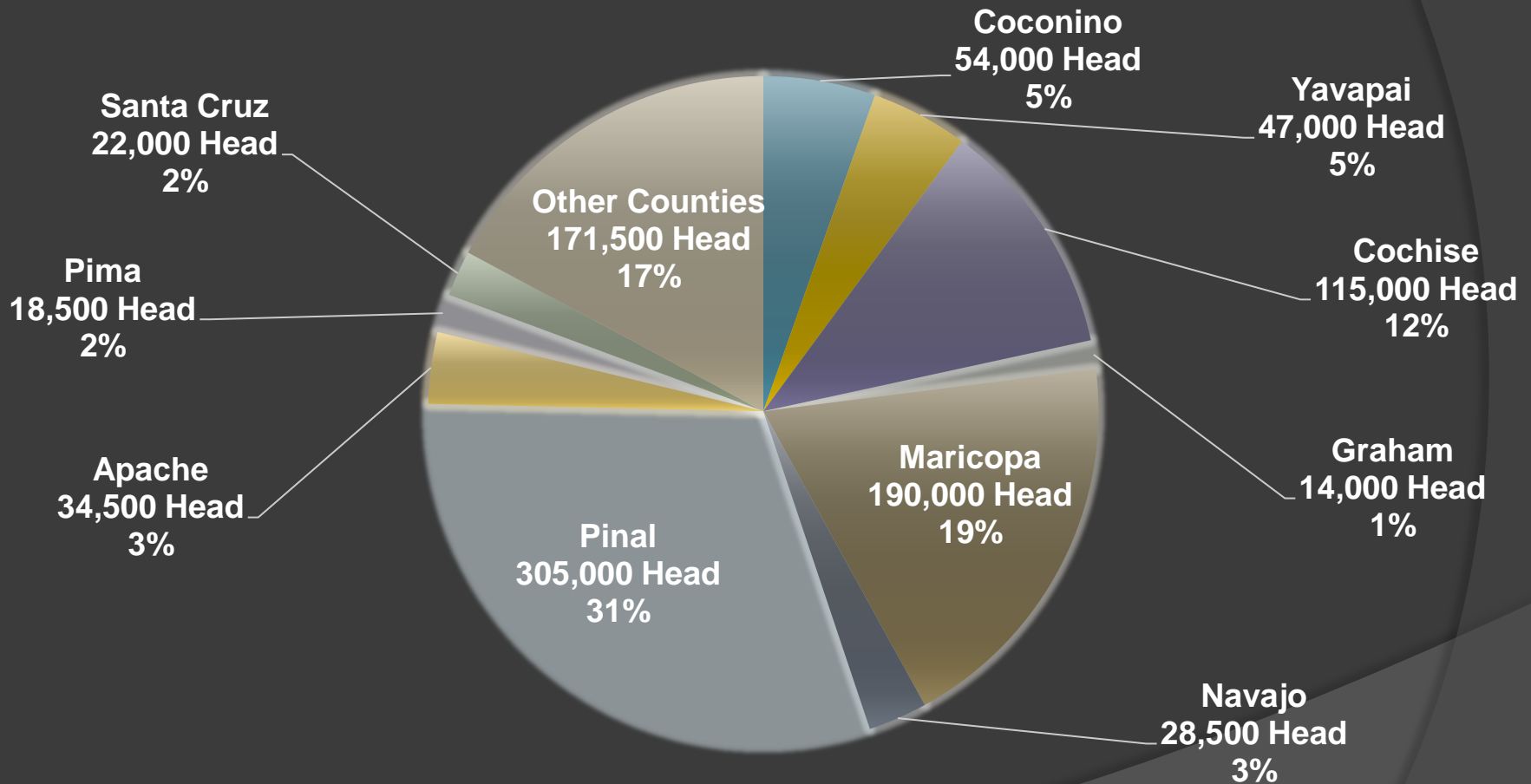


# Cattle Inventory – 01/01/18



**Total Inventory = 1,000,000 Head**

# 01/01/18 Cattle Inventory by County



**Total Inventory = 1,000,000 Head**

# 2018 Cattle on Feed

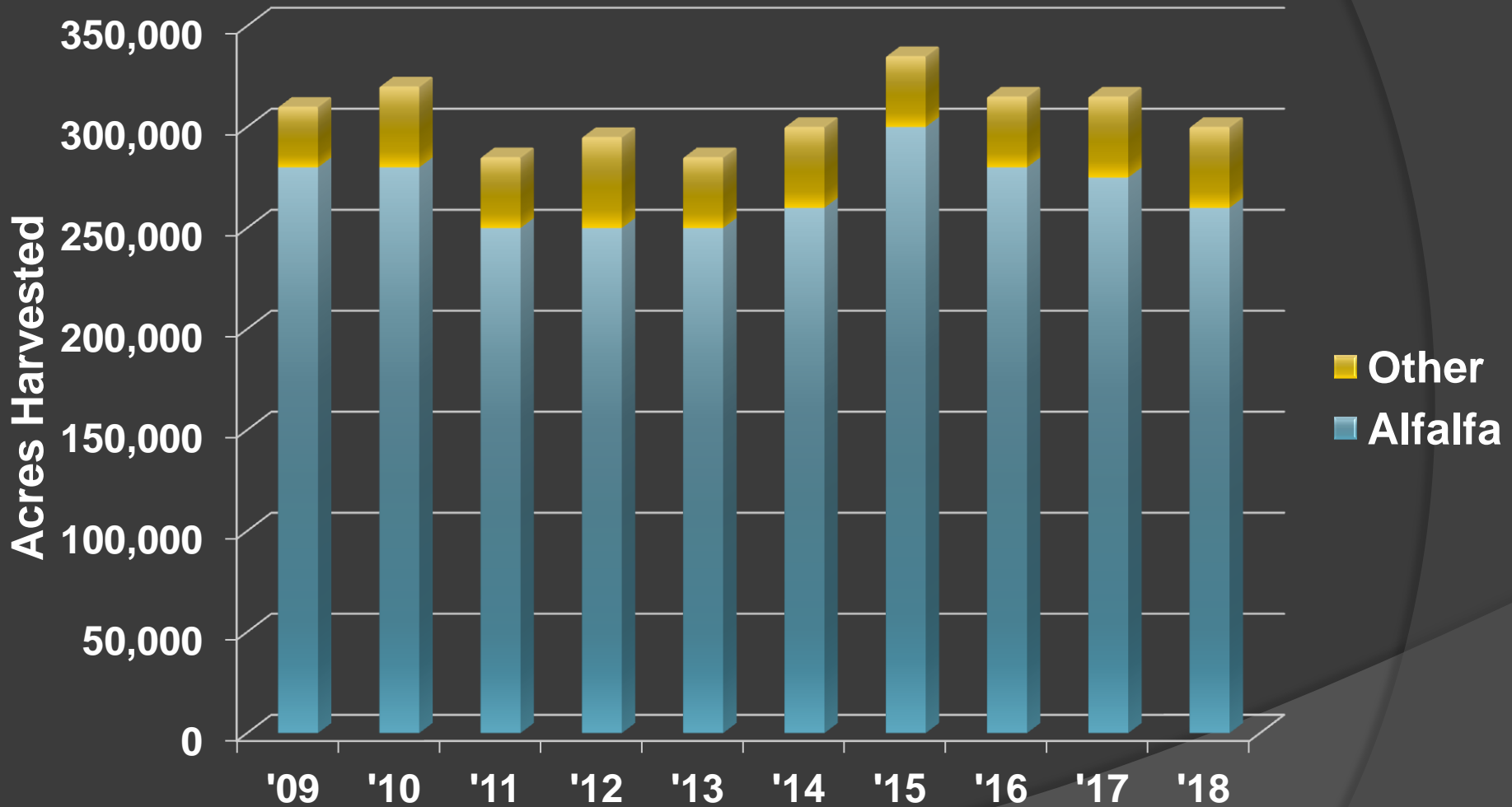
**The number of cattle and calves on feed for the slaughter market in Arizona feedlots with a capacity of 1,000 head or larger was estimated at 289,000 head as of 12/31/18. This total was one percent above the prior month's inventory and 11 percent above the same time period a year ago.**

# Top 10 Commodities in 2017 by Acres Harvested (Reported)

- 1) Hay – 315,000 Acres (unchanged from 2016)
- 2) Cotton – 174,000 Acres (+31% from 2016)
- 3) Wheat – 107,000 Acres (+4 from 2016)
- 4) Corn for Grain – 32,000 Acres (-36% from 2016)
- 5) Corn for Silage – 32,000 Acres (-27% from 2016)
- 6) Head Lettuce – 39,200 Acres (+7% from 2016)
- 7) Romaine Lettuce – 28,000 Acres (+7% from 2016)
- 8) Barley – 17,000 Acres (+6% from 2016)
- 9) Cantaloupe – 15,700 Acres (-1% from 2016)
- 10) Spinach – 12,800 Acres (+14% from 2016)

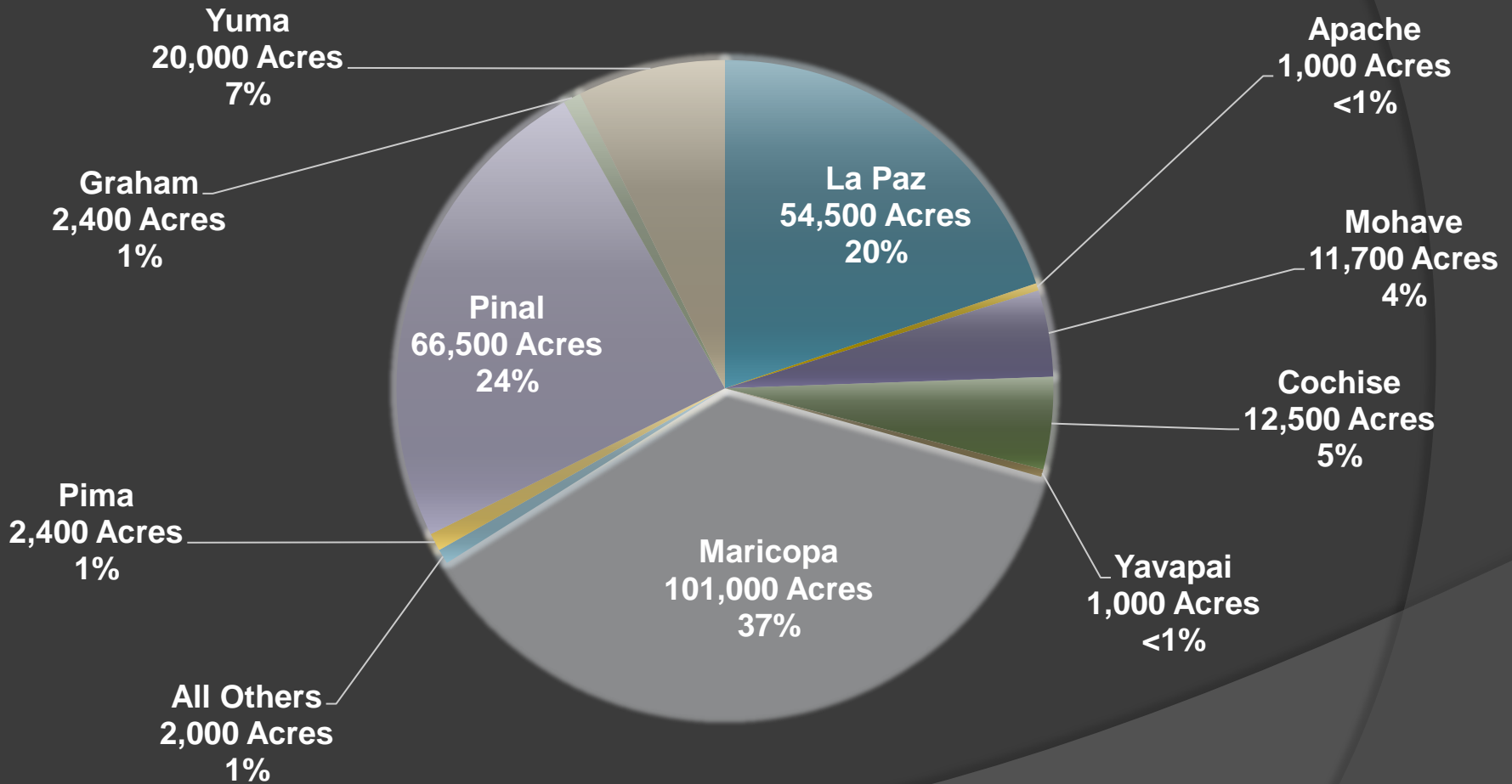


# Hay



**Trend = 5% decline from 2016-2018**

# 2017 Alfalfa Hay Acres Harvested by County



**275,000 Total Acres Harvested in 2017**

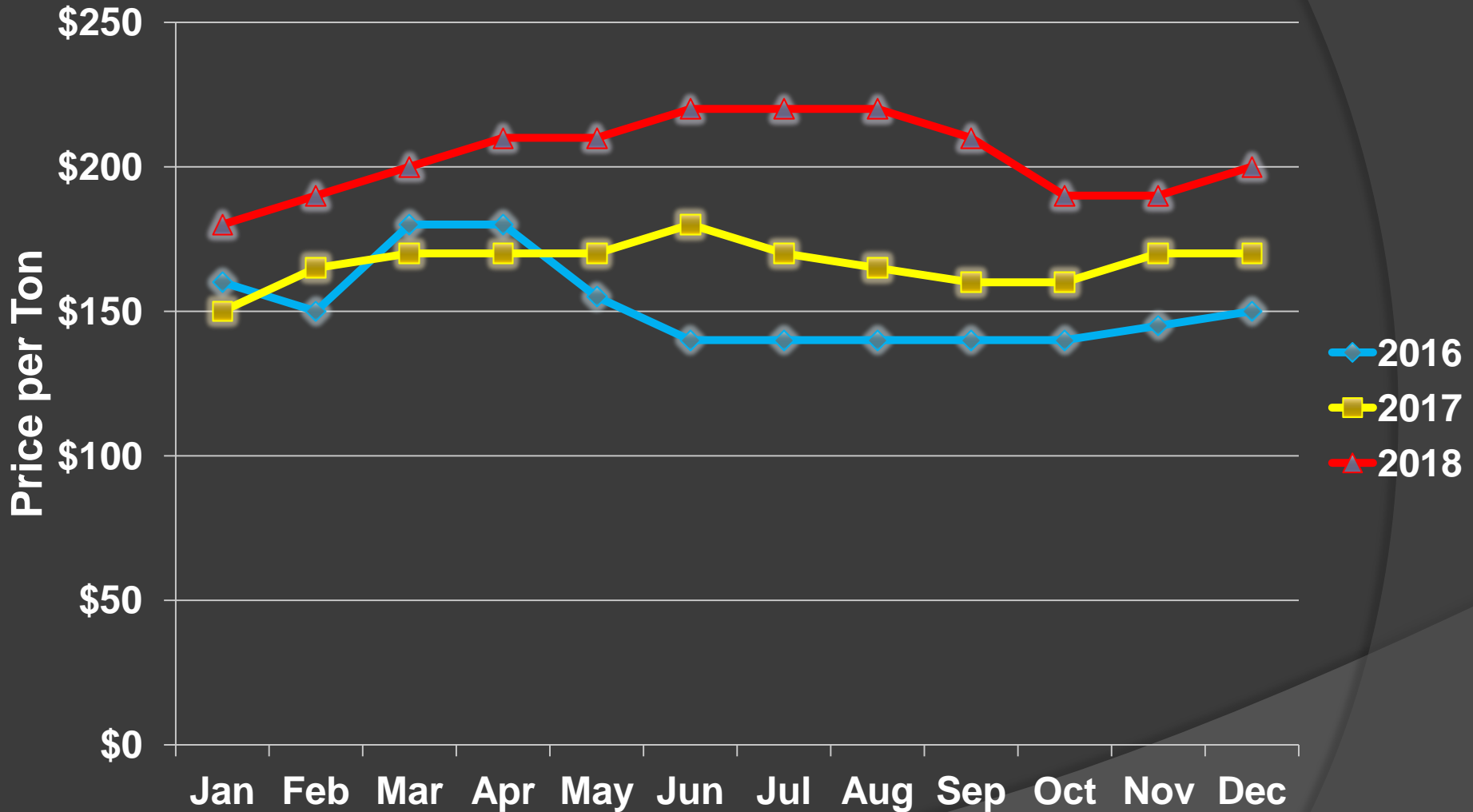
# Alfalfa Hay

## Yield vs Price

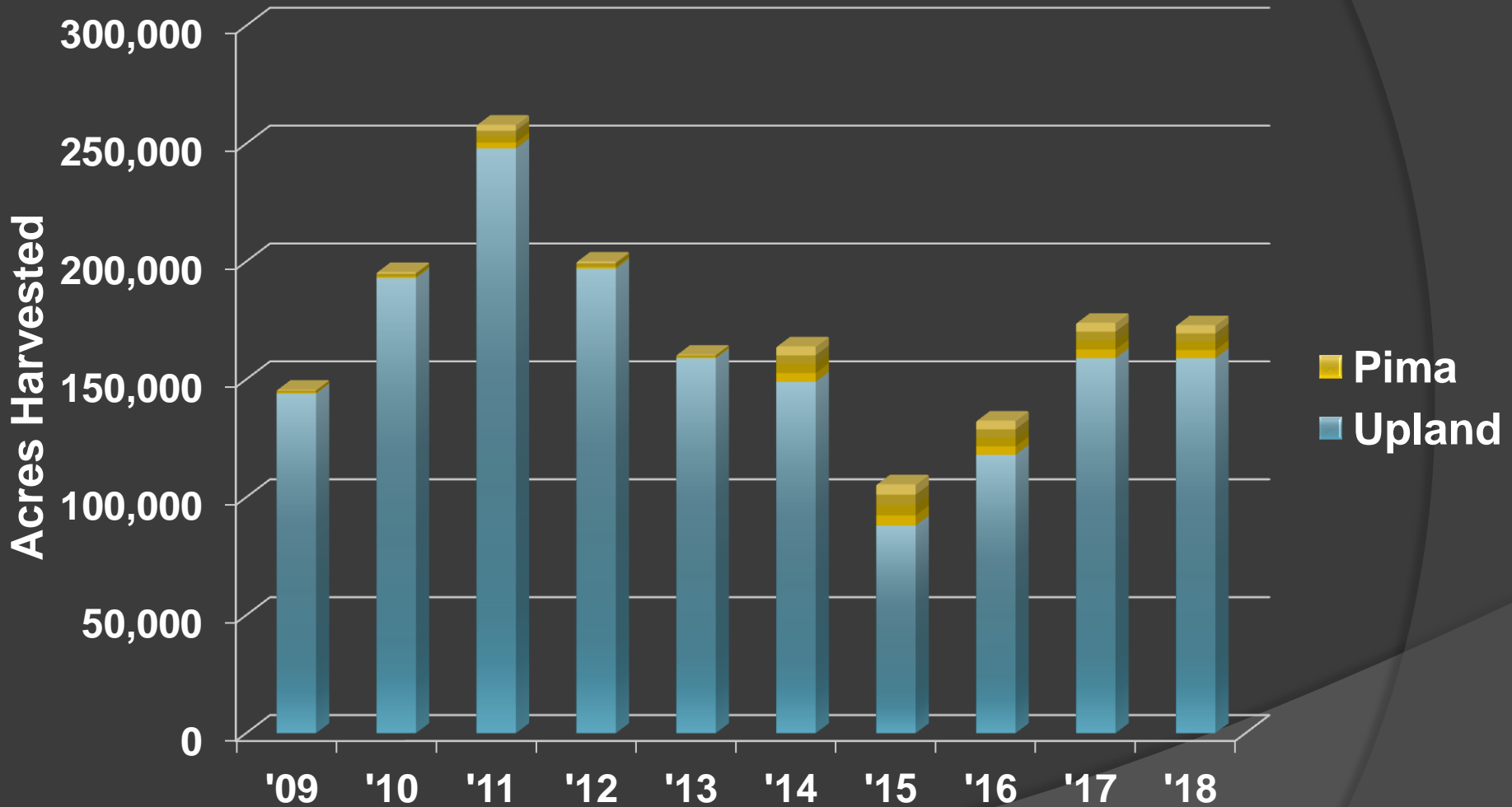


**2016-2018 Trend = Yield is -3% and Price is +34%**

# Alfalfa Hay

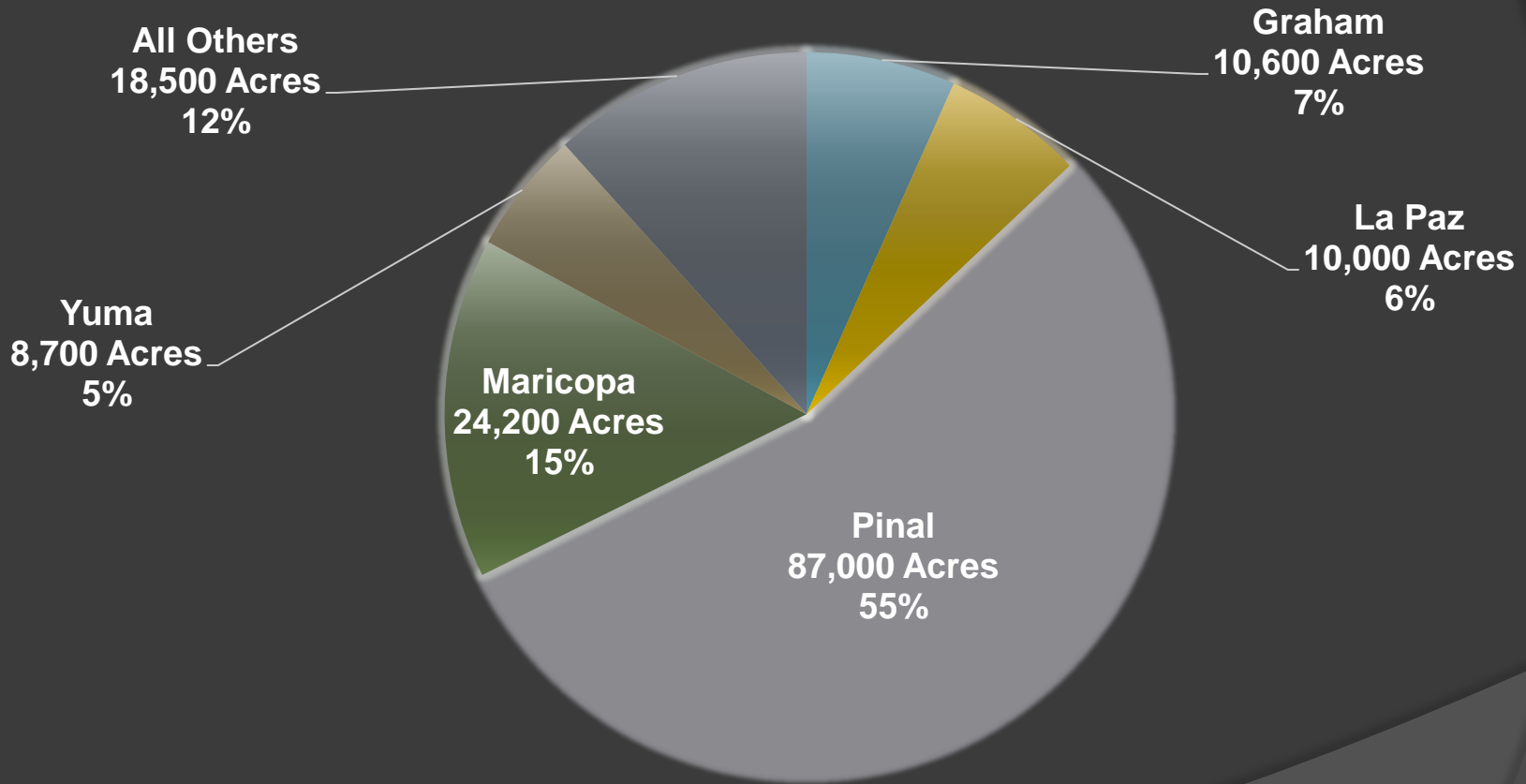


# Cotton



**Trend = 31% increase from 2016-2018**

# 2017 Upland Cotton Acres Harvested by County



**159,000 Total Acres Harvested in 2017**

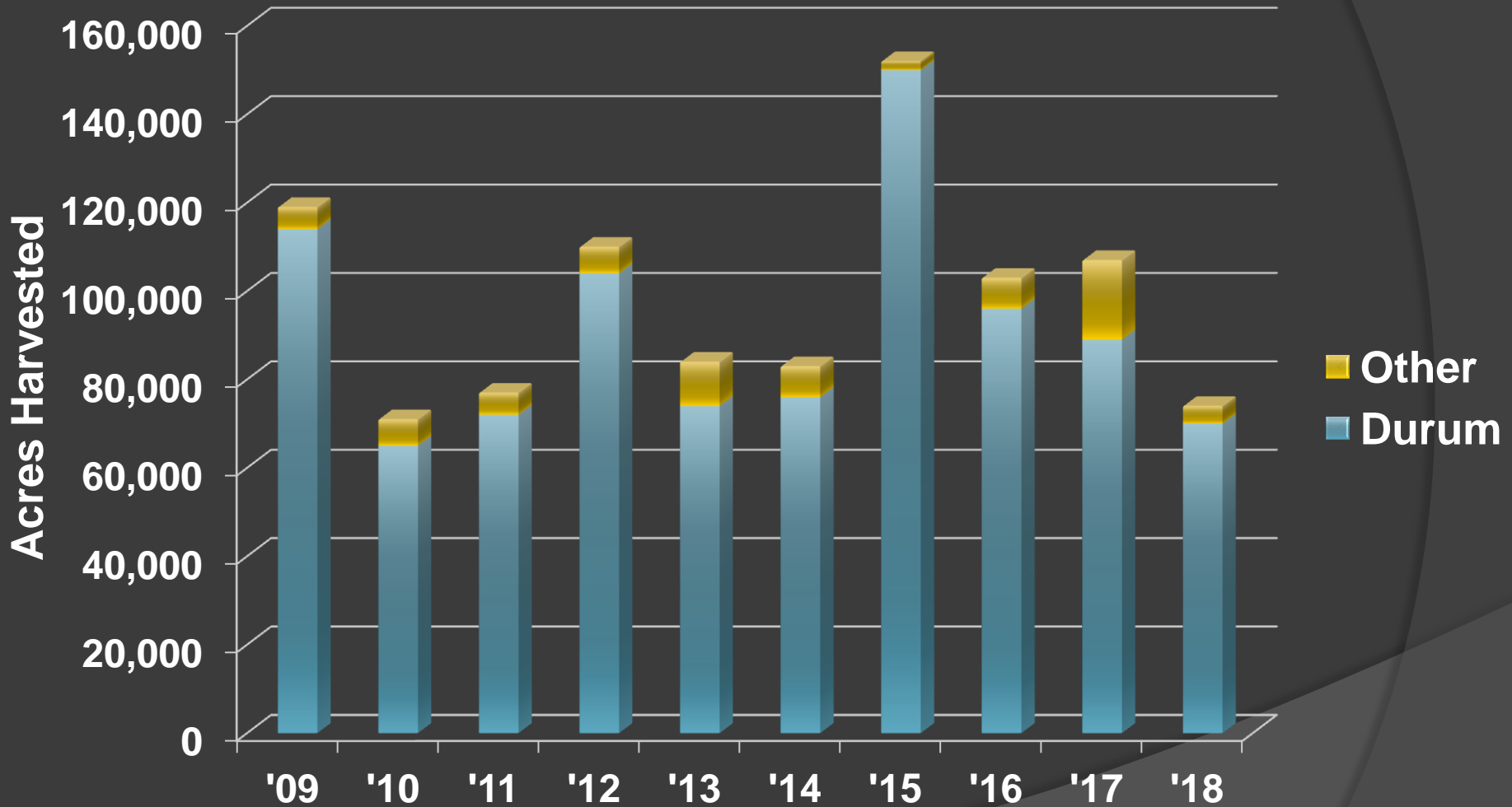
# Upland Cotton

## Yield vs Price



**2016-2018 Trend = Yield is -13% and Price is unreported**

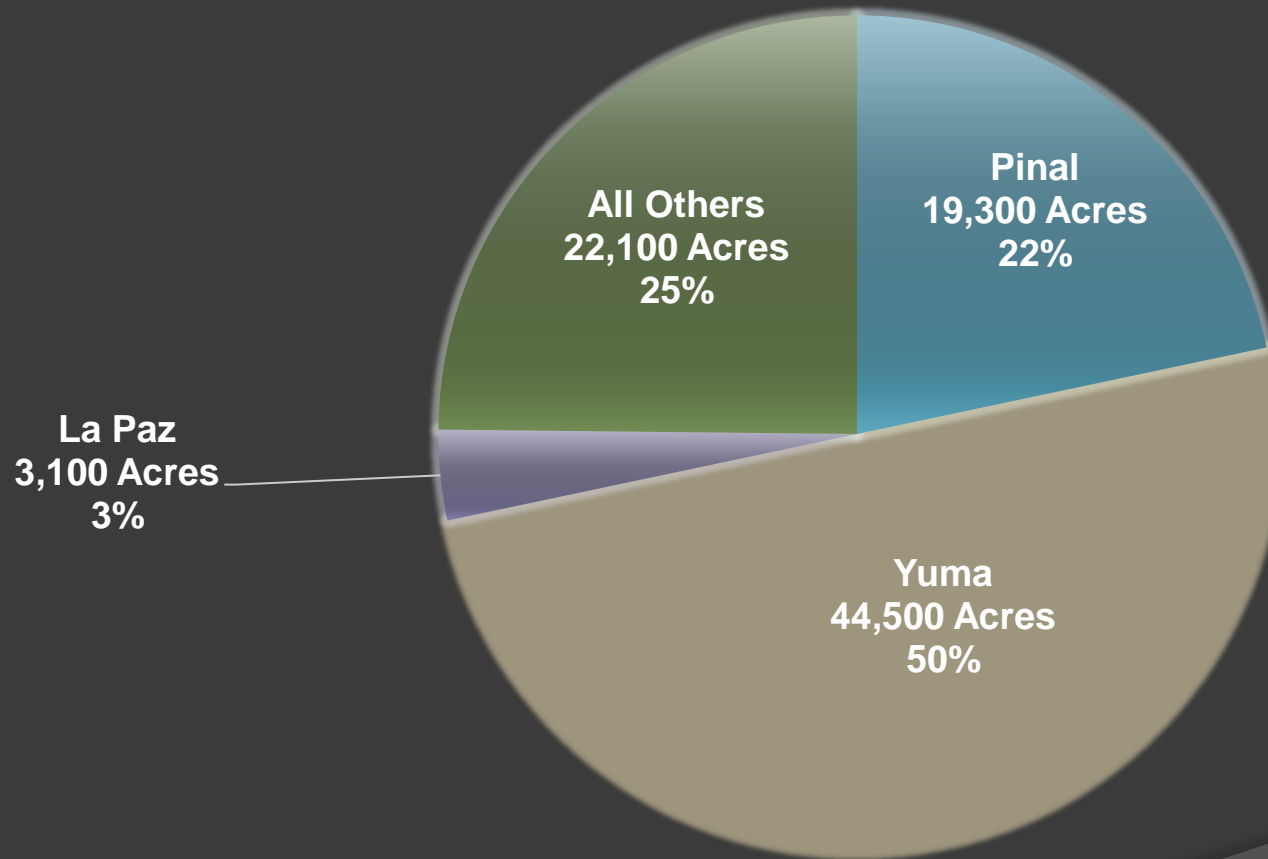
# Wheat



**Trend = 28% decline from 2016-2018**



# 2017 Durum Wheat Acres Harvested by County



**89,000 Total Acres Harvested in 2017**

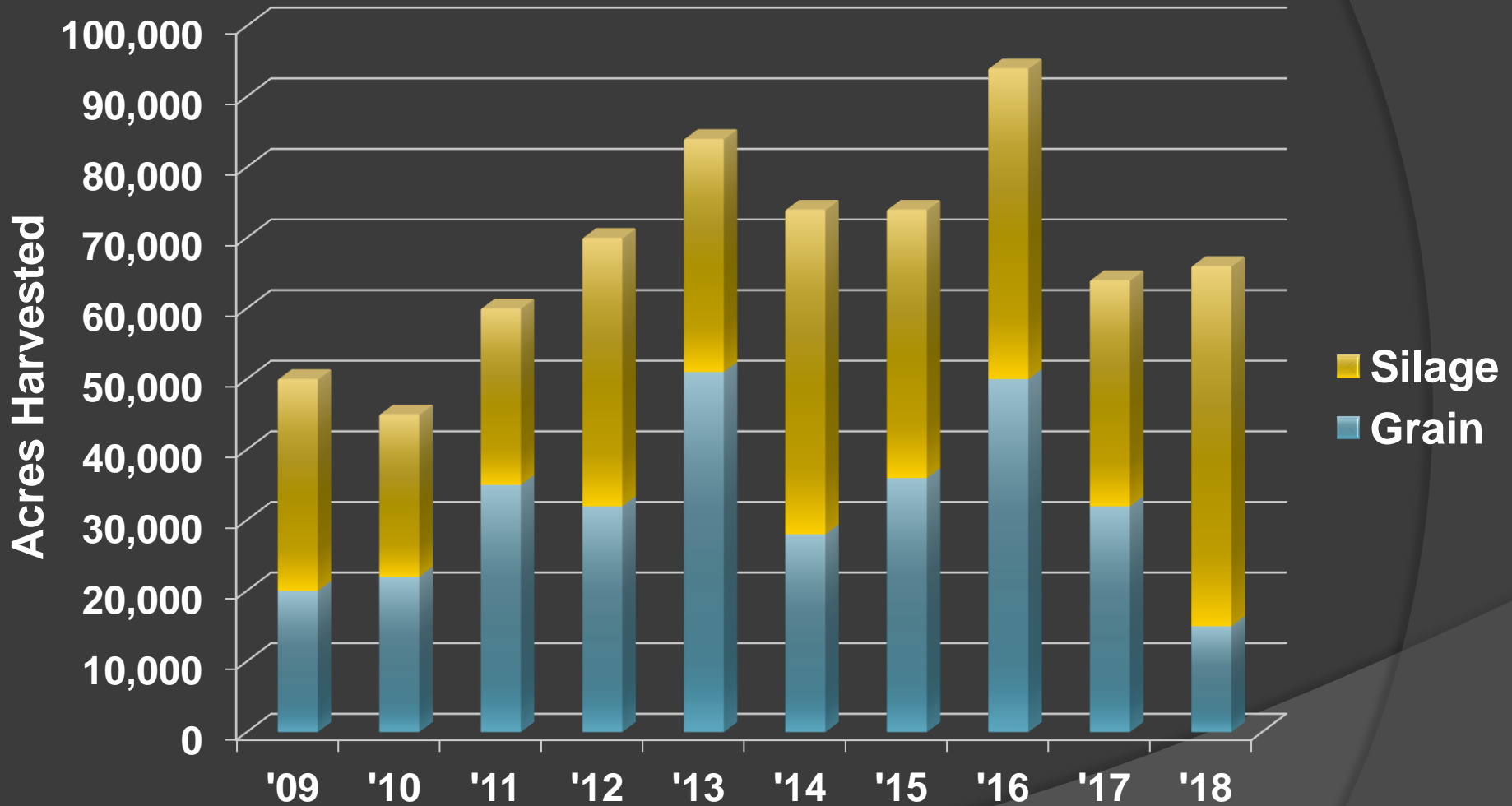
# Wheat

## Yield vs Price



**2015-2017 Trend = Yield is stable and Price is -23%**

# Corn



**Trend = 30% decline from 2016-2018**

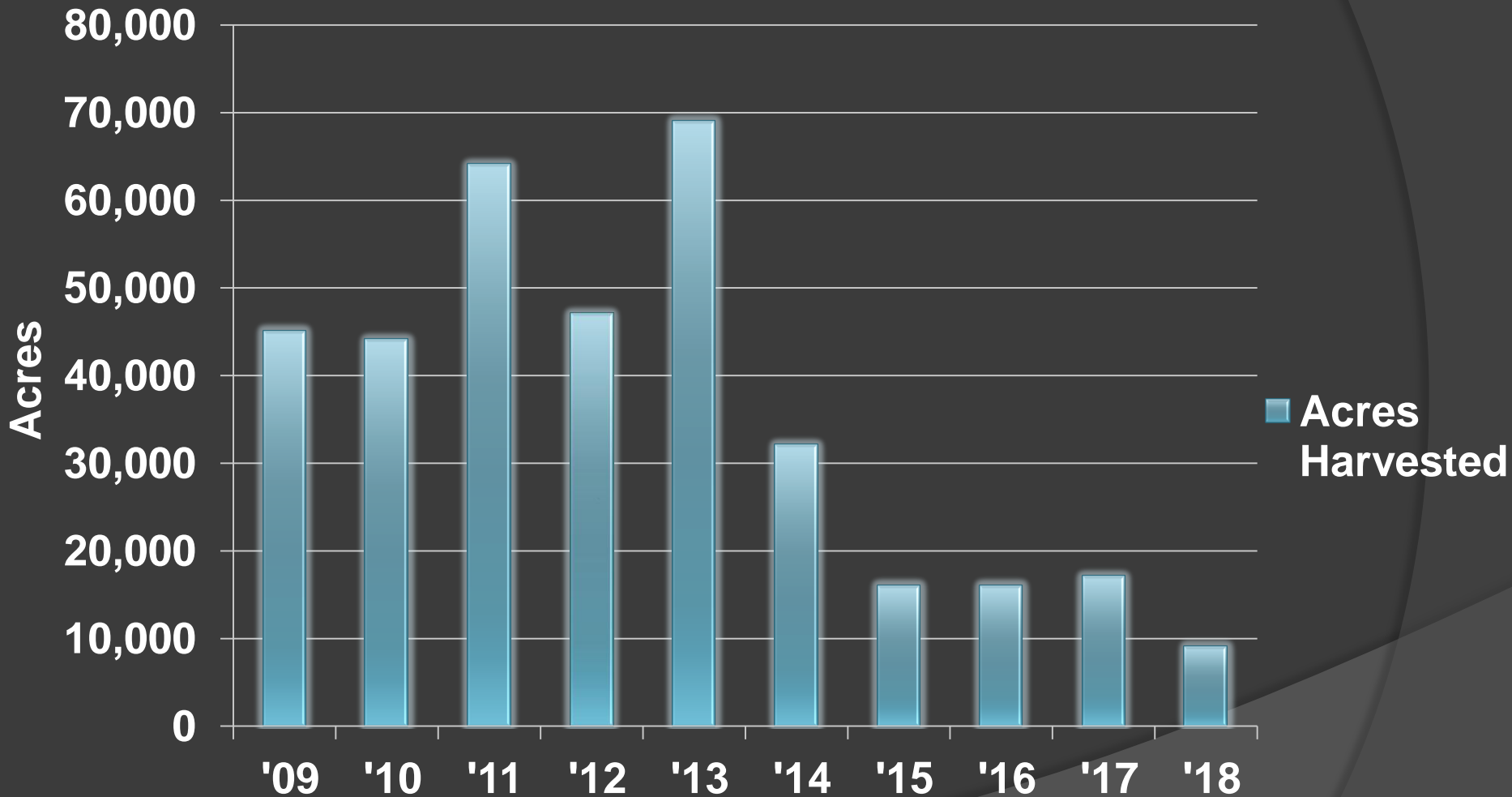
# Grain Corn

## Yield vs Price



**2015-2017 Trend = -7% in Yield and -13% in Price**

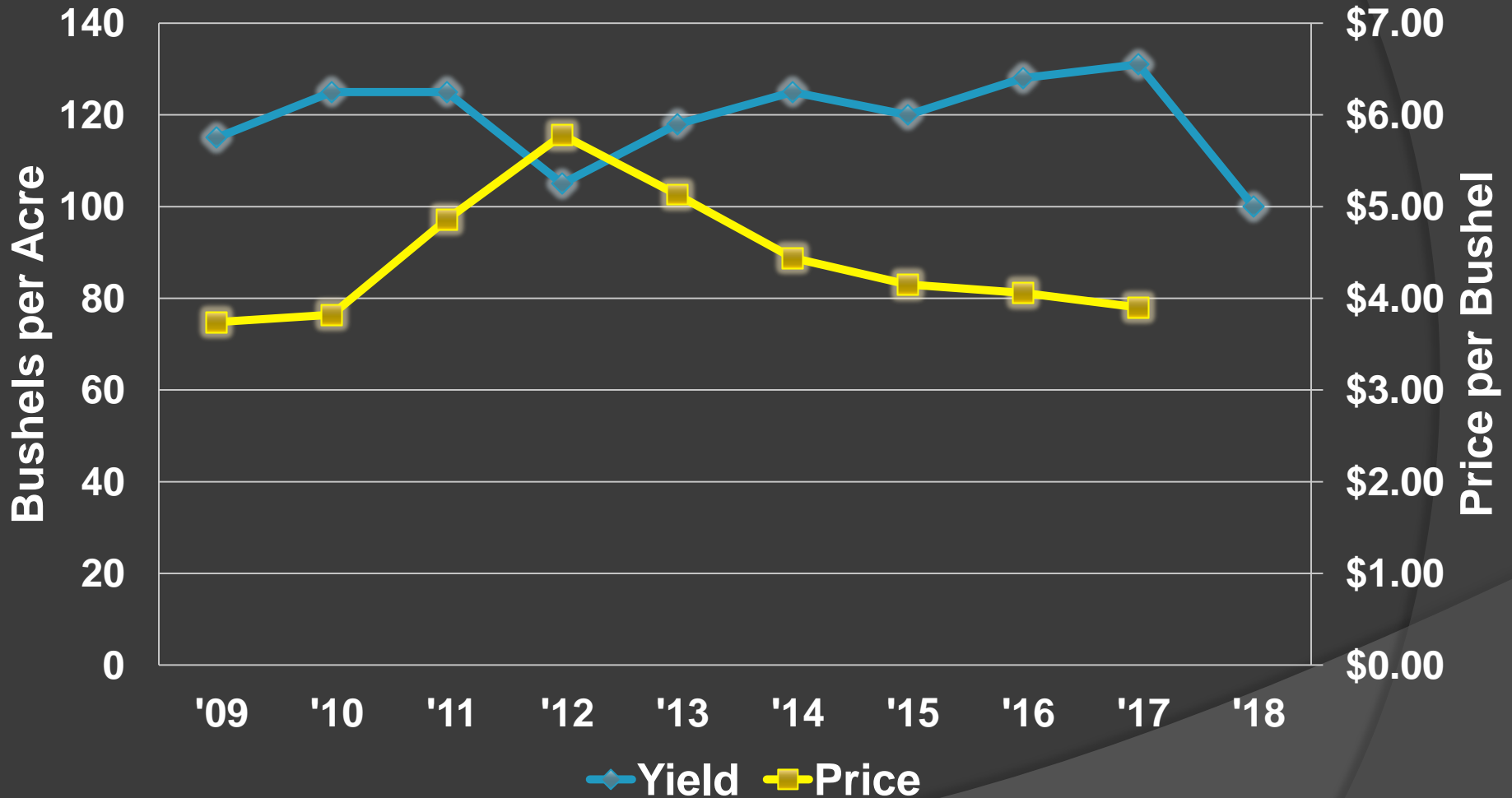
# Barley



**Trend = 44% decrease from 2016-2018**

# Barley

## Yield vs Price

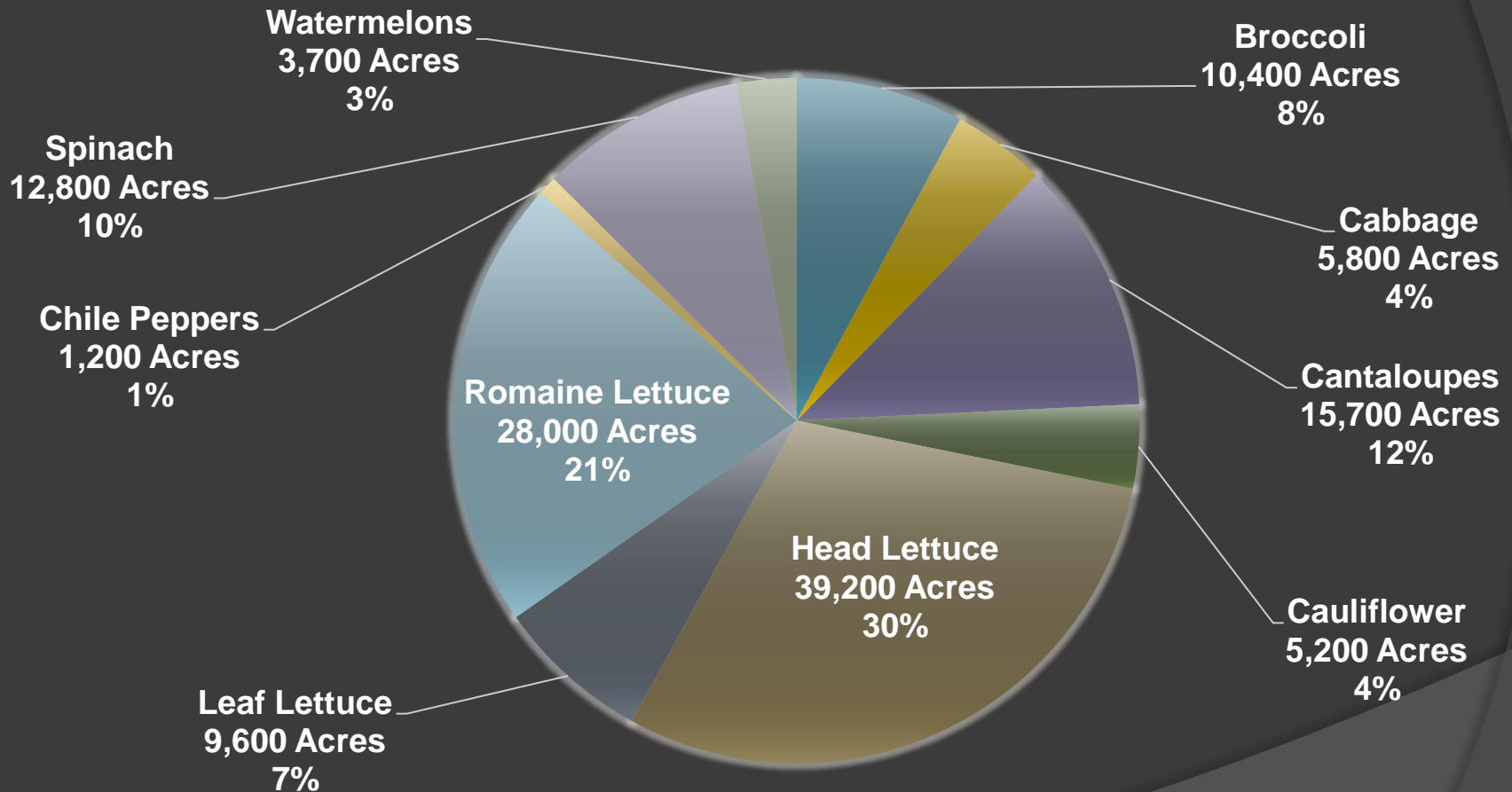


**2015-2017 Trend = +9% in Yield and -6% in Price**

# 2017 Vegetables Annual Summary

**Arizona harvested 131,600 acres of vegetables in 2017, up 6% from 124,400 acres harvested in 2016. The state produced 36.38 million hundredweight (cwt) of total vegetables in 2017. The value of utilized vegetable production increased 28% from \$1.30 billion in 2016 to \$1.67 billion in 2017.**

# 2017 Vegetable Acres Harvested by Commodity



**131,600 Total Acres Harvested in 2017**



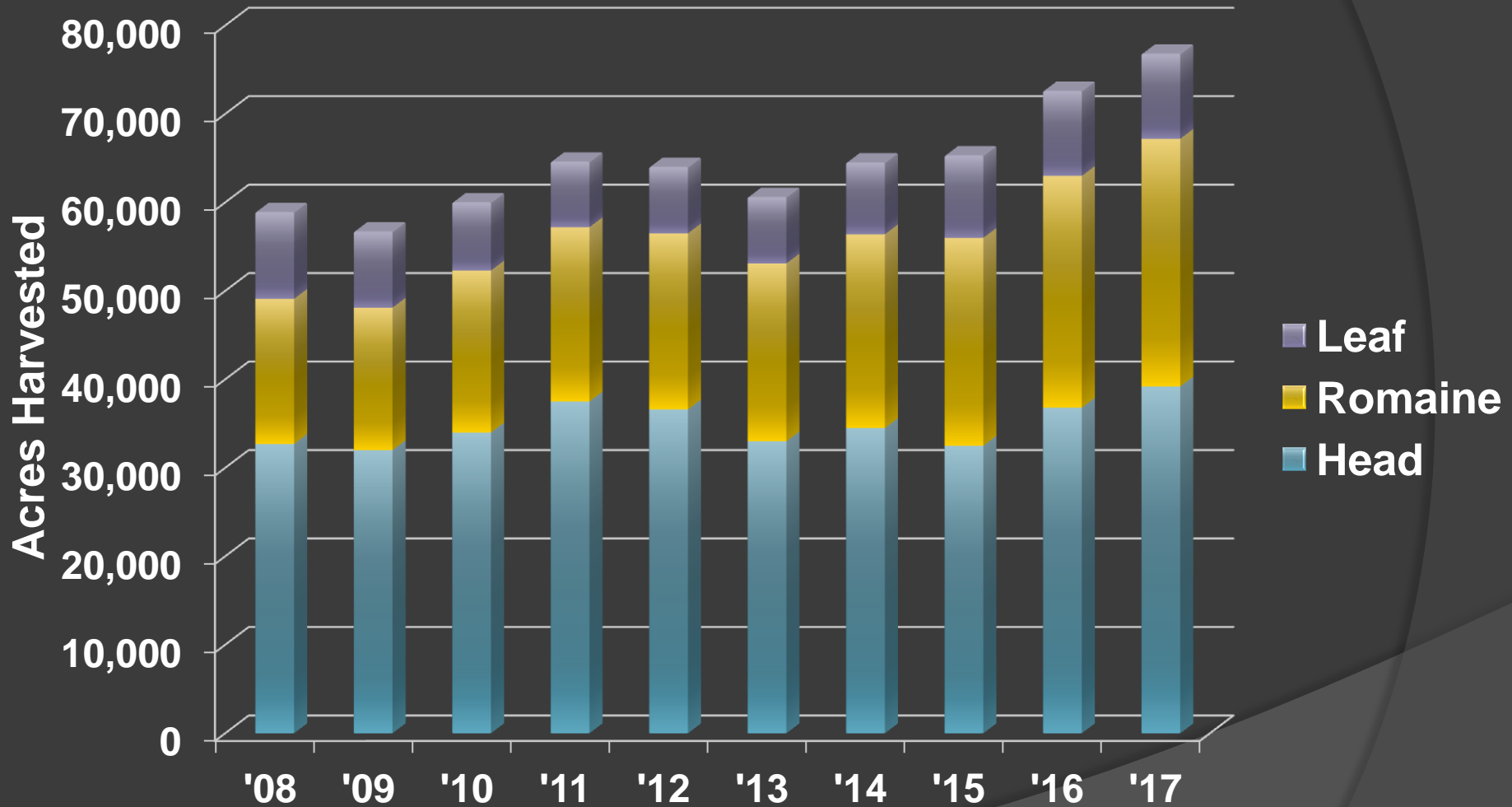
## Rank, Production, & Percent of United States Total – Arizona: 2017

Field Crops	Rank	Arizona	United States	Percent of U.S. Total
Barley.....(1,000 Bu)	10	2,227	141,923	1.6
Corn, Grain.....(1,000 Bu)	36	6,240	14,604,067	<= 0.1
Corn, Silage.....(1,000 Tons)	26	992	128,356	0.8
Cotton, All <sup>1</sup> .....(1,000 Bales)	11	514	20,923	2.5
Cotton, American Pima <sup>1</sup> .....(1,000 Bales)	2	30	700	4.3
Cotton, Upland Production <sup>1</sup> .....(1,000 Bales)	10	485	20,223	2.4
Hay, All.....(1,000 Tons)	24	2,502	131,455	1.9
Hay, Alfalfa.....(1,000 Tons)	10	2,310	55,068	4.2
Wheat, All.....(1,000 Bu)	25	10,789	1,740,582	0.6
Wheat, Spring Durum.....(1,000 Bu)	3	8,989	54,909	16.4
Wheat, Winter.....(1,000 Bu)	33	1,800	1,269,437	<= 0.1
<b>Vegetables</b>				
Broccoli.....(1,000 Cwt)	2	1,352	20,392	6.6
Cabbage.....(1,000 Cwt)	5	2,610	23,463	11.1
→ Cantaloupe.....(1,000 Cwt)	2	3,533	13,822	25.6 ←
Cauliflower.....(1,000 Cwt)	2	1,014	8,414	12.1
→ Lettuce, Head.....(1,000 Cwt)	2	12,348	42,826	28.8 ←
→ Lettuce, Leaf.....(1,000 Cwt)	2	2,112	11,012	19.2 ←
→ Lettuce, romaine.....(1,000 Cwt)	2	9,240	30,750	30.0 ←
Peppers, Chile.....(1,000 Cwt)	4	78	4,233	1.8
→ Spinach.....(1,000 Cwt)	2	2,240	7,321	30.6 ←
Watermelon.....(1,000 Cwt)	8	1,850	40,617	4.6
<b>Fruits &amp; Nuts</b>				
Pecans <sup>2</sup> .....(1,000 Lbs)	4	28,000	277,000	9.5

<sup>1</sup> 480-lb. bales

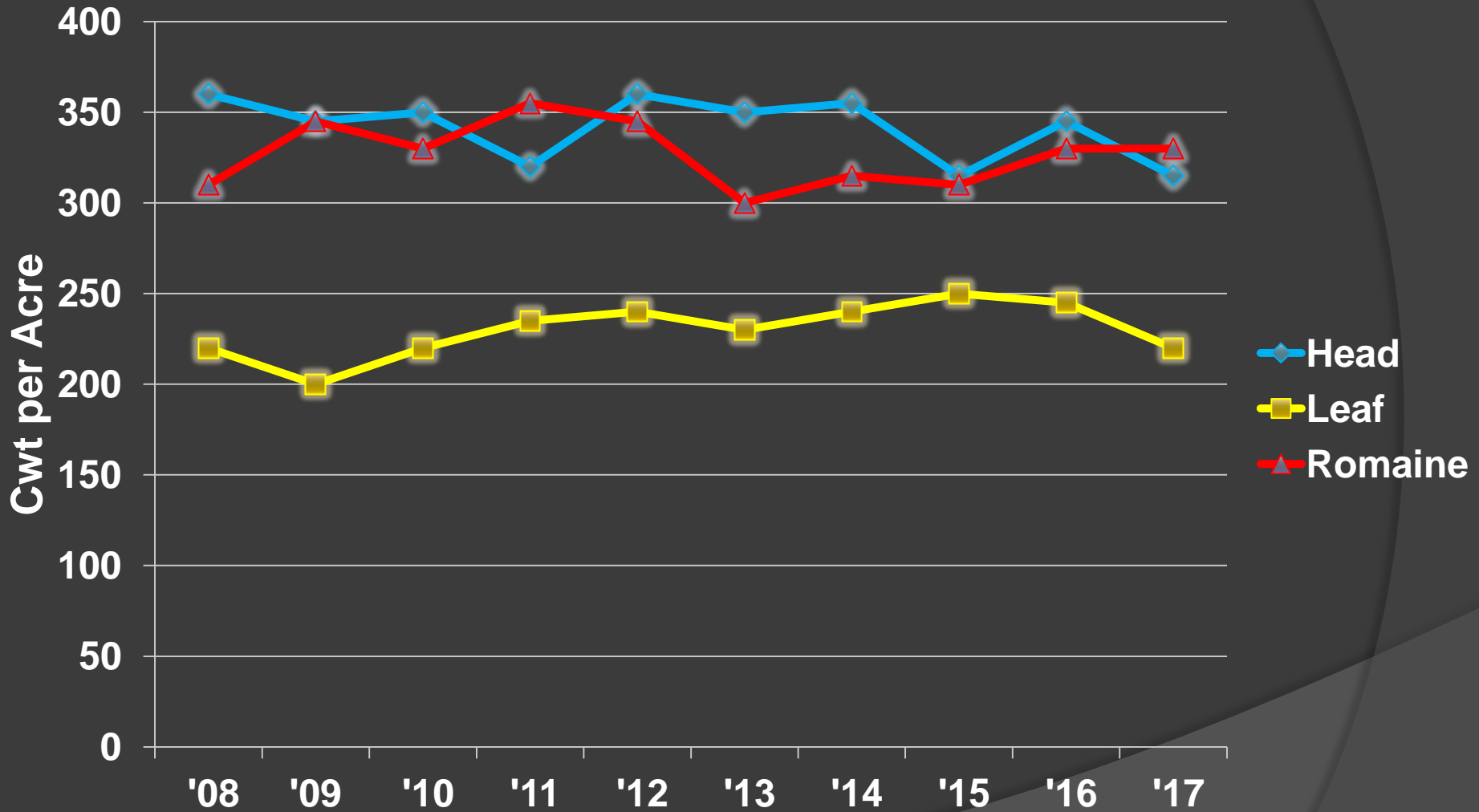
<sup>2</sup> Utilized Production, in shell

# Lettuce



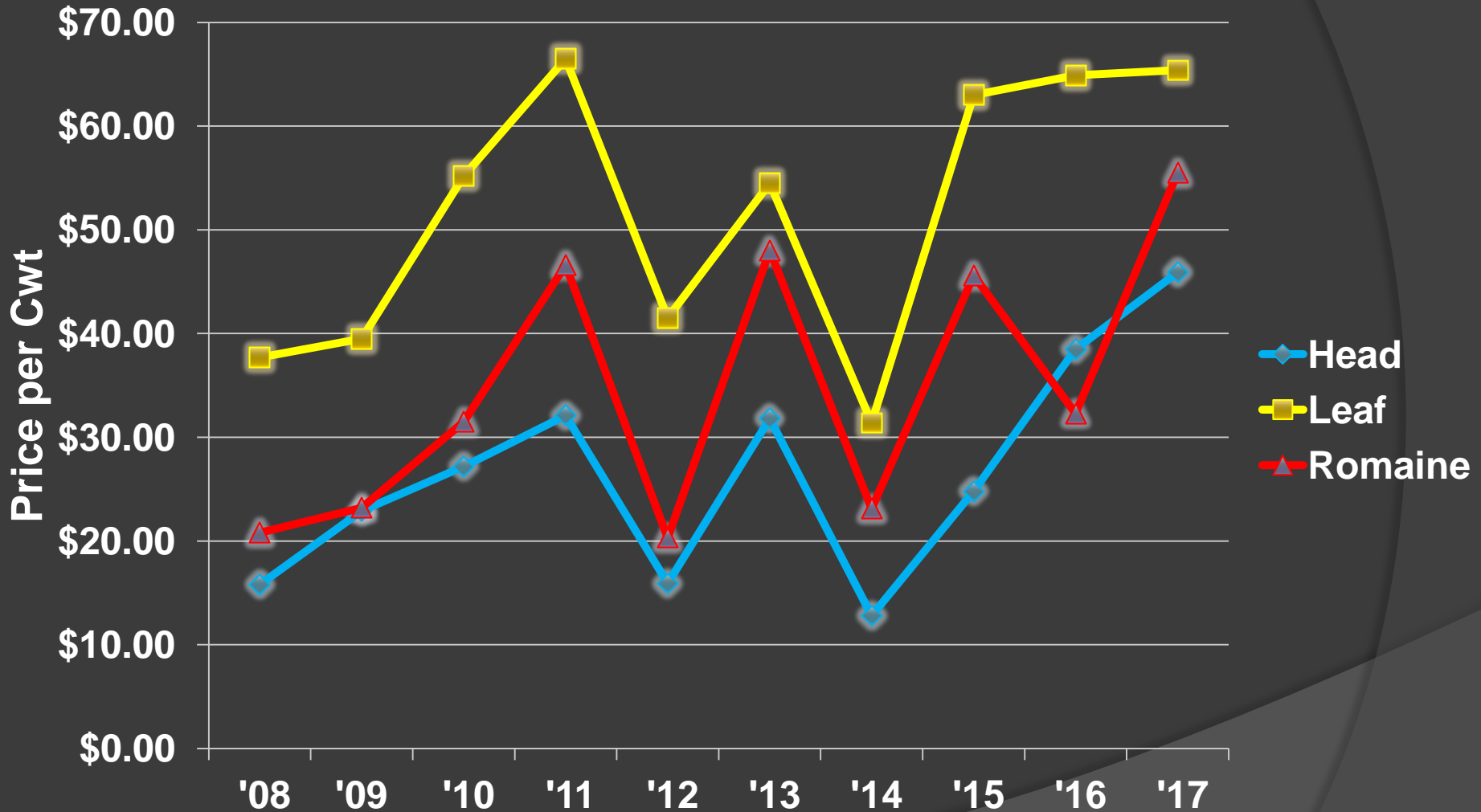
**Trend = 18% increase from 2015-2017**

# Lettuce



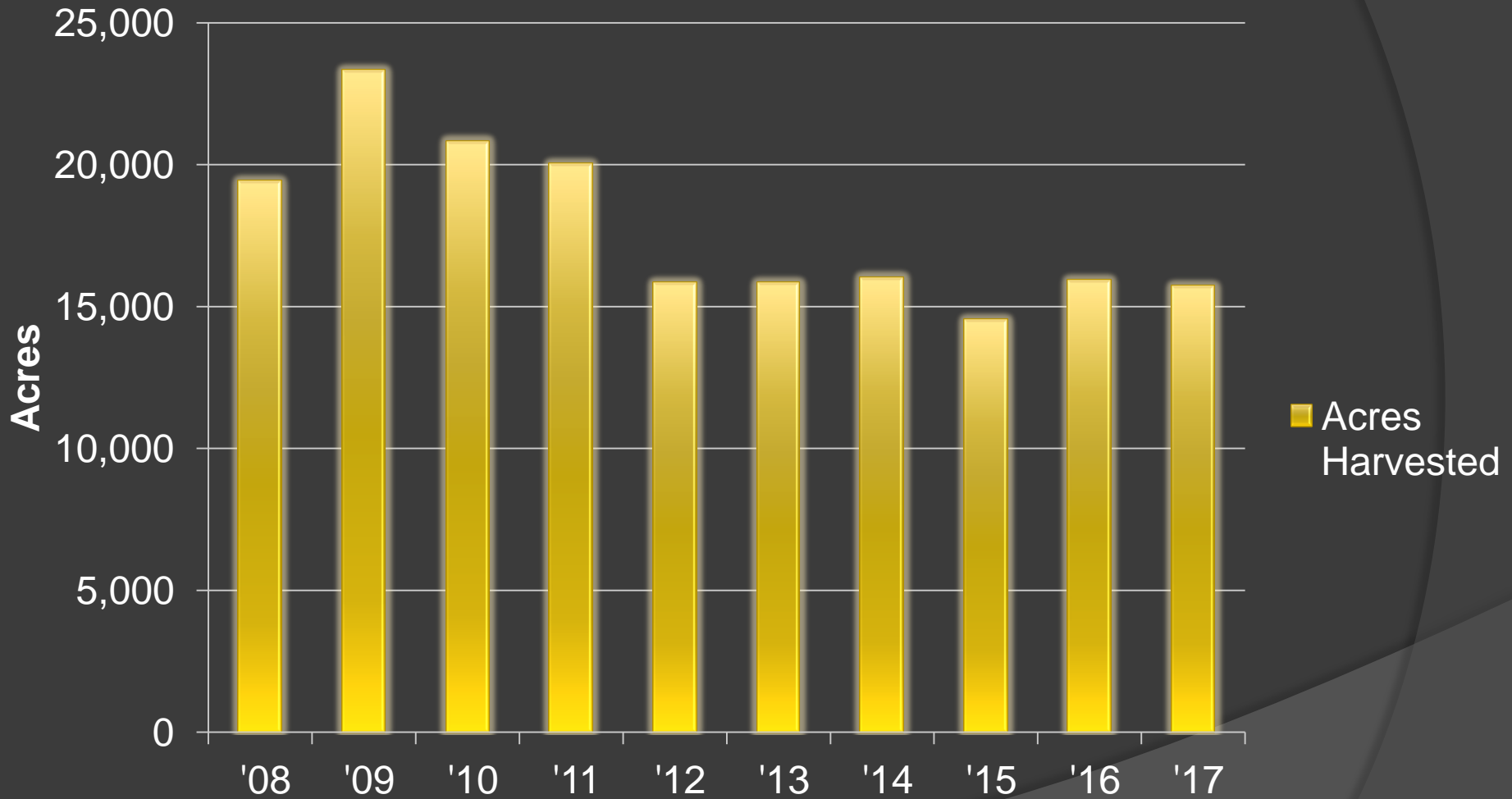
**2015-2017 Trends: Head = Stable; Leaf -12%; Romaine +6%**

# Lettuce



**2015-2017 Trends: Head +85%; Leaf +4%; Romaine +22%**

# Cantaloupe



**Trend = 8% increase from 2015-2017**

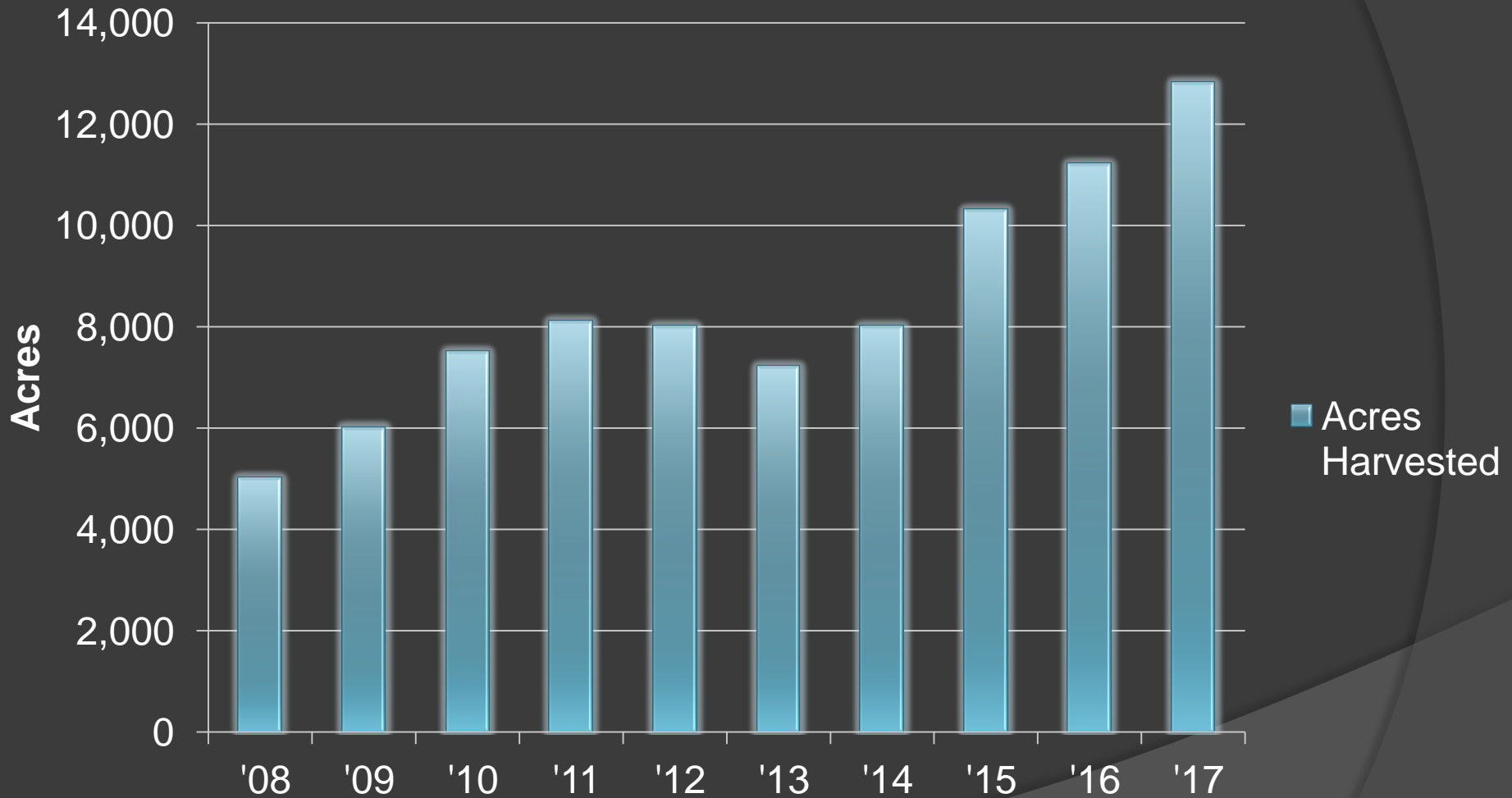
# Cantaloupe

## Yield vs Price



**2015-2017 Trend = -8% in Yield and 4% in Price**

# Spinach



**Trend = 24% increase from 2015-2017**

# Spinach

## Yield vs Price



**2015-2017 Trend = +40% in Yield and +24% in Price**



# When Are Prices Coming Back?

*Excerpt from a November 2017 article in DTN/Progressive Farmer featuring Dave Kohl, Professor Emeritus of Ag Economics at Virginia Tech*

When are prices coming back? Kohl said he gets asked this question all the time. His short answer: “It’s unlikely, unless there is a catastrophic event.” In his long answer, Kohl walked the bankers through the four waves of economic cycles.

- 1) The offensive wave – from 2006-2012 – was a super cycle, led by China demand, ethanol and low interest rates, Kohl explained. “It was an aberration.”
- 2) The transition wave occurred from 2013-2017. Kohl said this was marked by commodity surplus, working capital burn (decreasing available cash) and land value resiliency.

# When Are Prices Coming Back?

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3) The defensive wave is coming next. From 2018-2021, Kohl predicted a widening gap of economic performance by farmers/ranchers, core equity burn (increasing leverage), steep decline of marginal land and increasing vendor/nontraditional operating credit as regulated lenders shut off operating credit for poor-performing borrowers. “Yet, even during this time, the top 40% of ag producers will grow their business,” Kohl added. Banks need to be ready to launch those opportunities with credit, he advised.

4) The regeneration wave from 2021-2025 will be consumer driven, data driven and people driven with more diversity on how farm and ranch businesses are organized. “One-size enterprise does not fit all,” said Kohl.