

# Keeping Heifer Raising Profit Margins Profitable

Presented At The  
**Raising Quality Dairy Heifers  
Heifer Management Seminar**  
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By  
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## Background

## Please Note

- Slides marked "Bernhardt" were developed by Kevin Bernhardt
  - Professor of Agribusiness at UW-Platteville
  - Extension Farm Management Specialist with the UW-Extension and Center for Dairy Profitability

## Topics

- I. Dairy Industry Financial Performance Prior to 2008
- II. A Year For The Record Books ...2008
- III. Beyond 2008
- IV. Hints To Help Keep Heifer Raising Profit Margins Profitable

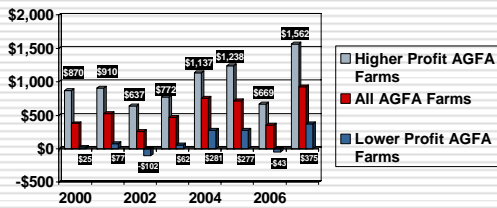
## I. Dairy Industry Financial Performance Prior to 2008

### USDA-NASS January All Milk Price 2000 - 2009



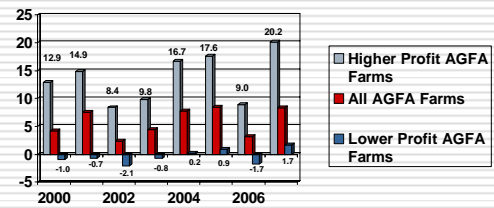
## Dairy Farms Prior to 2008

Net Farm Income from Operations per Cow

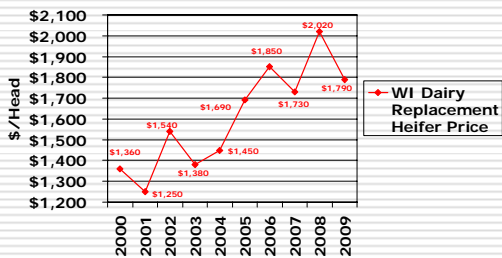


## Dairy Farms Prior to 2008

Rate of Return on Assets %



## USDA-NASS January Dairy Heifer Replacement Price 2000 - 2009



## 2000 to 2007

- Despite a few years of low prices
  - The average WI AGFA Dairy Farm earned a positive Net Farm Income from Operations and Rate of Return on Assets
- Overall dairy farm profitability helped to keep upward price pressure on dairy replacement heifers
  - Farmers were willing to invest in their dairy replacement program
    - Whether raising their own heifers, having them custom raised, or purchasing them

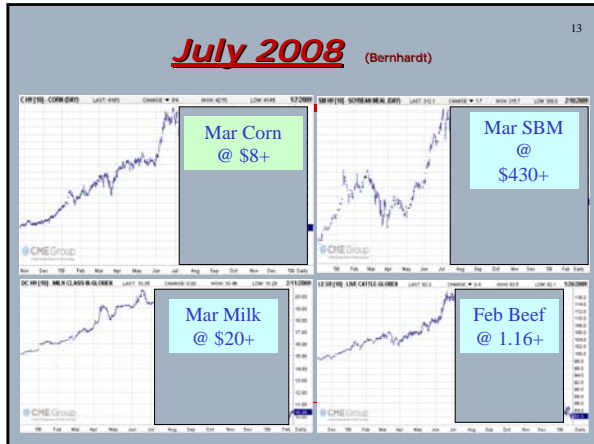
## II. A Year For The Record Books ...2008

*"What a long strange trip it's been."*

-From the Song 'Truckin'  
-Jerry Garcia, Bob Weir, Phil Lesh, and Robert Hunter  
-1970

Prior To 2008

**RISKY**



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***It's Not July Anymore*** (Bernhardt)

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Input Price Changes Bernhardt 17

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	Pre Meltdown	Post Meltdown
Anhydrous	\$1,000/ton	\$600
DAP	1,000/ton	\$800
Potash	\$900/ton	\$600
Triple Stack	\$275/bag	\$210
Crude Oil	\$144/b	\$44/b

Source: University of Illinois Extension

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RISKY

**VOLATILITY**

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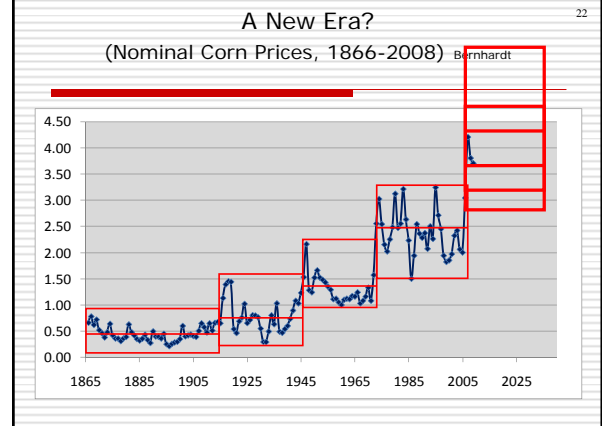
## 2008 VOLATILITY ISSUES

- ❑ SIMULTANEOUS INPUT AND OUTPUT VOLATILITY
- ❑ MARGIN CALL CONCERNS
  - HEDGING AND CONTRACTING A PRICE MORE COSTLY
- ❑ TRADITIONAL RISK MANAGEMENT VEHICLES SEEMED LESS EFFICIENT

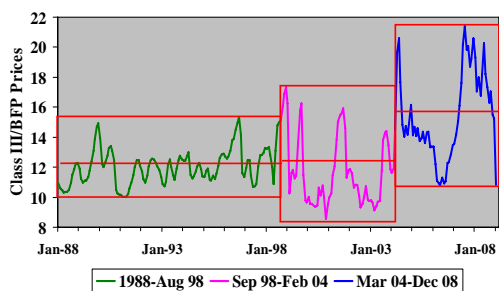
RISKY  
VOLATILITY  
**UNCERTAINTY**

## 2008 VOLATILITY AND UNCERTAINTY

**HARBINGER OF THINGS TO COME?**



## Class III Prices – January 1988 to December 2008 Bernhardt



## 2008 VOLATILITY AND UNCERTAINTY

HARBINGER OF THINGS TO COME?  
**WE SHOULD PROBABLY  
ACT LIKE IT IS!**

### III. Beyond 2008

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### What Do The Markets Have To Say?

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Market	2009	2010
Dairy (Dec)	\$14.61	\$15.40
Corn (Dec)	\$4.05	\$4.23
Soybeans (Nov)	\$8.92	\$9.13
Soybean Meal (Dec)	\$262	\$267
Crude Oil (Dec)	\$53	\$63

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### What If... Dairy Heifer Raising Scenarios

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- Dairy Heifer Raising Simulations
    - Dairy Heifer Dollars
      - A enterprise profitability and cost of production analysis spreadsheet
      - Coming soon at...
        - <http://www.uwrf.edu/extension/GreggH.htm>
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### IV. Hints To Help Keep Heifer Raising Profit Margins Profitable

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#### Hint 1 Engage In Active Financial Management

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- Active financial management will become increasingly important in this new uncertain environment
  - Pushing the pencil
    - Frequent budgeting sessions
      - Quarterly if not monthly
      - Look out farther into the horizon
        - 1 to 2 years
  - Lock prices in accordingly
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#### Hint 2 Cull Less Profitable Enterprises

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- You can't afford to waste money on losing enterprises!
    - For dairy farmers raising their replacements
      - Grain enterprises
      - Harvesting enterprises
      - Heifer enterprises?
      - Forage enterprises?
    - For custom heifer raisers
      - Cash grain enterprises
      - Harvesting enterprises
      - Forage enterprises?
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### Culling Grain Enterprises

- There is considerable evidence that suggests that there are a lot of unprofitable grain operations on Upper Midwest dairy farms.
- Why grow it if you can buy it cheaper?

### Culling Harvesting Operations

- It is difficult to justify buying new harvesting equipment on most dairy farms, custom heifer raising operations, and other livestock farms.

### Buying a Chopper for Corn Silage Harvesting

- A small feedlot with 125 acres of corn silage buys:
  - A chopper for \$35,000
  - A corn head for \$9,000
  - Trade in allowance: \$2,000
  - Salvage value: \$2,000
  - Amount borrowed at 6.2 % for 5 years
  - Useful life: 8 years
  - 20 % marginal tax rate

### Interest and Net Depreciation Expense for the Chopper

Line Item	Expense/Acre/Year
Interest Expense	\$7.50
Depreciation Expense	\$40.00
Less Depreciation Shield	\$8.00
Interest and Net Depreciation Expense	\$39.50

### Buying A Chopper Results

- Can you harvest silage cheaper?
  - Total custom hire rate per acre for corn silage harvesting = \$43.20 (NASS Custom Rate Guide)
  - Just the interest and net depreciation expense for owning the chopper = \$39.50
- Do you really believe you can chop corn silage for \$3.70 per acre?
- Results for buying a combine for 1,200 acres of corn are similar

### Hint 3

### You Don't Have To Grow Out Every Heifer

- If it is important to stop wasting resources on losing enterprises in this new uncertain era...
- Why waste resources on replacements that probably won't make it in your herd?

## How Many Replacements Do You Need?

- A 100 cow herd with a 10 % heifer cull rate needs the following number of replacements...
  - 58 if their cow cull rate is 26 %
  - 66 if their cow cull rate is 30 %
  - 76 if their cow cull rate is 34 %
  - 84 if their cow cull rate is 38 %
  - 93 if their cow cull rate is 42 %

■ Source: Penn State University  
[www.extension.org/pages/Heifer\\_Economics](http://www.extension.org/pages/Heifer_Economics)

## How Do I Choose Heifers To Sell?

- Genetic potential
- Veterinary records
- Heifer growth records

## Hint 4 Reduce Operating Efficiency Slack

- We need to reduce operating efficiency slack in Wisconsin agriculture!
  - Slack refers to a reduction in cost efficiency in good years

## OPERATING EFFICIENCY SLACK EXAMPLE (August 2007 Study of AGFA Farms)

	2006	2005
HERD SIZE	106	103
MILK PER COW	21,561 LBS	21,538 LBS
MILK PRICE/CWT	\$13.31	\$15.67
NET FARM INCOME FROM OPERATIONS /COW	\$391	\$894
TOTAL EXPENSE PER COW (IN 2005 DOLLARS)	\$3,284	\$3,431

## Hint 5 Use Cash Wisely

- Cash is usually managed with tax management goals in mind
  - Bought a lot of nice equipment
- In uncertain environments, this may not be the most important goal
- Cash is an excellent safety net!
  - Prepay expenses
  - Self insure the bad years

## Summary

- The uncertainty the came about in 2008 will cause new challenges for dairy farmers and heifer raisers in the future
  - Nevertheless, they are not insurmountable
  - Farmers and growers that
    - Push the pencil a lot
    - Cull poor enterprises
    - Don't raise every heifer
    - Minimize slack
    - Manage cash well
- Will Succeed!

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