

Standardized Performance Analysis (SPA) for Decision Making

August 8, 2012
2012 Beef Cattle Shortcourse
College Station, Texas

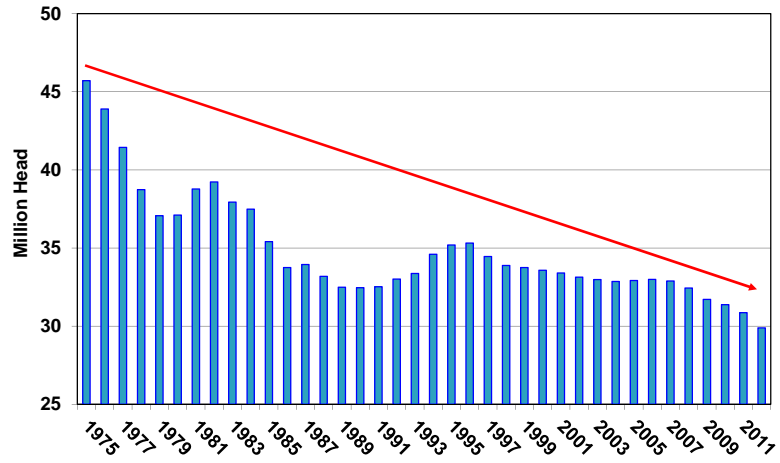
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The Beef/Cattle Industry

- ▶ Beef competes with other proteins
 - Will always be one of the most expensive
- ▶ Unique because of the phases within the industry
 - Cow-calf
 - Asset Intensive
 - Labor Intensive
 - Stocker
 - Margin Business
 - Feedlots
 - Margin Business
 - Packer
 - Margin Business
 - Retail
- ▶ The Beef Industry players compete within their phases.

U.S. Beef Cow Inventory

January 1 Inventories



“It’s all a big wheel and one broken spoke breaks the wagon down.”



Minnie Lou Bradley
Bradley 3 Ranch
Memphis, Texas

The best tool we have to establish baselines and then analyze cow-calf operations is the IRM Beef Cow-calf Standardized Performance Analysis (SPA)

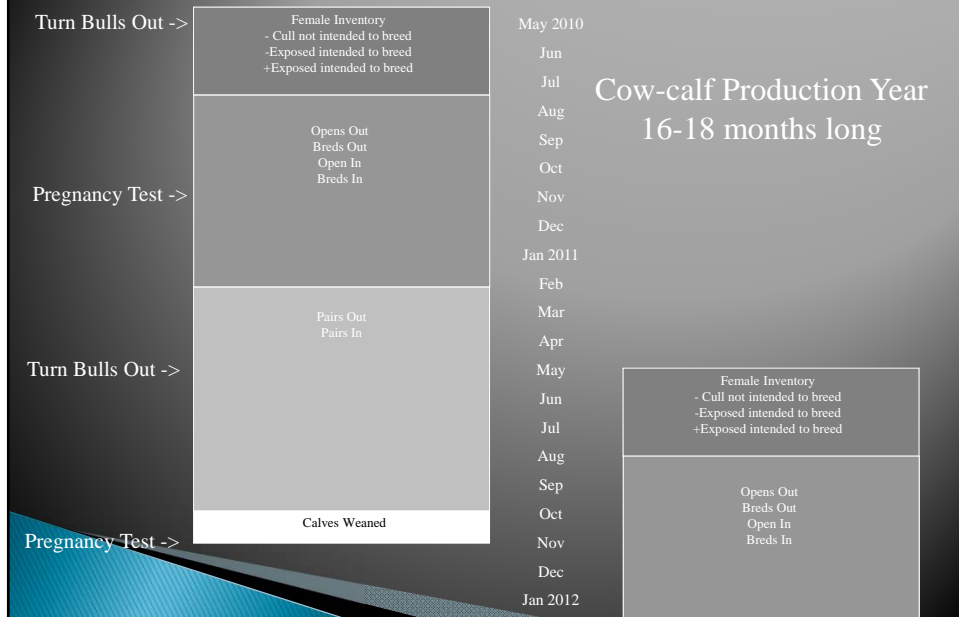
IRM-SPA Program

- ▶ National Program endorsed by the NCBA in 1991
- ▶ Objectives
 - Identify areas of an operation needing change in order to fulfill owner's objectives.
 - Determine annual COP and ROA for an operation.
 - Develop Regional Databases to establish production and financial benchmarks.

Beef Cattle SPA Program

- ▶ Facilitates the comparison of an operation's performance between years, groups of producers, production regions and production systems.
- ▶ Texas and the Texas Rolling Plains has led this endeavor.
- ▶ Completed on an individual basis.
- ▶ Annual workshops are held to assist ranchers with the analysis.

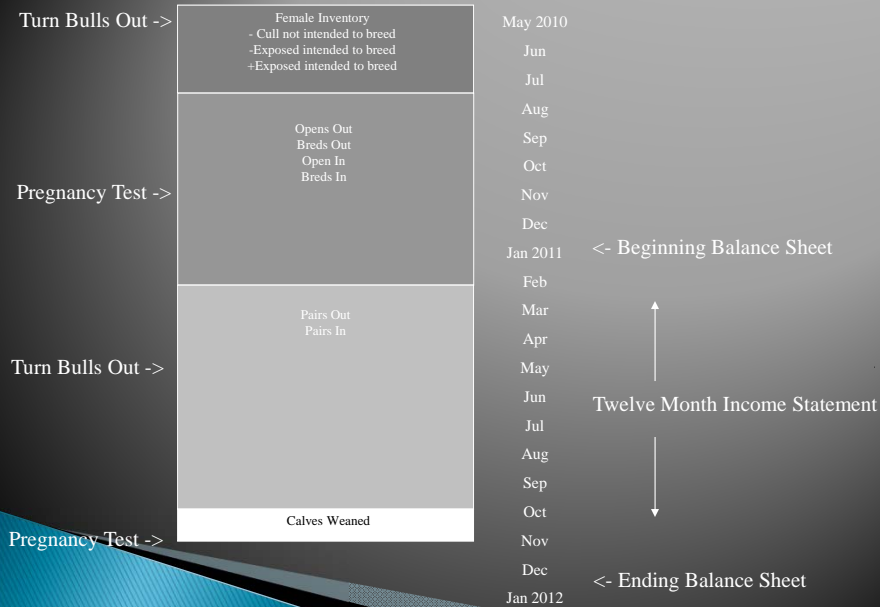
How the SPA Production Side Works - Spring Calving Herd



SPA Production Results

- ▶ Rainfall Data
- ▶ Acres/Female
- ▶ Breeding Season Length
- ▶ Pounds Feed Fed
- ▶ Average Prices Rec'd
 - All Calves
 - Steers
 - Heifers
 - Culls
- ▶ Pounds per Acre
- ▶ Pregnancy Percentage
- ▶ Pregnancy Loss
- ▶ Calving Percentage
- ▶ Calving Death Loss
- ▶ Weaning Percentage
- ▶ Calving Distribution
- ▶ Age at Weaning
- ▶ Pounds produced per Female
- ▶ Weaning Weights

How the SPA Financial Side Works - Spring Calving Herd



SPA Financial Results

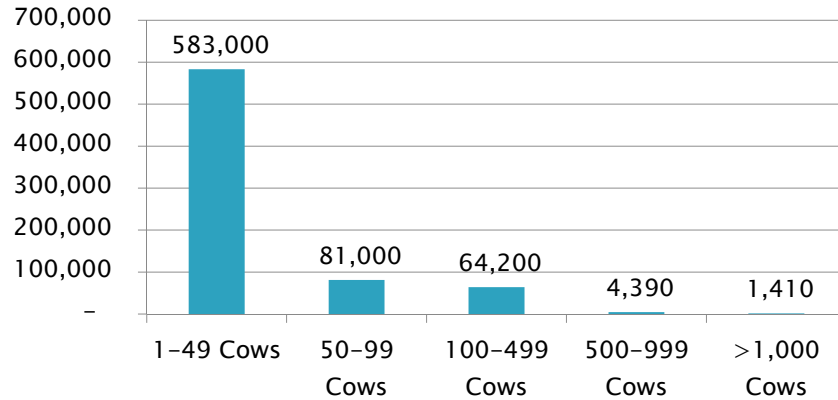
- ▶ Investment per Female
 - Cost Basis
 - Market Basis
- ▶ Debt per Female
- ▶ Feed Costs per Female & Cwt.
- ▶ Grazing Costs per Female & Cwt.
- ▶ Finance Costs per Female & Cwt.
- ▶ Total Costs per Female & Cwt.
- ▶ Breakeven Price per pound of weaned calf
- ▶ Rate of Return on Assets
 - Cost Basis
 - Market Basis
- ▶ Percentage Breakdown of each cost item.

Beef Cattle SPA Program Results

- ▶ Two Primary Comparisons
 - Comparison with a regional database average
 - What is the ranch's strengths and weakness compared to the regional average.
 - Track the same operation over time.
 - Where is the ranch going?
 - Is it getting there?

Number of US Beef Cow-calf Operations – 2011

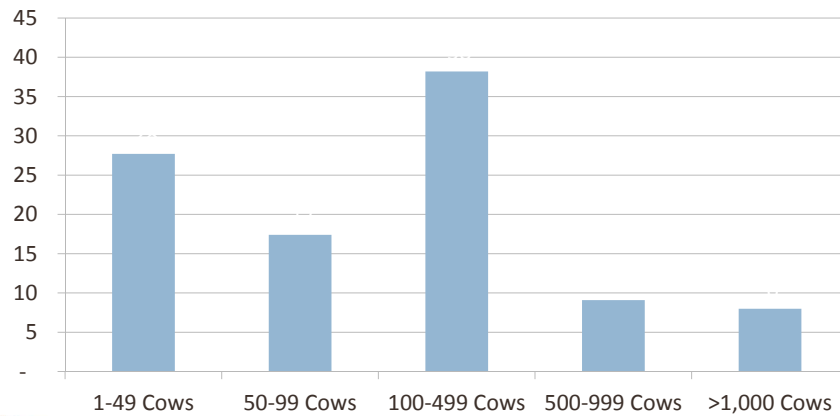
U.S. Cow-calf Operations



Source: USDA-NASS, "Farms, Land in Farms, and Livestock Operations: 2011 Summary", February 2012.

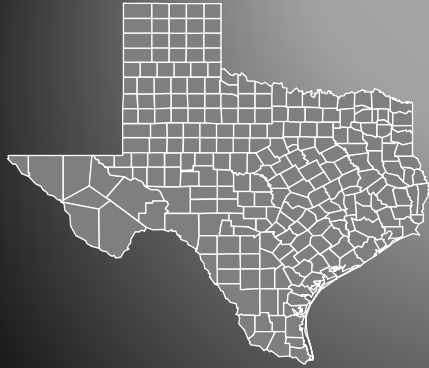
U.S. Beef Cow Inventory by Size of Herd

The average herd size is 42 Cows.

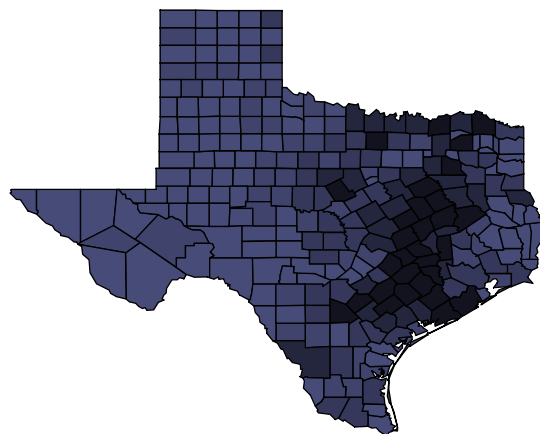


Source: USDA-NASS, "Farms, Land in Farms, and Livestock Operations: 2011 Summary", February 2012.

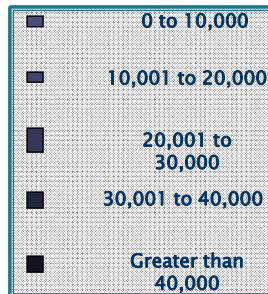
Focusing on Texas Cow-calf Industry



Where are the Cows in Texas



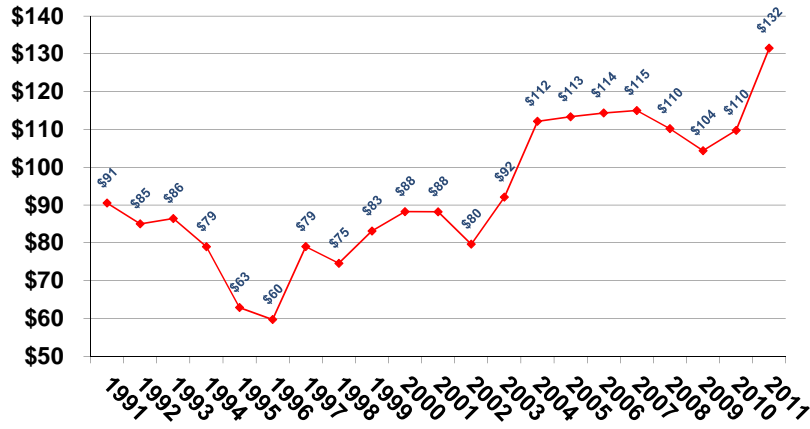
Texas Beef Cow Inventory, by County, January 1, 2009



Annual Calf Prices

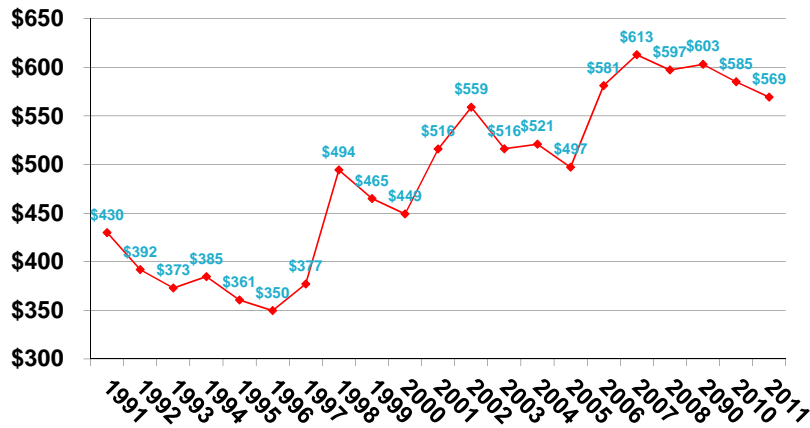
Texas SPA Database – 1991 to 2011

Texas SPA database contains results from 441 herds totaling 318,389 females.

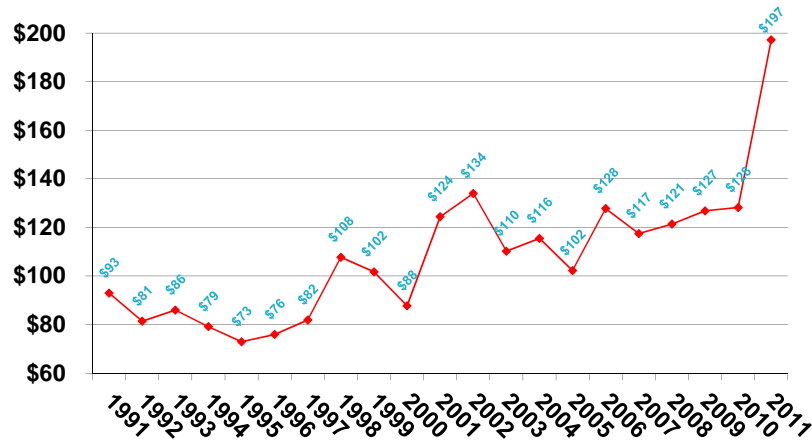


Costs per Female

Texas SPA Database – 1991 to 2011



Breakeven Price per Cwt. Weaned Texas SPA Database – 1991 to 2011

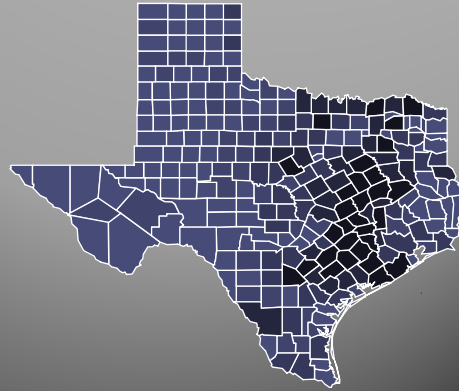


What is Cow-calf Owners goals?

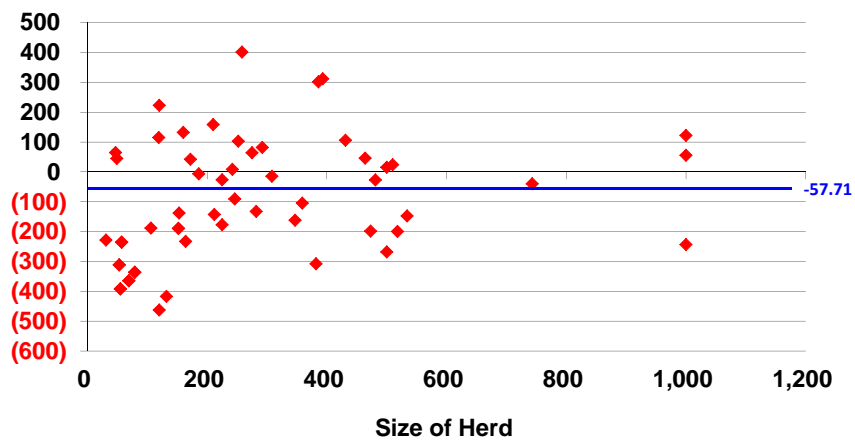
1. Pay property taxes (I just like cows)
2. Breakeven (I just like cows, but I don't necessarily need the money)
3. Be Profitable (If I don't make money, I have to find something else to do)
4. Genetic progression (I plan to have the "best performing" cattle)

Texas SPA Results

- ▶ 2007 to 2011
- ▶ 45 herds
- ▶ 47 to 2,972
- ▶ 17,291 females
- ▶ Herds by Size:
 - 1 - 49: 2
 - 50 - 99: 5
 - 100 - 199: 12
 - 200 - 299: 10
 - 300 - 499: 9
 - 500 - 999: 4
 - => 1,000: 3

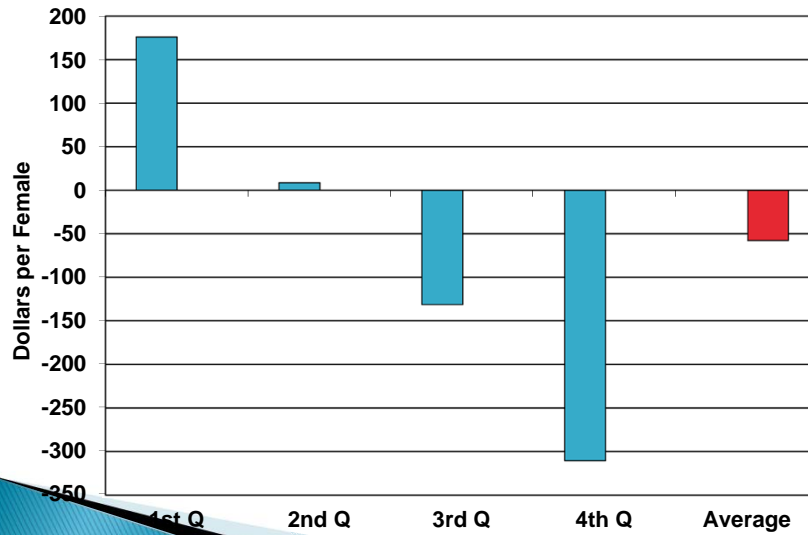


Net Income per Female by Size

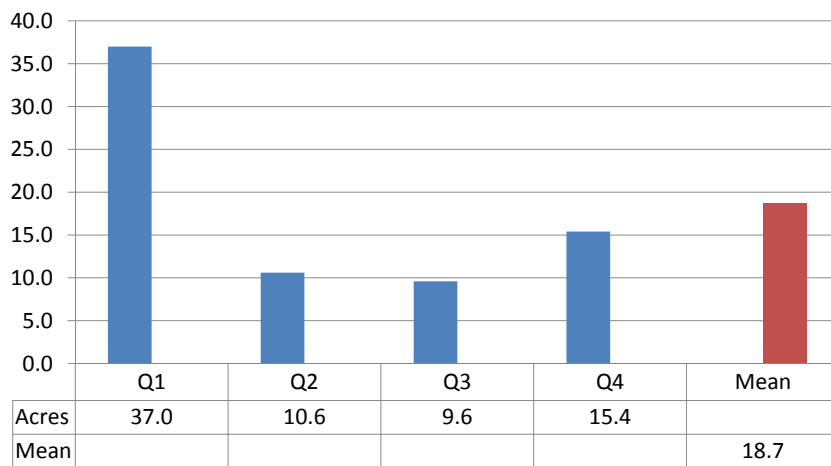


Financial Net Income Per Female

Database Average = -\$57.71

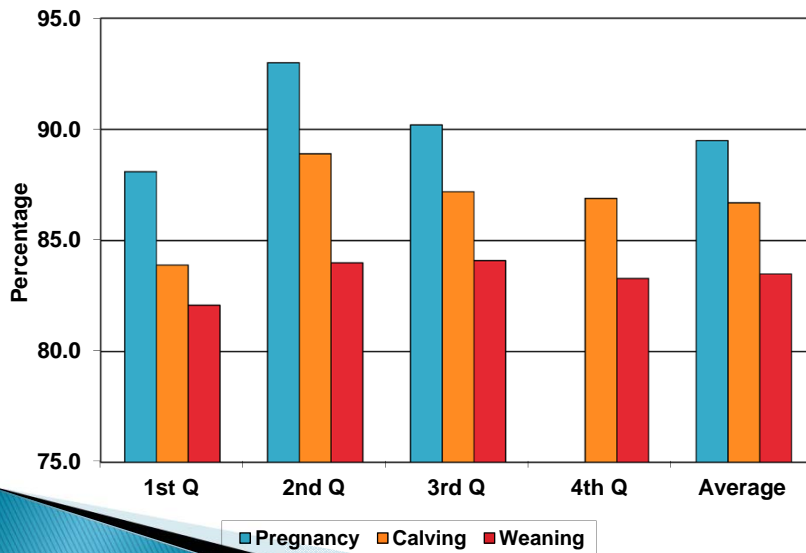


Acres per Female



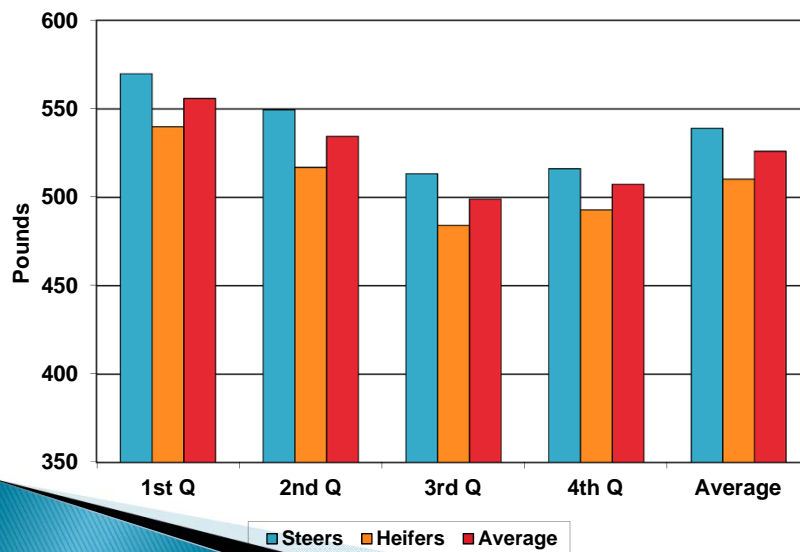
Production Performances

Database Average = 83.5%

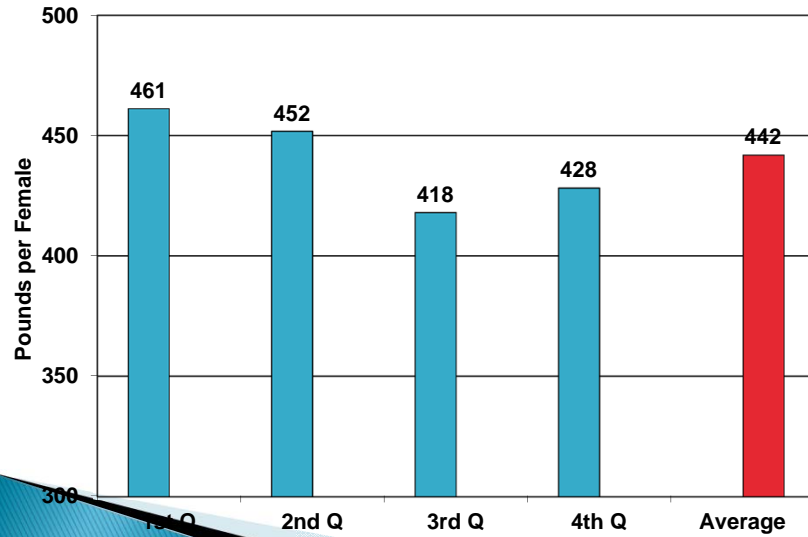


Weaning Weights

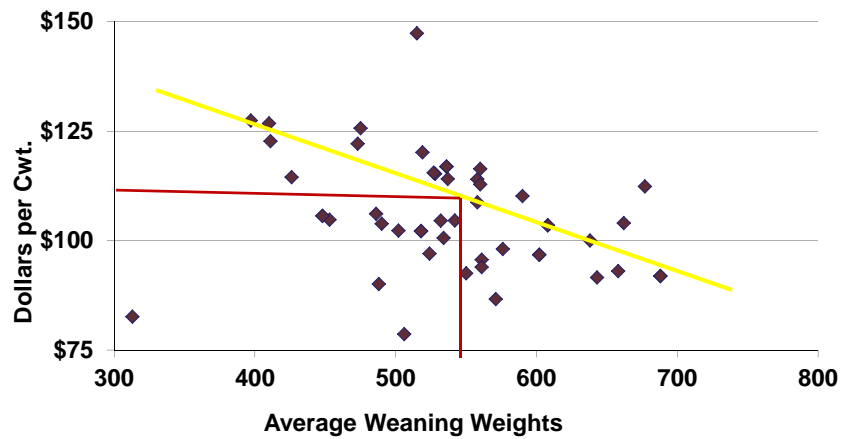
Database Average = 526.0 lbs.



Pounds Weaned per Exposed Female Database Average = 441.9 lbs.

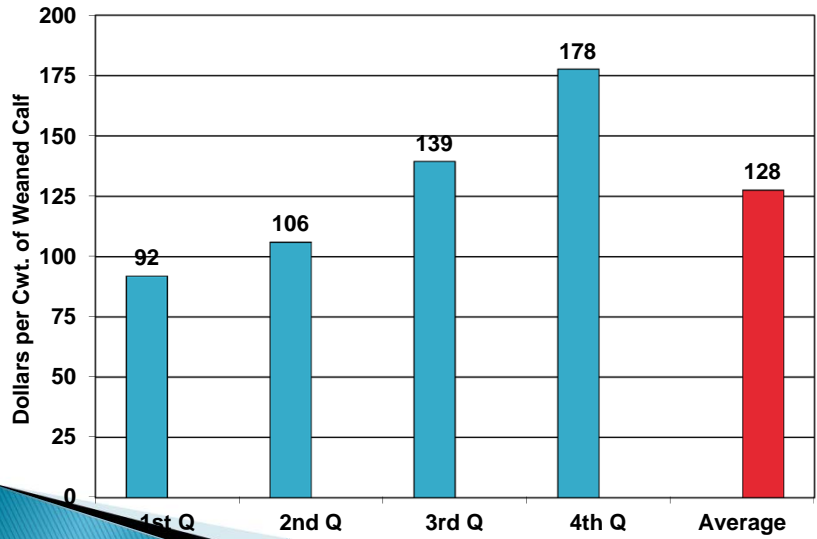


Average Price Received (or Assigned)

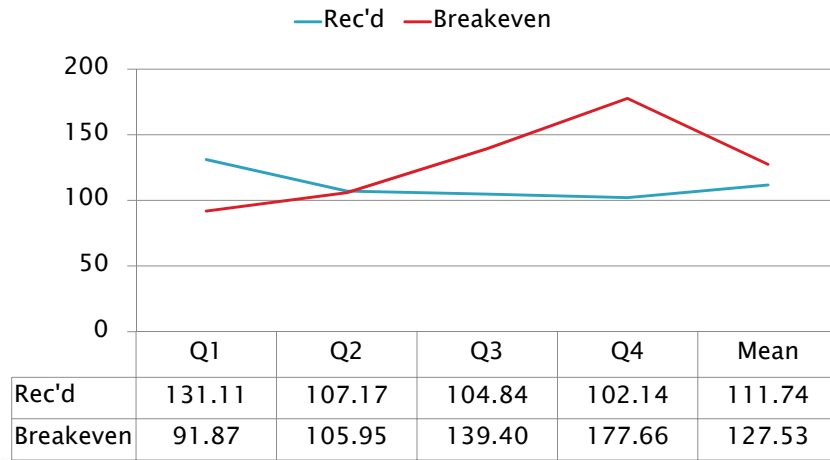


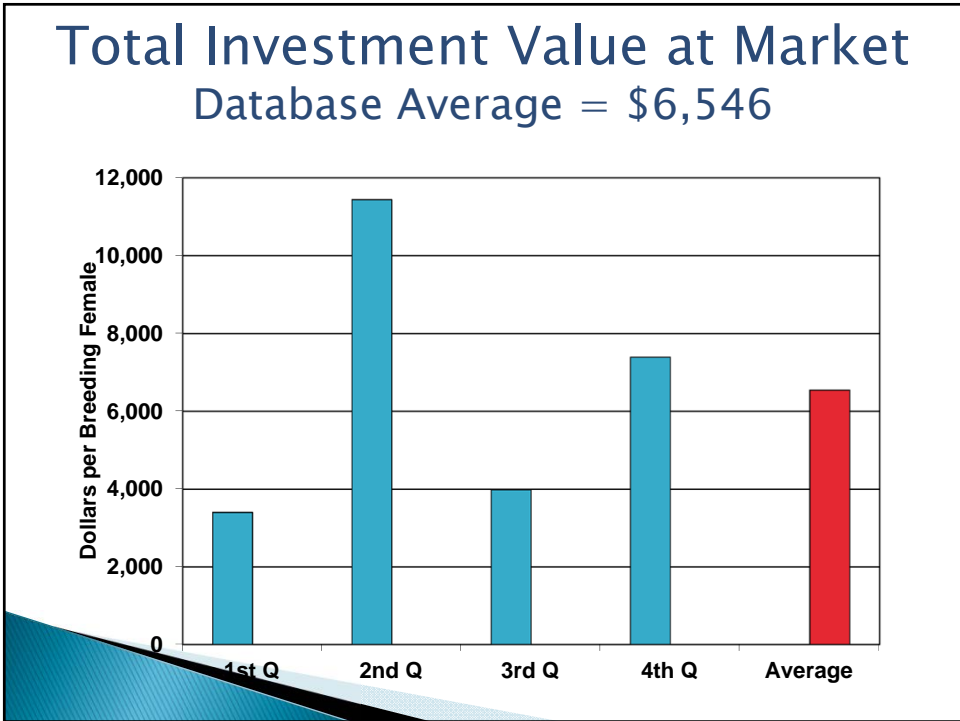
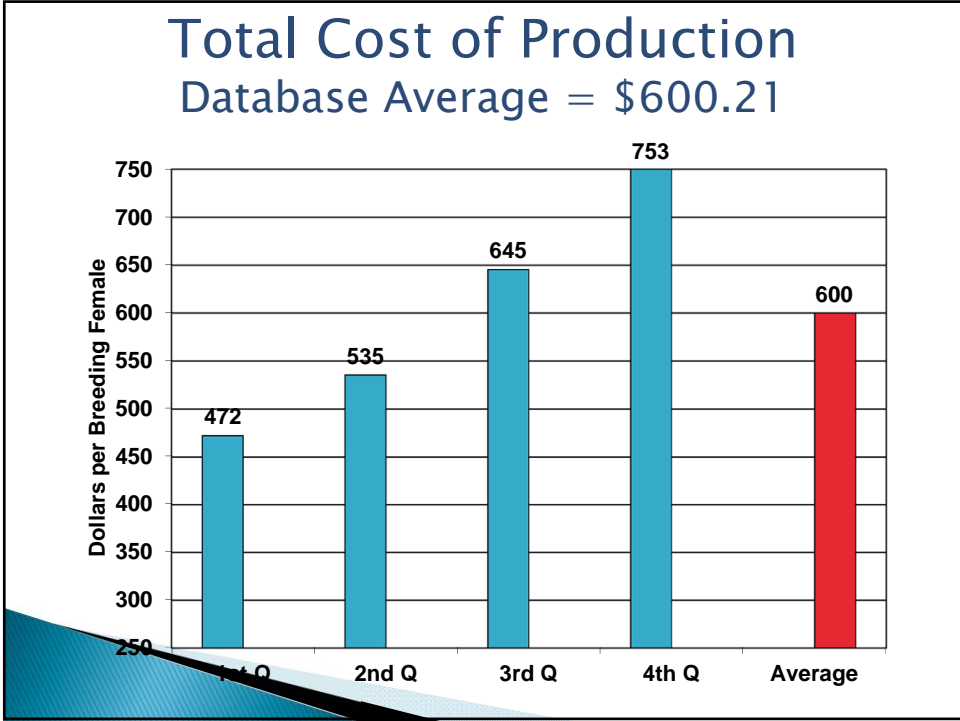
Cost of Production

Database Average = \$127.53

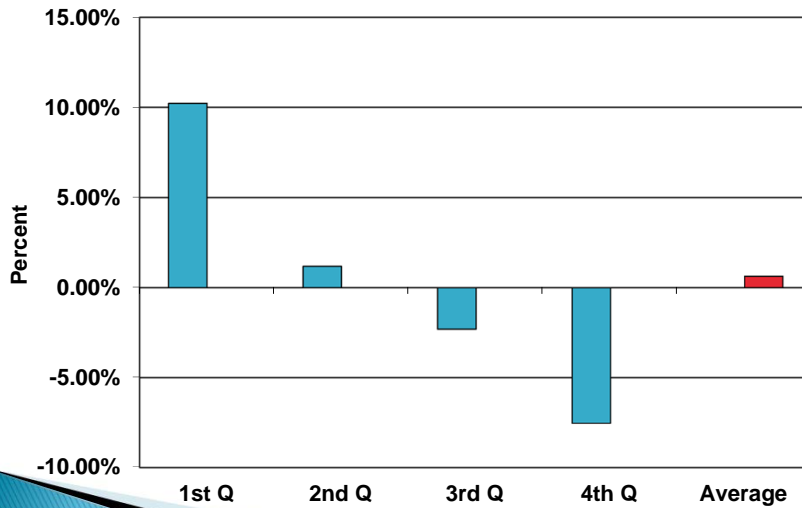


Price Rec'd versus Breakeven



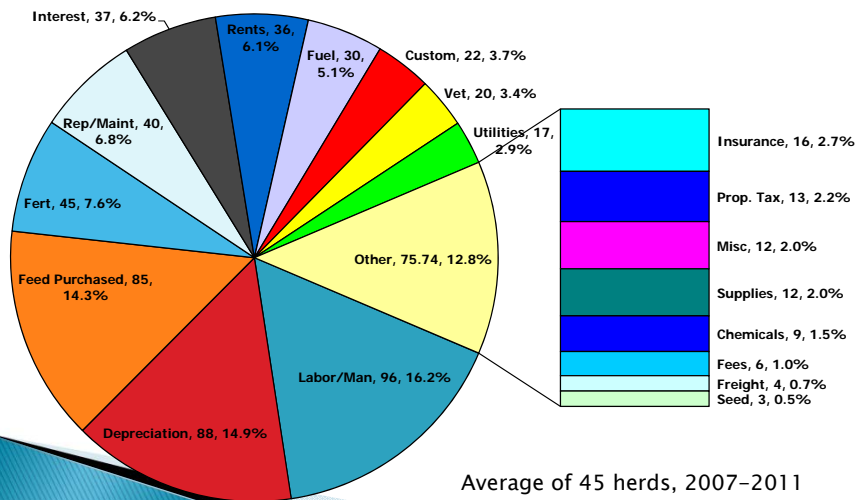


Rate of Return on Assets at Market Database Average = 0.63%



Texas SPA Expense Breakdown per Female

Average Total Cost per Female = \$600.21



Reproduction Goals for Texas

- ▶ Pregnancy Rate: Greater than 91.0%
 - This includes all females
 - Including
 - 1st calf heifers
 - 2nd calf heifers
- ▶ Calving Rate: Greater than 88.0%
- ▶ Weaning Percentage: Greater than 84.0%

- ▶ Your management determines these.

- ▶ Any less than these, you need to figure out why. Where is the loss occurring?

- ▶ Any more than these may cost too much.

Production Goals for Texas

- ▶ Average Weaning Weights of all calves: 530 pounds.
- ▶ While your management determines this to a degree (ie. Genetics, etc.), mother nature can always trump you (ie. Rainfall after calving).

- ▶ Combine this with an 84% weaning percentage, then pounds per female will be 445 pounds.

Production Efficiencies

- ▶ Are you stocked right for you land resources?
 - Affects reproduction, weaning weights, feed costs, etc.
 - Remember, if she doesn't get bred, everything else that follows is an expense with no income to offset it.
- ▶ Are my females "sized" right?
- ▶ Are your females weaning an appropriate weighted calf annually for your resources?

Financial Goals for the Texas

- ▶ Total Costs should be \$500 to \$575.
- ▶ Top three expenses (Depreciation, Labor & Management, and Feed Purchased) should account for at least 45% of your total expense (\$225 to \$260 per female).
- ▶ That gives you \$\$275 to \$315 for everything else.
- ▶ Ask yourself: Is this _____ that I am considering purchasing going to improve my reproduction and/or production efficiency?
 - Feed
 - Labor (save one more calf)
 - New pickup

Other Comments

- ▶ This drought will end sometime, then calf prices should be very good.
- ▶ Expansion will come, but it will be very slow, probably won't begin until 2015.
- ▶ In the meantime, this industry (above the cow-calf sector) has some downsizing to do.

Questions and/or Comments



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