

Creating & Maintaining A Profitable Beef Cow Business In 2003 & Beyond

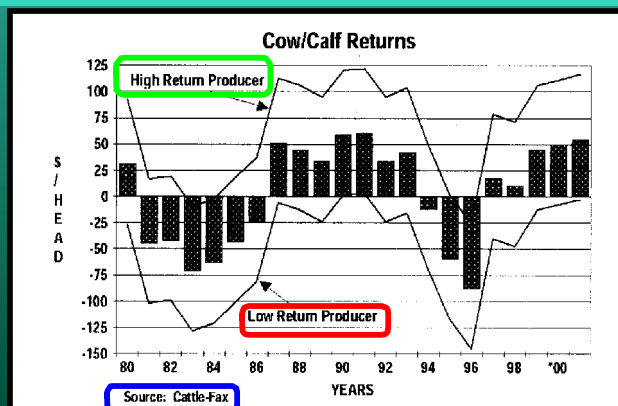
By

Harlan Hughes
Professor Emeritus
North Dakota State University
Western Edge Consulting

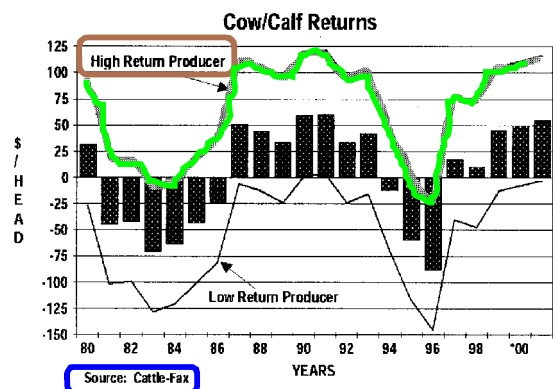
9th Annual Bovine Day
Levis, Quebec
6 June 2003

November 2002

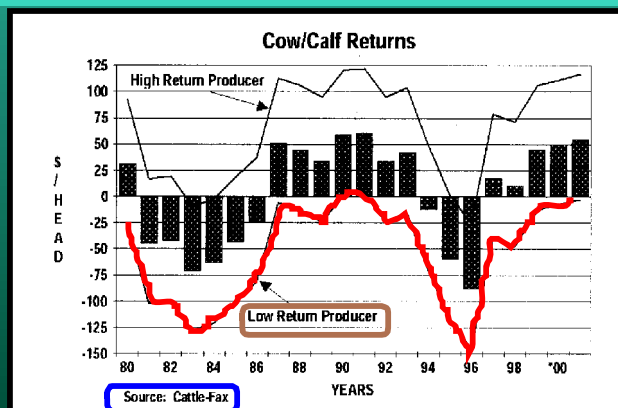
Are There Differences In Economic Performances Among Beef Cow Producers?



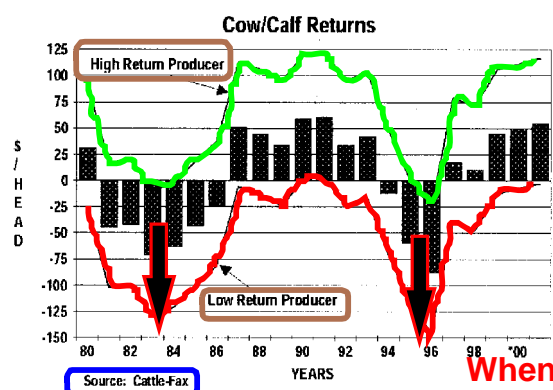
Are There Differences In Economic Performances Among Beef Cow Producers?



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Are There Differences In Economic Performances Among Beef Cow Producers?



Do You Think The Management Levels Of These Three Producer Groups Are The Same?

I DO NOT THINK SO!!

So...What Is Needed To Create And Maintain A High Profit Beef Cow Herd In The Years Ahead?

Profit Equation

- Profit = Income - Expenses
- Income = Price x Cwt Of Calf Produced
- Expenses = UCOP x Cwt Of Calf Produced

$$\text{Profit} = (\text{Price} - \text{UCOP}) \times \text{Cwt Of Calf Produced}$$

Economics Based

Profit Margin

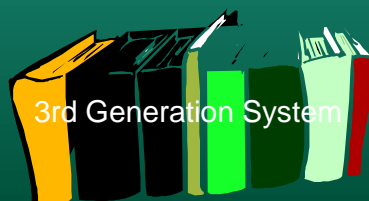
Production Based

Cwt Of Calf Produced

$$\text{Profit} = (\text{Price} - \text{UCOP}) \times \text{Cwt Of Calf Produced}$$

Intensive Management Tool #1

Management Intensity
Increases Profits!!!



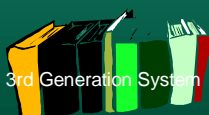
3rd Generation System



CHAPS

Cow Herd Analysis & Performance
System

- HERD PERFORMANCE DATA
- BENCHMARKING AGAINST
OTHER CHAPS HERDS



3rd Generation System

Herd Comparison

1. Calving Distribution
2. Production Performance Measures
3. Reproductive Performance



3rd Generation System

Benchmarking

- Is the act of comparing your beef cow herd's production and economic facts
- to the average facts from a set of benchmark herds

Table 1: North Dakota's Beef Cow Herd Analysis Program (CHAPS)

Herd Performance Measures	Study Herd	Benchmark Ave	Your Goals
Calving Distribution			
Calves Born During First 21 Days	44.9%	58.2%	
Calves Born During First 42 Days	74.4%	85.9%	
Calves Born During First 63 Days	80.4%	95.2%	
Calves Born After First 63 Days	19.6%	4.8%	

For some reason, this study herd manager could not get his cows bred in a timely manner. I wonder why?



Table 1: North Dakota's Beef Cow Herd Analysis Program (CHAPS)

Herd Performance Measures	Study Herd	Benchmark Ave	Your Goals
Production Performance Measures			
Average Age At Weaning	207 Days	201 Days	
Average Weaning Weight	565 Lbs	556 Lbs	
Steers	585 Lbs	566 Lbs	
Heifers	536 Lbs	538 Lbs	
Bulls	NA	604 Lbs	
Pounds Weaned Per Exposed Female	481 Lbs	489 Lbs	

Weaning Weights Good

Lbs/Female Exposed a little low



Table 1: North Dakota's Beef Cow Herd Analysis Program (CHAPS)

Herd Performance Measures	Study Herd	Benchmark Ave	Your Goals
Reproduction Performance (Based On Females Exposed)			
Pregnancy Percentage	94.3%	93.1%	
Pregnancy Loss	1.6%	0.7%	
Calving Percentage	92.9%	92.5%	
Calf Death Loss	7.1%	4.3%	
Calf Crop or Weaning Percentage	85.7%	89.0%	
Female Replacement Rate	19.0%	20.8%	
Calf Death Loss (based on No. calves born)	7.7%	4.7%	

Calf Death Losss High. Percent Calf Crop Low!

Calving Distribution Table



Calving Distribution Table

Total Herd

DAM AGE	#CALVES EACH AGE	EARLY	21-1ST	21-2ND	21-3RD	21-4TH	LATE	OPEN COWS	AVG DATE FOR EACH	AVG WWT
2	31	8	11	4	4	4			4/13/94	543
3	24		8	8	4	4			4/15/94	552
4	35	2	19	4		2	8		4/18/94	598
5	12			4	4	4		1	5/9/94	579
6	8			4	4				4/22/94	611
7	14		4	4	6				4/4/94	578
8	18		2	8	4	4		1	5/3/94	543
9	12		8		4				4/16/94	530
10	6		4	2					3/30/94	518
11	4				4				4/20/94	528
12+	0									0
TOTAL	164	10	56	38	34	18	8	2	4/18/94	567

Weaning Wt 566 550 527 485 455 437

Calving Distribution Table

21-Day Calving Intervals

DAM AGE	#CALVES EACH AGE	EARLY	21 ST	21 ND	21 RD	21 TH	LATE	OPEN COWS	AVG DATE FOR EACH	AVG WWT
2	31	8	11	4	4	4			4/13/94	543
3	24		8	8	4	4			4/15/94	552
4	35	2	19	4		2	8		4/18/94	598
5	12			4	4	4		1	5/9/94	579
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10	6		4	2					3/30/94	518
11	4				4				4/20/94	528
12+	0									0
TOTAL	164	10	56	38	34	18	8	2	4/18/94	567

Weaning Wt 627 624 556 511 397 365

Calving Distribution Table

Sorted By Age Of Dam

DAM AGE	#CALVES EACH AGE	EARLY	21 ST	21 ND	21 RD	21 TH	LATE	OPEN COWS	AVG DATE FOR EACH	AVG WWT
2	31	8	11	4	4	4			4/13/94	543
3	24		8	8	4	4			4/15/94	552
4	35	2	19	4		2	8		4/18/94	598
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12+	0									0
TOTAL	164	10	56	38	34	18	8	2	4/18/94	567

Weaning Wt 566 550 527 485 455 437

What Ages Of Cows Produces Heaviest Calves ?

CALVING DISTRIBUTION REPORT

CALVES BORN DURING EACH PERIOD

DAM AGE	#CALVES EACH AGE	EARLY	21 ST	21 ND	21 RD	21 TH	LATE	OPEN COWS	AVG DATE FOR EACH	AVG WWT
2	31	8	11	4	4	4			4/13/94	543
3	24		8	8	4	4			4/15/94	552
4	35	2	19	4		2	8		4/18/94	598
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10	6		4	2					3/30/94	518
11	4				4				4/20/94	528
12+	0									0
TOTAL	164	10	56	38	34	18	8	2	4/18/94	567

Weaning Wt 566 550 527 485 455 437

Calving Distribution Table

We Recommend Calving Heifers Early

DAM AGE	#CALVES EACH AGE	EARLY	21 ST	21 ND	21 RD	21 TH	LATE	OPEN COWS	AVG DATE FOR EACH	AVG WWT
2	31	8	11	4	4	4			4/13/94	543
3	24		8	8	4	4			4/15/94	552
4	35	2	19	4		2	8		4/18/94	598
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6	8			4	4				4/22/94	611
7	14		4	4	6				4/4/94	578
8	18		2	8	4	4		1	5/3/94	543
9	12		8		4				4/16/94	530
10	6		4	2					3/30/94	518
11	4				4				4/20/94	528
12+	0									0
TOTAL	164	10	56	38	34	18	8	2	4/18/94	567

Weaning Wt 566 550 527 485 455 437

Calving Distribution Table

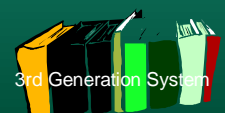
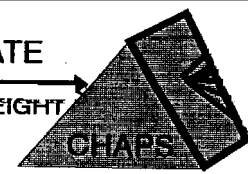
Prime Candidates For Being Culled

DAM AGE	#CALVES EACH AGE	EARLY	21 ST	21 ND	21 RD	21 TH	LATE	OPEN COWS	AVG DATE FOR EACH	AVG WWT
2	31	8	11	4	4	4			4/13/94	543
3	24		8	8	4	4			4/15/94	552
4	35	2	19	4		2	8		4/18/94	598
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Weaning Wt 566 550 527 485 455 437

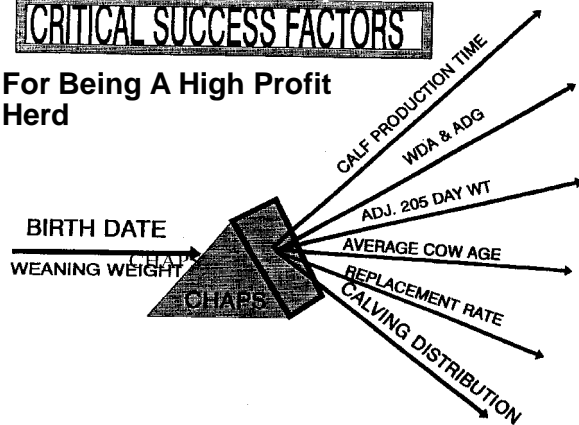
CRITICAL SUCCESS FACTORS

BIRTH DATE
WEANING WEIGHT



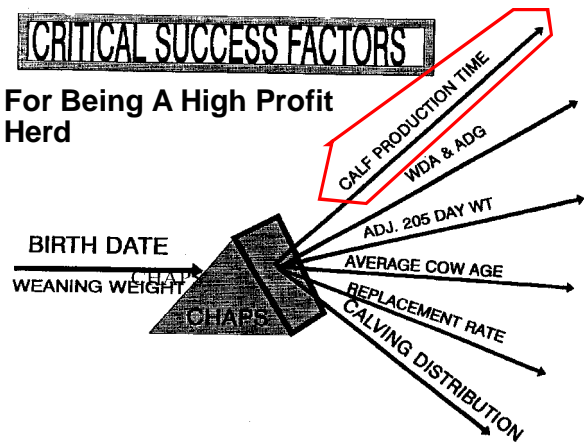
CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



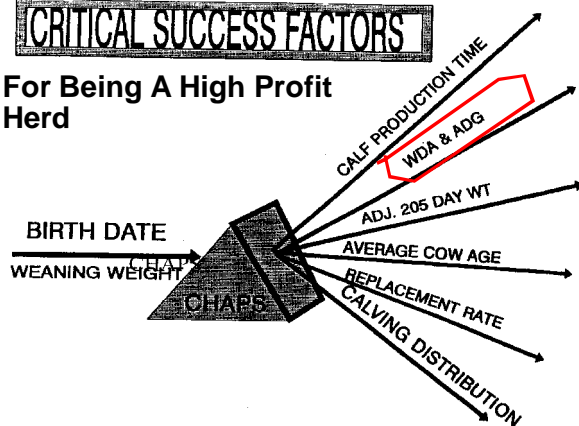
CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



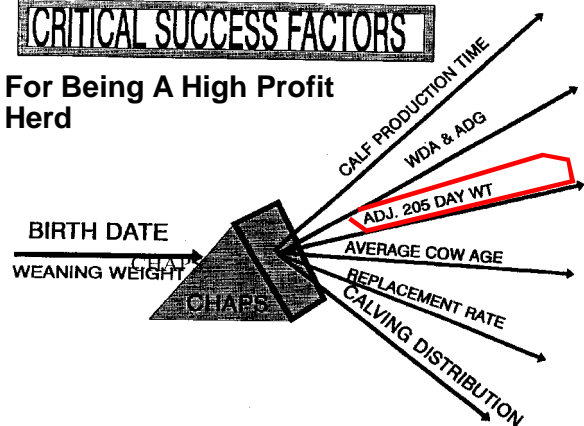
CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



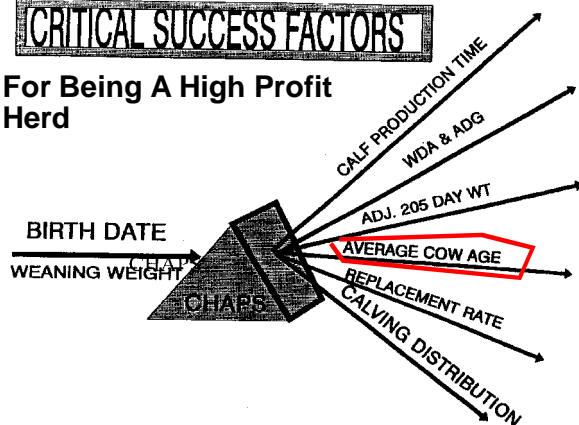
CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



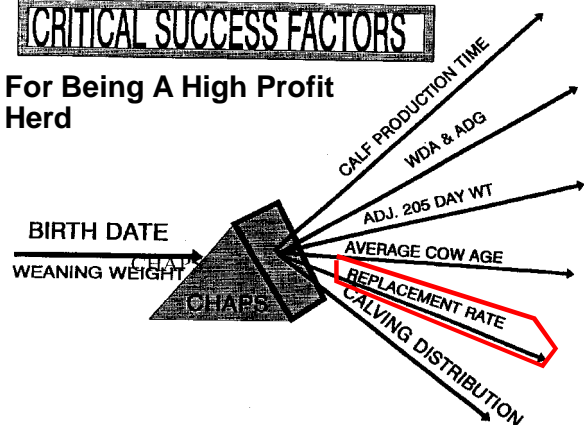
CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



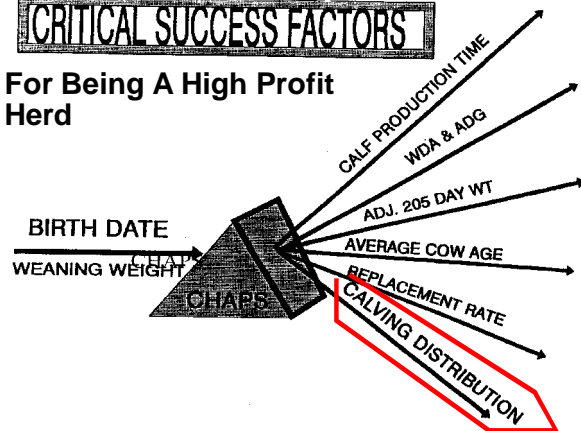
CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



CRITICAL SUCCESS FACTORS

For Being A High Profit Herd



Intensive Management Tool #2

Management Intensity Increases Profits!!!

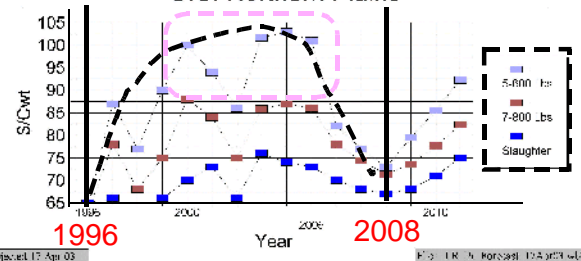


Planning Prices

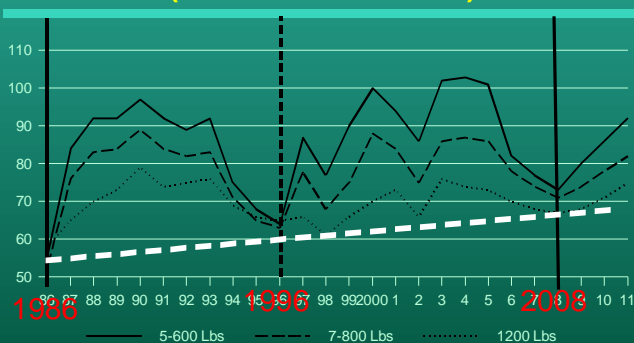
$$\text{Profit} = (\text{Price} - \text{UCOP}) \times \text{Cwt Of Calf Produced}$$

U.S. Planning Prices Northern Plains

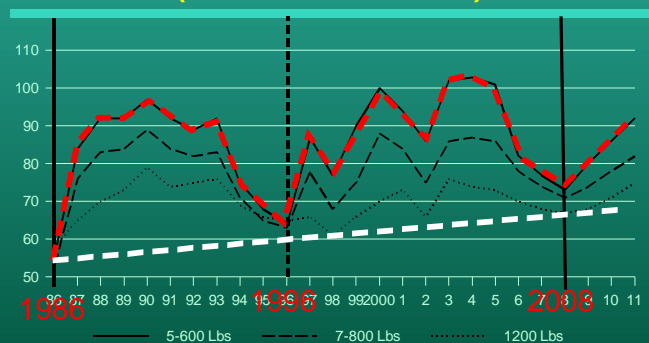
Calf, Feeder, & Slaughter Prices U.S. Northern Plains



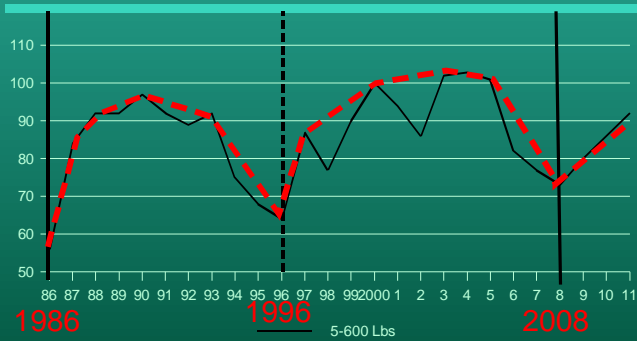
Planning Prices (Northern Plains U.S.)



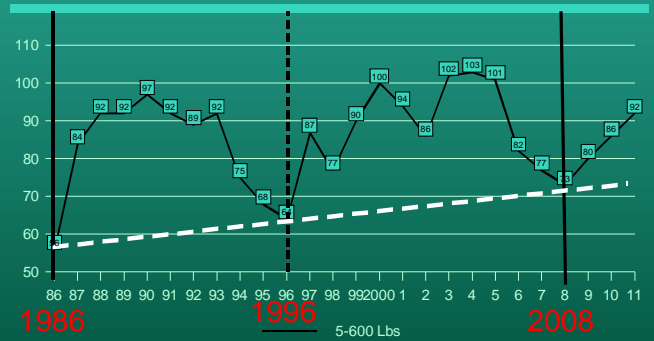
Planning Prices (Northern Plains U.S.)



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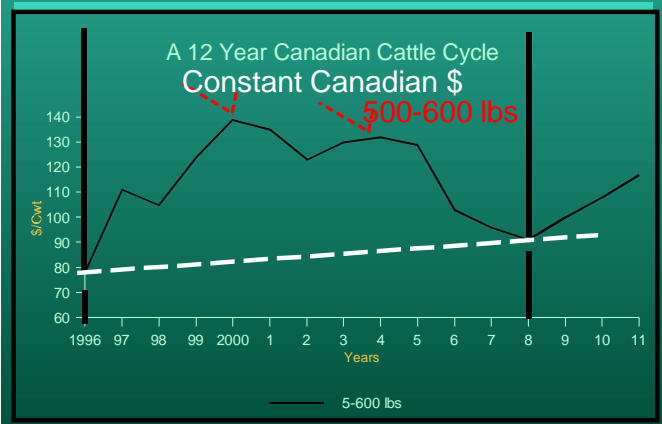
Planning Prices (Northern Plains U.S.)



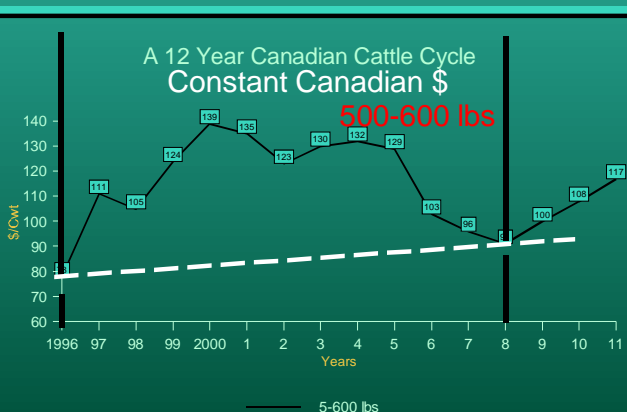
Hour-Long Computer CD Video Available On Cattle Cycle, Its Implied Beef Price Cycle, and How To Make Both Work For You

\$10 Ca – A Special Conference Rate

Canadian Beef Price Cycle



Canadian Beef Price Cycle



Intensive Management Tool #3

Management Intensity
Increases Profits!!!



Unit Cost Of Production UCOP

$$3. \text{ Profit} = (\text{Price} - \text{UCOP}) \times \text{Cwt Of Calf Produced}$$

IRM Has Arrived In North Dakota

FINPACK

CHAPS



IRM-FARMS

PASTURE

IRM-TEAMS

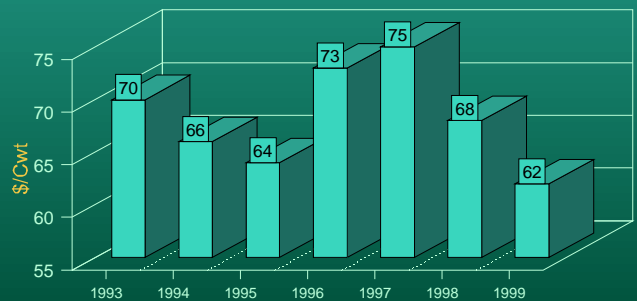
Harlan Hughes
NDSU Extension Service

1st Question

- What does It Cost Me to Produce a hundredweight Of Calf?
 - Answer By IRM Cost & Return Analysis

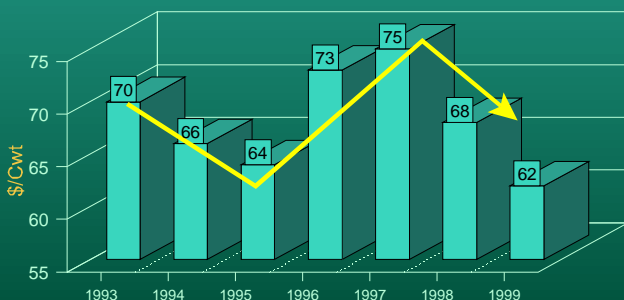
IRM Herds' Unit Cost Of Production

Northern Plains



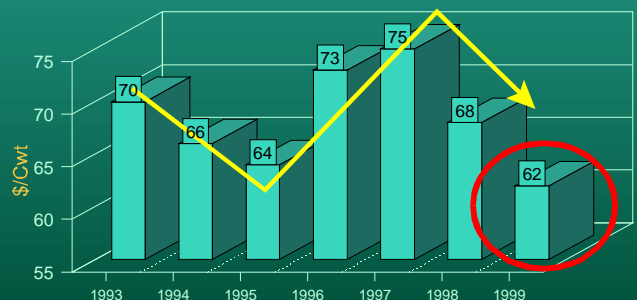
IRM Herds' Unit Cost Of Production

Northern Plains



IRM Herds' Unit Cost Of Production

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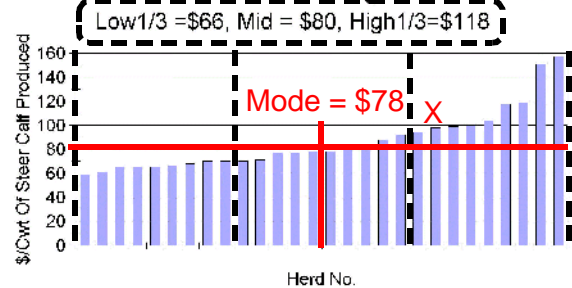


2nd Question

- Am I A High-Cost or Low-Cost producer?
 - Answer By Benchmarking Against Other Herds

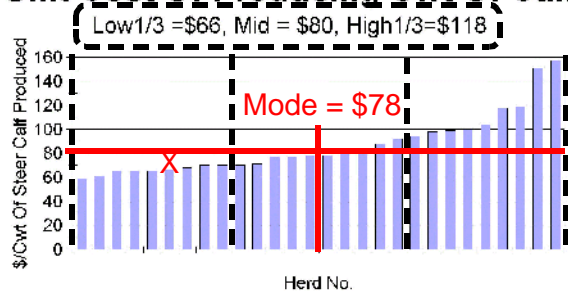
Manitoba UCOP S.E. Manitoba IRM Herds

Unit Cost Of Producing Cwt Of Calf



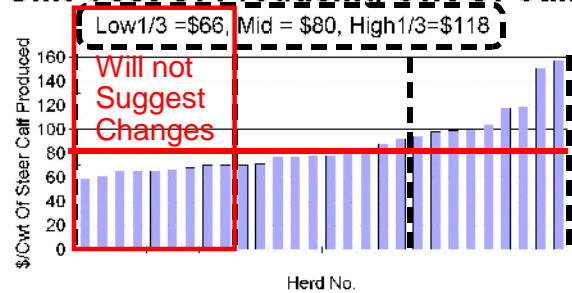
Manitoba UCOP S.E. Manitoba IRM Herds

Unit Cost Of Producing Cwt Of Calf



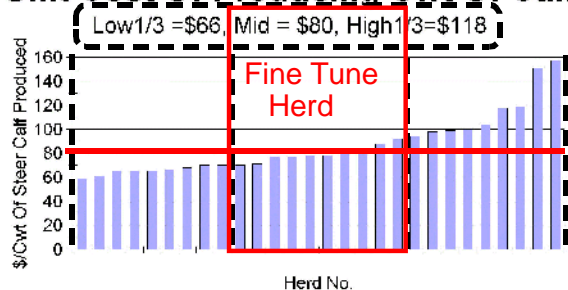
Manitoba UCOP S.E. Manitoba IRM Herds

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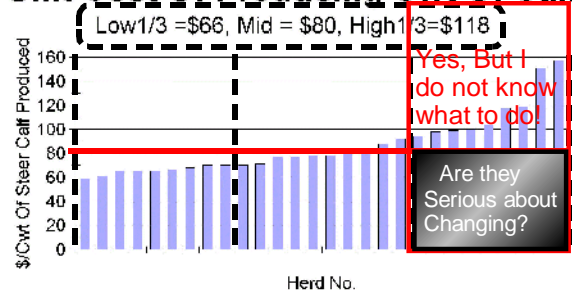
Manitoba UCOP S.E. Manitoba IRM Herds

Unit Cost Of Producing Cwt Of Calf



Manitoba UCOP S.E. Manitoba IRM Herds

Unit Cost Of Producing Cwt Of Calf



**Weaning Weight Must
Explain Herd To Herd
Variation In Profits...**

Doesn't It???