

SOUTHEAST DAIRY OUTLOOK

Georgia Milk Producers Association

January 22, 2020

Calvin Covington

ccovington5@cs.com

Better News Than Last Year

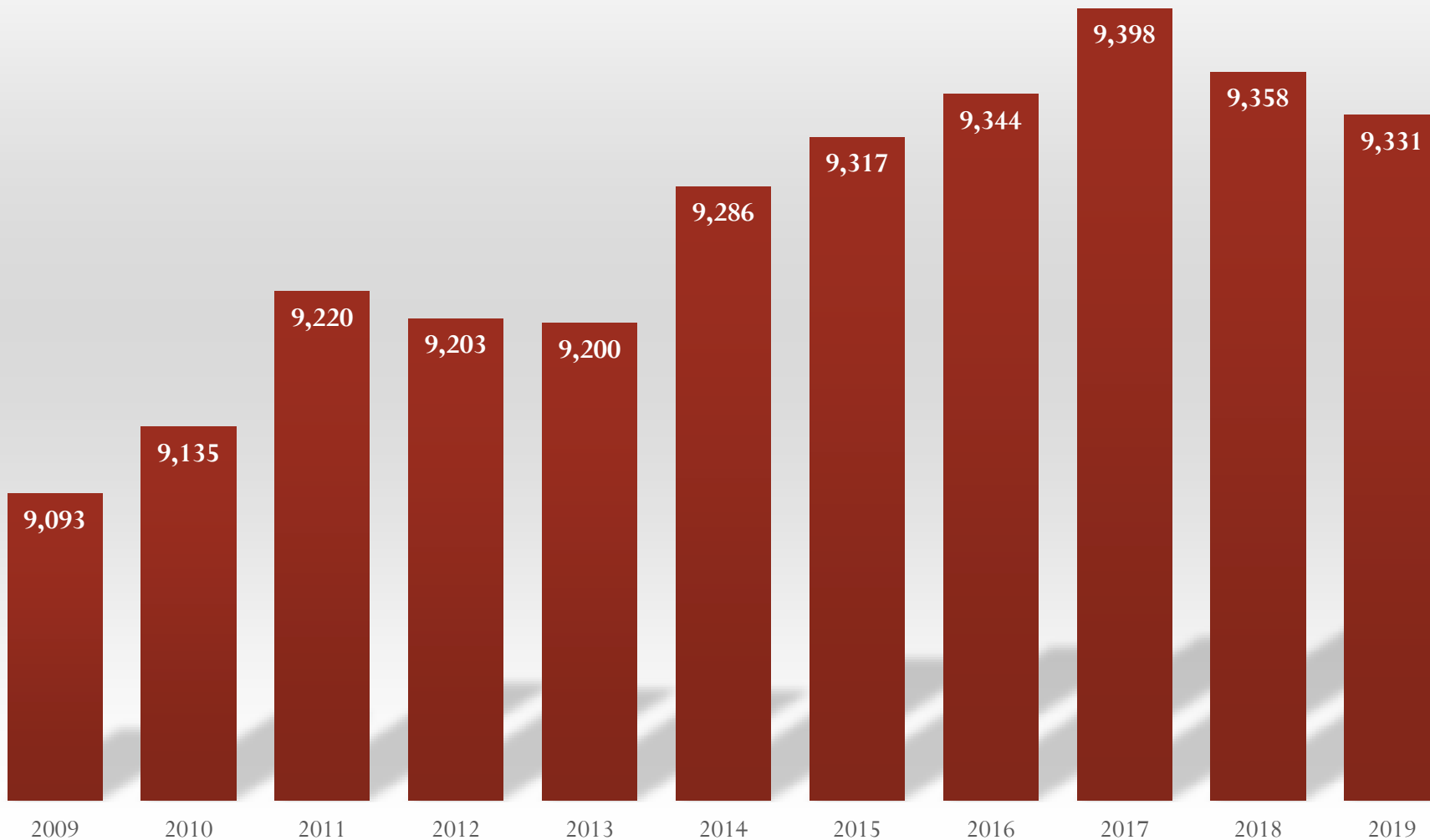
<u>Year</u>	<u>Appalachian</u>	<u>Florida</u>	<u>Southeast</u>
	Blend Price (\$/cwt., 3.5% fat, base zone, weighted average)		
2015	\$18.57	\$20.90	\$19.27
2016	\$17.08	\$19.23	\$17.51
2017	\$18.79	\$20.92	\$19.13
2018	\$17.29	\$19.37	\$17.71
2019	\$19.38	\$21.39	\$19.75
<u>Change 19 vs. 18</u>	<u>\$2.09</u>	<u>\$2.02</u>	<u>\$2.04</u>

Dairy Product Prices

Establish Milk Price

Year	Butter	Cheese	Nonfat Dry Milk Powder	Dry Whey
	Annual Average (\$/lb.)			
2014	\$2.14	\$2.16	\$1.77	\$0.65
2015	\$2.08	\$1.65	\$0.90	\$0.38
2016	\$2.08	\$1.61	\$0.83	\$0.29
2017	\$2.33	\$1.63	\$0.87	\$0.44
2018	\$2.26	\$1.54	\$0.79	\$0.34
2019	\$2.24	\$1.76	\$1.04	\$0.38

Dairy Cows end of November 2009 – 2019 (1,000 head)



Milk Production Growth Slowing

<u>Year</u>	<u>Milk Production</u>	<u>Change from Previous Year</u>
	(million lbs.)	(%)
2014	206,054	
2015	208,597	1.23
2016	212,405	1.83
2017	215,527	1.47
2018	217,575	0.95
2019 (estimated)	218,250	0.30

Milk Production by Regions

<u>Region</u>	2018 (January-September)	2019 (January-September)	<u>Change %</u>
	(million lbs.)		
Midwest	51,599	51,530	-0.1%
California	30,416	30,827	1.4%
Northwest	24,385	24,913	2.2%
Northeast	23,456	22,990	-2.0%
Southwest	20,396	20,696	1.5%
Plains (I-29)	7,066	7,074	0.1%
Southeast	6,880	6,459	-6.1%

DAIRY PRODUCT INVENTORY

<u>Product</u>	<u>Nov. 2017</u>	<u>Nov. 2018</u>	<u>Nov. 2019</u>	<u>19 vs. 18</u> <u>Change %</u>
Butter	161	154	181	+ 18 %
Nonfat Dry Milk Powder	317	289	223	-23 %
Dry Whey	100	68	80	+ 18 %
American Cheese	733	799	740	- 7 %

Strong Domestic Demand

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>19 vs. 18</u>
	Total Solids (January-November) billion lbs.			Change %
Domestic	21.9	22.1	22.6	+ 2.3 %
Export	3.6	4.1	3.7	-9.2 %
Total	25.5	26.2	26.3	+ 0.5%
Export % of Total	14.1%	15.6%	14.1%	

Below 10 billion in Sales

<u>Order</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>19 vs. 18</u>
	Class I Producer Milk (million lbs.)			
Appalachian	4,002	3,984	3,746	-6.0%
Florida	2,168	2,144	2,091	-2.5 %
Southeast	3,767	3,704	3,438	-7.2 %
Total	9,937	9,832	9,275	-5.7 %
Virginia	760	741	714	-3.6%
Total All	10,697	10,573	9,989	-5.5%

Southeast Class I Utilization

Little Change

<u>Order</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Appalachian	69.18 %	68.98 %	69.48 %	70.33 %
Florida	83.84 %	83.33 %	83.59 %	83.38 %
Southeast	71.22 %	69.10 %	71.11 %	70.18%
Total	72.88 %	71.73 %	72.79 %	72.84 %

What Kind of Milk are People Drinking?

Florida Order 2014 vs. 2019 (Nov.)

<u>Product</u>	<u>2014</u>	<u>2019</u>
	(Percent of Total Fluid Sales)	
Whole	34.7	38.6
Low fat	41.5	39.2
Skim	10.2	6.8
Fortified	1.0	0.0
Flavored	8.4	10.8
Buttermilk	0.5	0.6
Eggnog	0.3	0.2
Organic	3.3	3.8

2020 Outlook

- Cow numbers – flat to up slightly ???
- Production – up 1.25%
- Demand – up 1.25% to 1.50%
- Close balance between supply and demand
- Product prices
 - Nonfat dry milk powder – higher
 - Cheese – up slightly, volatility
 - Butter – down
 - Dry whey - ? Exports – Asia rebuilt swine herds

2020 Blend Prices

Continue to be a Walk not a Run Upward

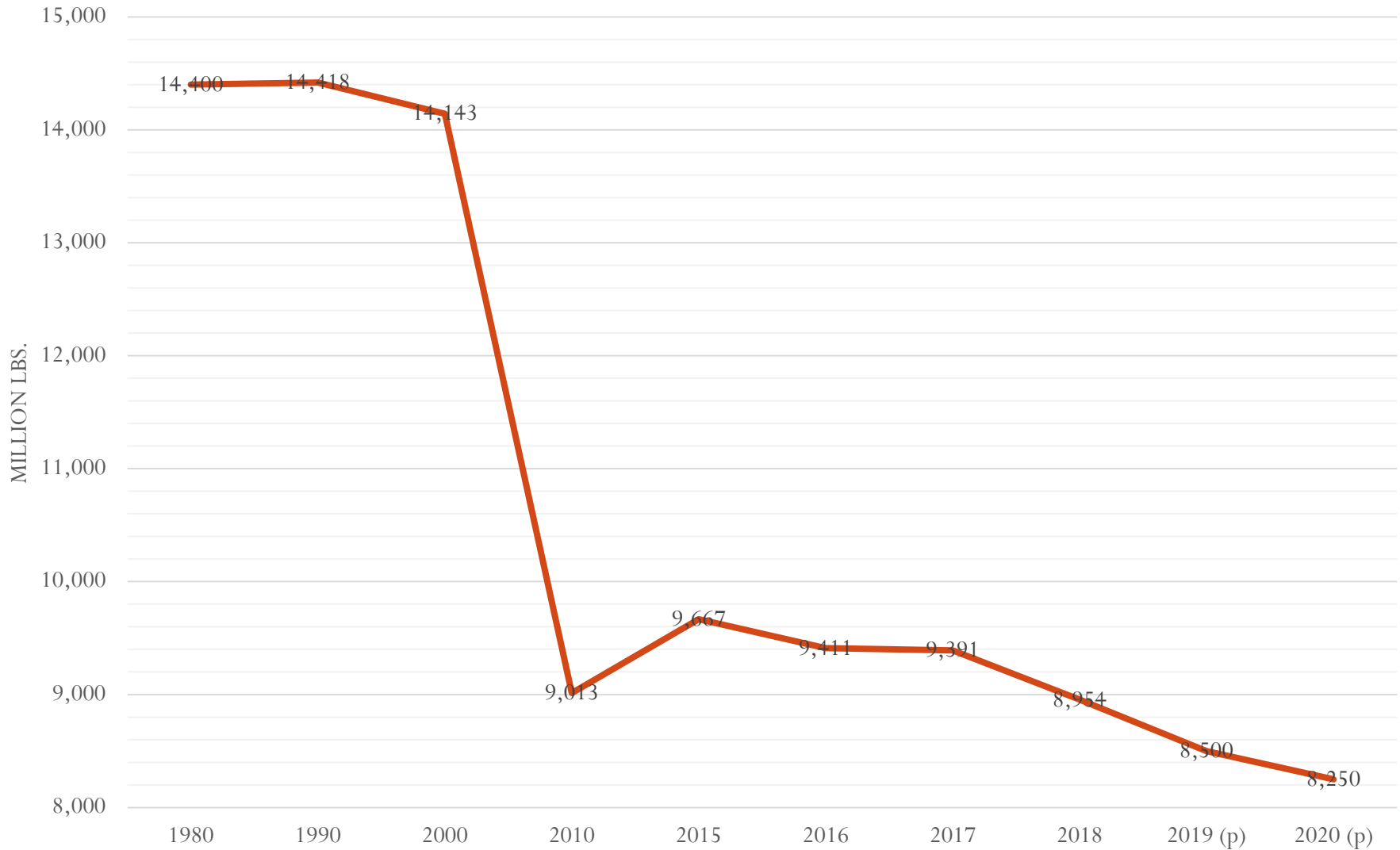
<u>Order</u>	<u>2019</u>	<u>2020</u>	<u>Change</u>
	Base Zone – 3.5% fat (\$/cwt.)		(\$/cwt.)
Appalachian	\$19.38	\$20.60	+\$1.22
Florida	\$21.39	\$22.70	+\$1.31
Southeast	\$19.75	\$21.14	+\$1.39

Southeast Milk Markets 2020 and Beyond ?

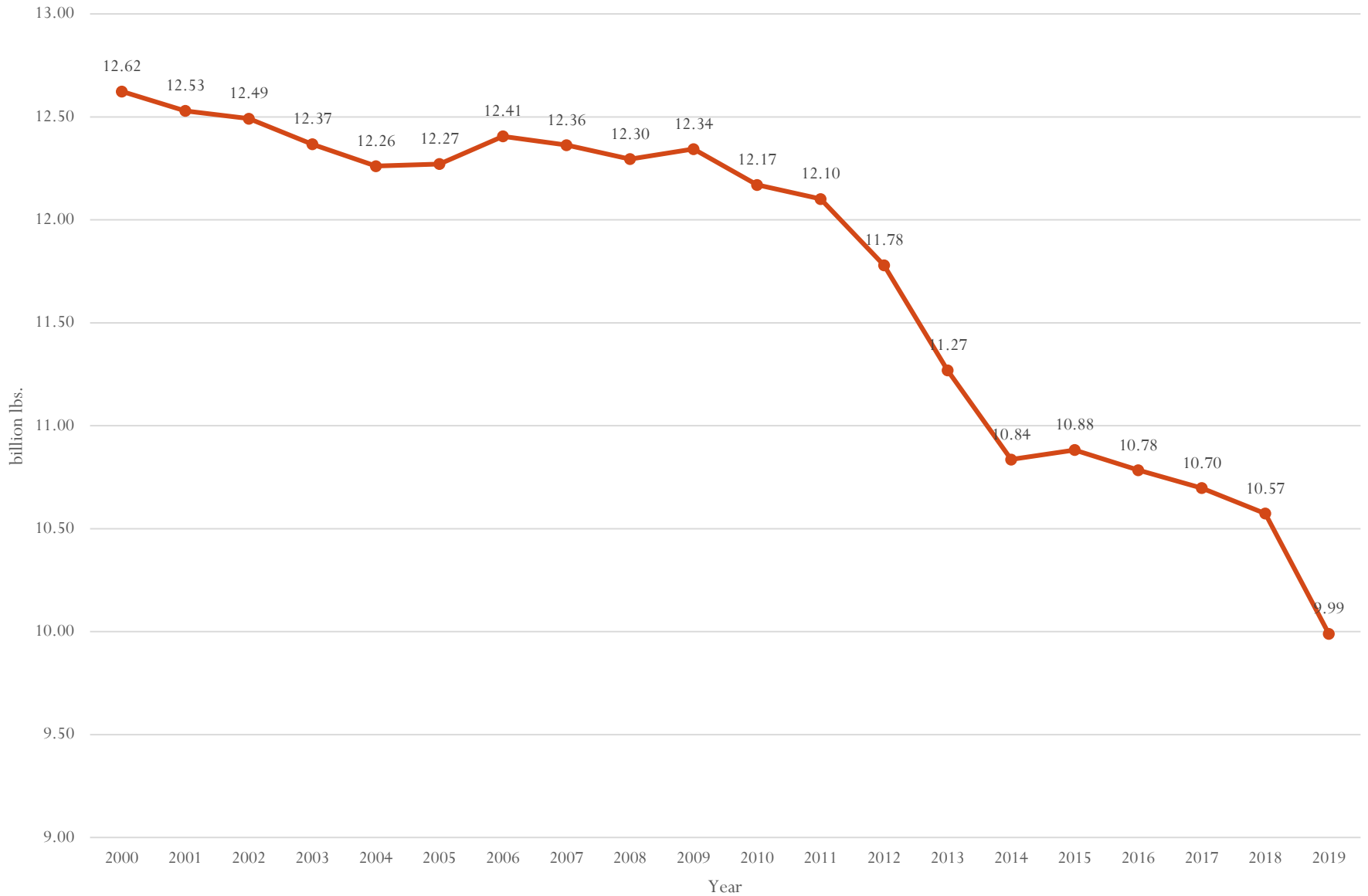
40 Pool Distributing Plants (Fluid)

- Dean Foods 11
- Borden 7
- Grocers 10
- Independents – single plant 8
- Cooperatives 4

Southeast Milk Production 2020 On ??



BELOW 10 billion lbs. in Class I SALES



Southeast Per Capita Production vs. Per Capita Fluid Sales

Year	Production	Fluid Sales	Difference
	(lbs. per capita)		
2010	122	178	-56
2011	122	174	-52
2012	124	170	-46
2013	122	165	-43
2014	124	159	-35
2015	125	156	-31
2016	121	154	-33
2017	119	149	-30
2018	113	146	-33
2019 (estimate)	106	142	-36

Outlook

- Walk, not a run, to higher prices continues.
- 2020 blend prices about \$1.25/cwt. higher than 2019.
- Southeast Fluid Milk Market facing challenges.
- Future viability of Southeast Dairy Industry is dependent upon growing, profitable, and local milk markets.
- No need to produce something unless there is a profitable market for the product.
- Good milk market – the milk production will follow.

Controlling the Controllable

Making a Profit in Unprofitable Times

John Ferry

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the teal bar.

Milk Street Dairy

My purpose for working with dairy farms is to do all that is possible to increase the health of the herd. I believe that achieving this will not only improve the welfare of the cattle; it will also reward the owner with greater financial health.

In his essay, The Ethics of Belief, W.K. Clifford wrote, “It is wrong always, everywhere, and for anyone, to believe anything upon insufficient evidence.”

He describes a shipowner who “acquired a sincere and comfortable conviction that his vessel was thoroughly safe and seaworthy; He watched her departure with a light heart, and benevolent wishes for the success of the exiles in their strange new home that was to be; and he got his insurance money when she went down in mid-ocean...”

“What shall we say of him? Surely this, that he was verily guilty of the death of those men. It is admitted that he did sincerely believe in the soundness of his ship; but the sincerity of his conviction can no wise help him, because he had no right to believe on such evidence as was before him.”

The duty of inquiry is a moral obligation. Ignoring this obligation and causing harm from ignorance is no more moral than an evil shipowner that sends a poor boat out hoping it sinks for insurance money. The same harm is done by the first man, even if his thoughts were benevolent. The action was still immoral.

In providing service to farmers, we can't know everything, and some things we think we know will be wrong, but we must always try to be knowledgeable. In the everyday discharge of our duties, we live Clifford's philosophy by always applying the duty of inquiry to every task.

Controlling the Controllable

Making a Profit in Unprofitable Times

Breaking Even at \$15/cwt in an \$18 world

John Ferry

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the teal bar.

Milk Street Dairy







Watertown
hourly

-35°

Monday		1°	-11°
Tuesday		16°	0°
Wednesday		16°	-4°
Thursday		5°	-6°
Friday		3°	-2°
Saturday		23°	19°

 Updated 2/16/15 8:07 AM 



ER
TY

SNOWFALL FORECAST

WEDNESDAY - FRIDAY



Preliminary
Snow Map

Locally
36-50"



RIVER CENTRAL SCHOOLS: NO AFTER-SCHOOL OR EVENING ACTIVITIES
RIVER CO. COMM. COLLEGE: CLOSING AT 3:45 PM









History of my Practice

1977-50 herds, 4000 cows

1982-added ration balancing to services

1987-consulting\speaking full time

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the bar.

Milk Street Dairy

By the time I bought Milk Street,
I was providing financial
advice to farms totally over
18,000 cows.

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in a white, serif font within the bar.

Milk Street Dairy



After 25 years of reviewing other herds finances, in 2008 – bought a dairy

Milk Street Dairy



2008 – 441 cows
cropped 1000 acres

Milk Street Dairy

2018-2000+ cows
Crop over 4000
acres



4200 acres in 182 fields, 69 are less than 10 acres



Why did I buy a
dairy?



Since 1985 my consulting has been based on examining dairy farms' finances.

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a dark green horizontal bar. This bar is superimposed on a larger, light green circular background that is partially obscured by the bar.

Milk Street Dairy

I know who makes money in this business!!

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a dark green horizontal bar. This bar is superimposed on a larger, light green circular background that has a subtle gradient and a slight shadow effect.

Milk Street Dairy

(and I had the chance to partner
with the most successful dairyman I
know of)



Controlling the Controllable

Making a Profit in Unprofitable Times

Breaking Even at \$15/cwt in an \$18 world

John Ferry

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the teal bar.

Milk Street Dairy

Making a Profit in Unprofitable Times

From the Cornell Dairy Farm Business Summary, Milk Street Dairy's total farm operating costs were:

2016	\$14.88.
2017	\$14.71.
2018	\$14.81

Making a Profit in Unprofitable Times

From the Cornell Dairy Farm Business Summary, Milk Street Dairy's total farm operating costs were: vs avg of:

2016	\$14.88.	\$17.55
2017	\$14.71.	\$17.75
2018	\$14.81	\$17.76

Controlling the Controllable

Breaking Even at \$15/cwt in an \$18 world

HOW??

John Ferry

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the bar.

Milk Street Dairy

Controlling the Controllable

Breaking Even at \$15/cwt in an \$18 world
HOW??

Stop spending so much money!!!!

John Ferry

The logo for Milk Street Dairy features a green oval with a white horizontal bar across its center. The text "Milk Street Dairy" is written in white serif font within the white bar.

Milk Street Dairy

Where ever your herd is on this herd average graph, you can cut costs and become profitable.

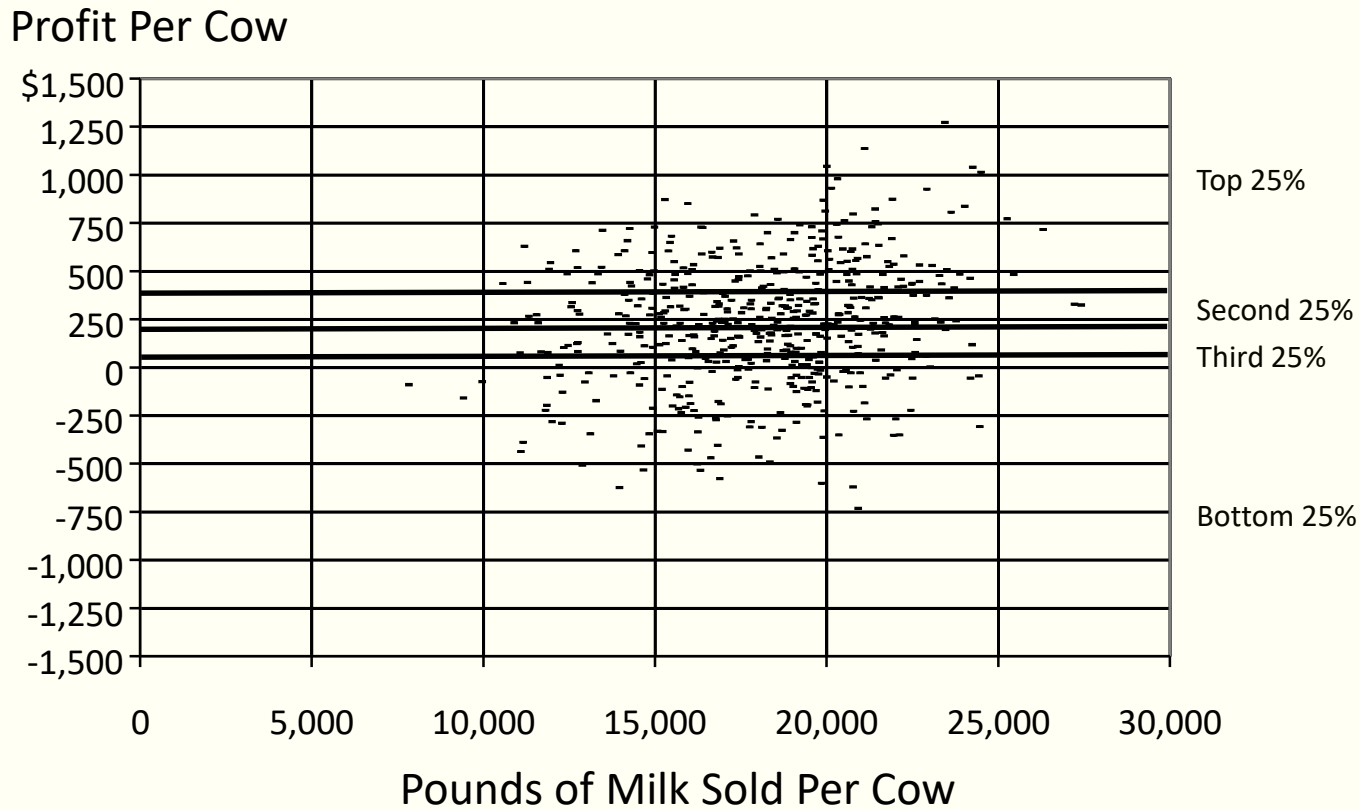


Figure 2. Profit versus milk sold per cow.

Where ever your herd is on this herd average graph, you can cut costs and become profitable.

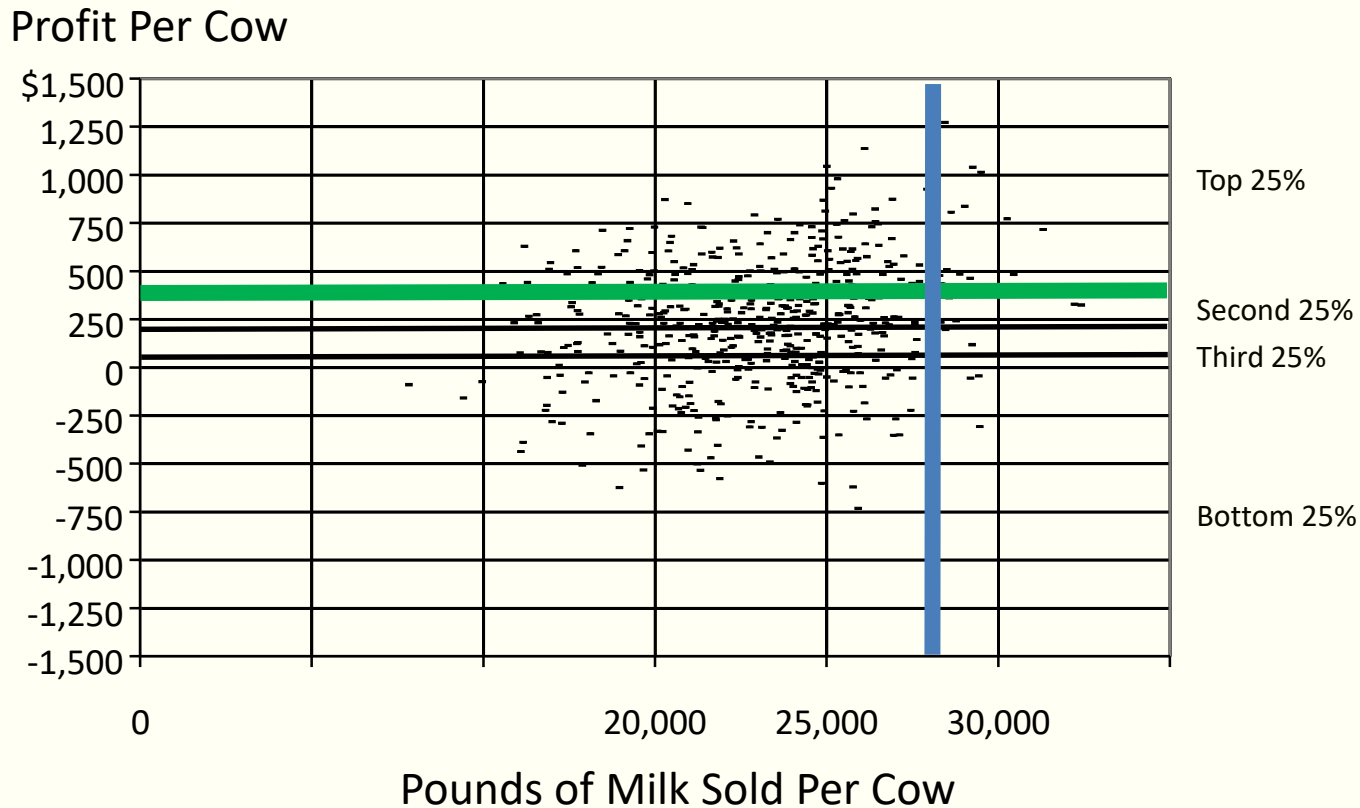


Figure 2. Profit versus milk sold per cow.

Controlling the Controllable

Because I know
dairy farm
finances!

A herd example...

The logo for Milk Street Dairy features a green horizontal bar with rounded ends, containing the text "Milk Street Dairy" in white. This bar is superimposed on a larger, semi-transparent green circle.

Milk Street Dairy

Controlling the Controllable

Walking the walk, herd example:

Dec 2003:

Cow numbers dropping, cull rate=42%

High salary herdsman

Using Posilac

Grain bill = \$575,527 (down from near \$700,000 in 2002)

Pounds shipped = 15,342,464

710 cows

Controlling the Controllable

Walking the walk, herd example:

Dec 2006:

Cow numbers rising, cull rate=26%

High salary herdsman

Using Posilac

Grain bill = \$575,527 (down from near \$700,000 in 2002)

Pounds shipped = 15,342,464

710 cows

Controlling the Controllable

Walking the walk, herd example:

Dec 2006:

Cow numbers rising, cull rate=26%

No herdsman

Using Posilac

Grain bill = \$575,527 (down from near \$700,000 in 2002)

Pounds shipped = 15,342,464

710 cows

Controlling the Controllable

Walking the walk, herd example:

Dec 2006:

Cow numbers rising, cull rate=26%

No herdsman

No Posilac

Grain bill = \$575,527 (down from near \$700,000 in 2002)

Pounds shipped = 15,342,464

710 cows

Controlling the Controllable

Walking the walk, herd example:

Dec 2006:

Cow numbers rising, cull rate=26%

No herdsman

No Posilac

Grain bill = \$525,537 (below 2003)

Pounds shipped = 15,342,464

710 cows

Controlling the Controllable

Walking the walk, herd example:

Dec 2006:

Cow numbers rising, cull rate=26%

No herdsman

No Posilac

Grain bill = \$525,537 (below 2003)

Pounds shipped = 18,683,904

710 cows

Controlling the Controllable

Walking the walk, herd example:

Dec 2006:

Cow numbers rising, cull rate=26%

No herdsman

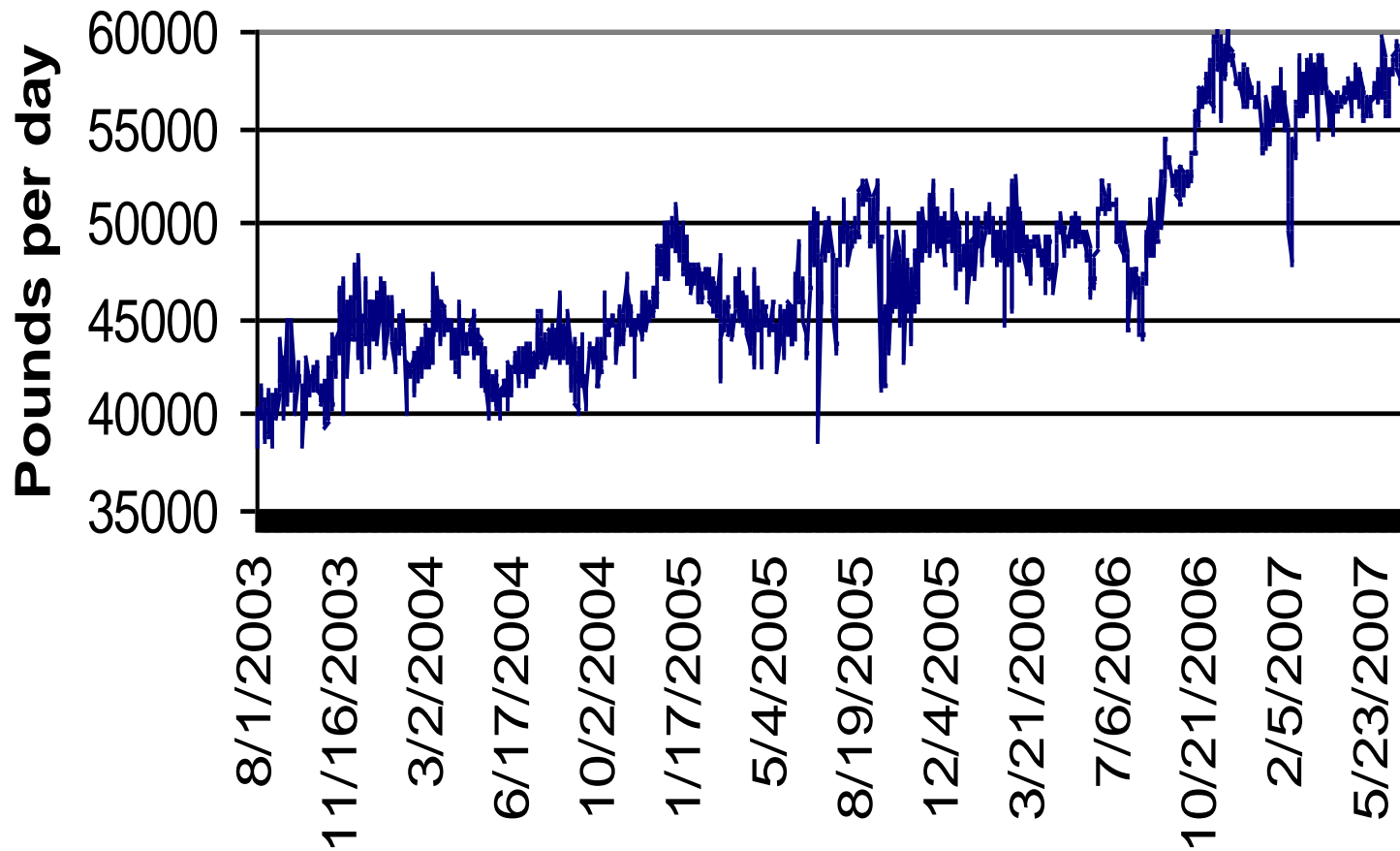
No Posilac

Grain bill = \$525,537 (below 2003)

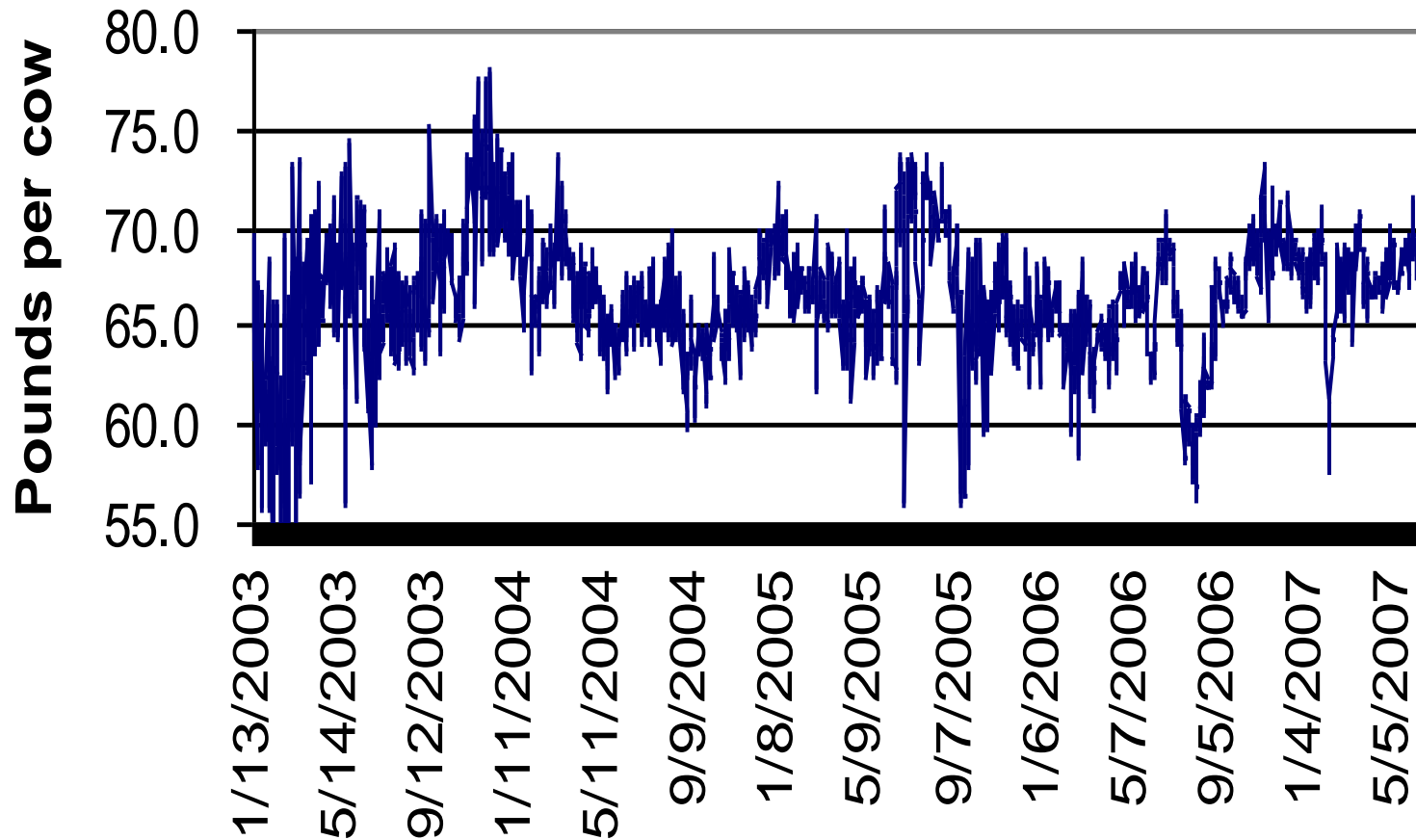
Pounds shipped = 18,683,904

934 cows

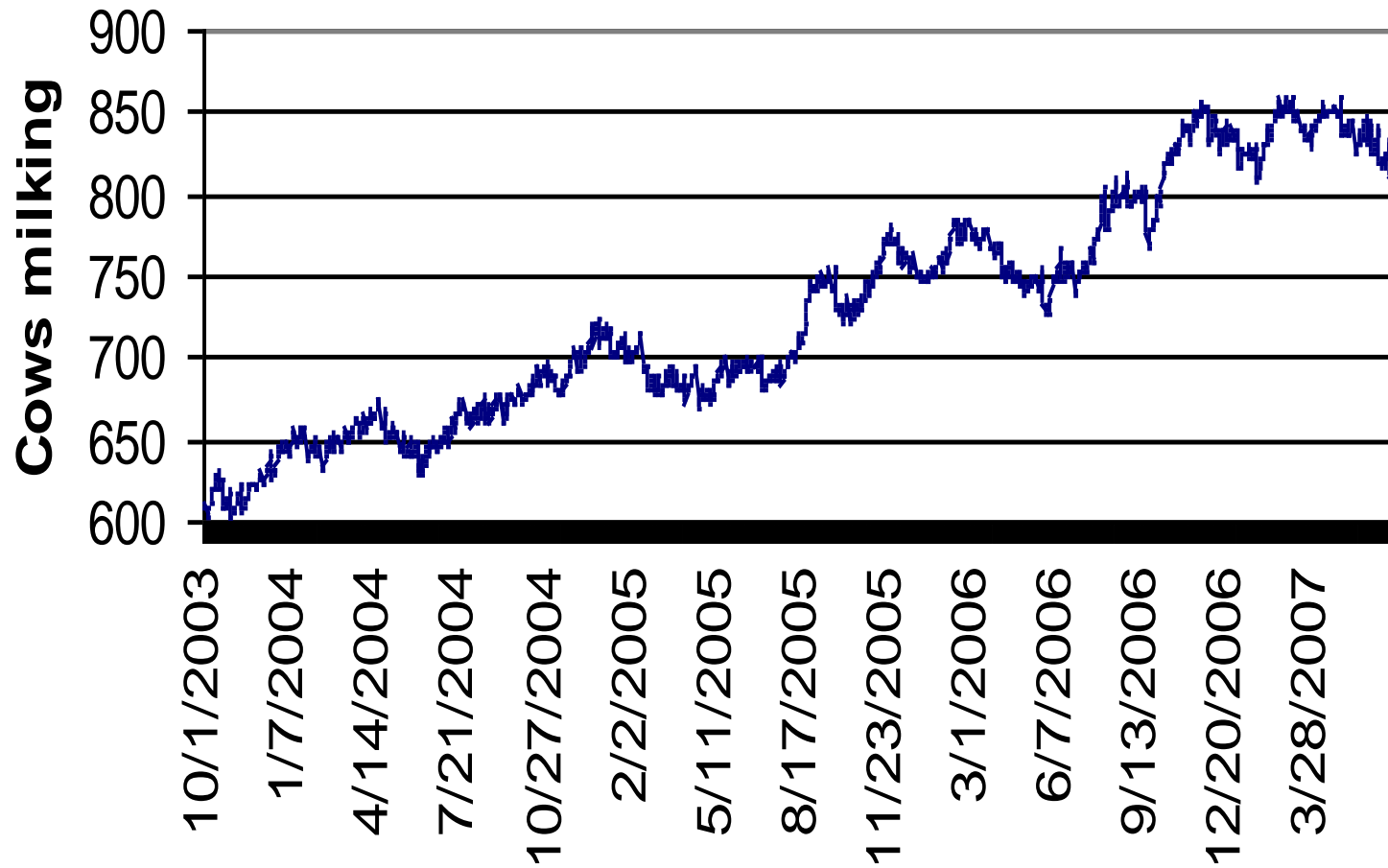
Driveway pounds per day



Pounds Per Cow



Cows in the Tank



Controlling the Controllable

Walking the walk, herd example:

Milk out the driveway increased 50%,

But the total grain bill dropped from \$575,527 for
710 cows in 2003,

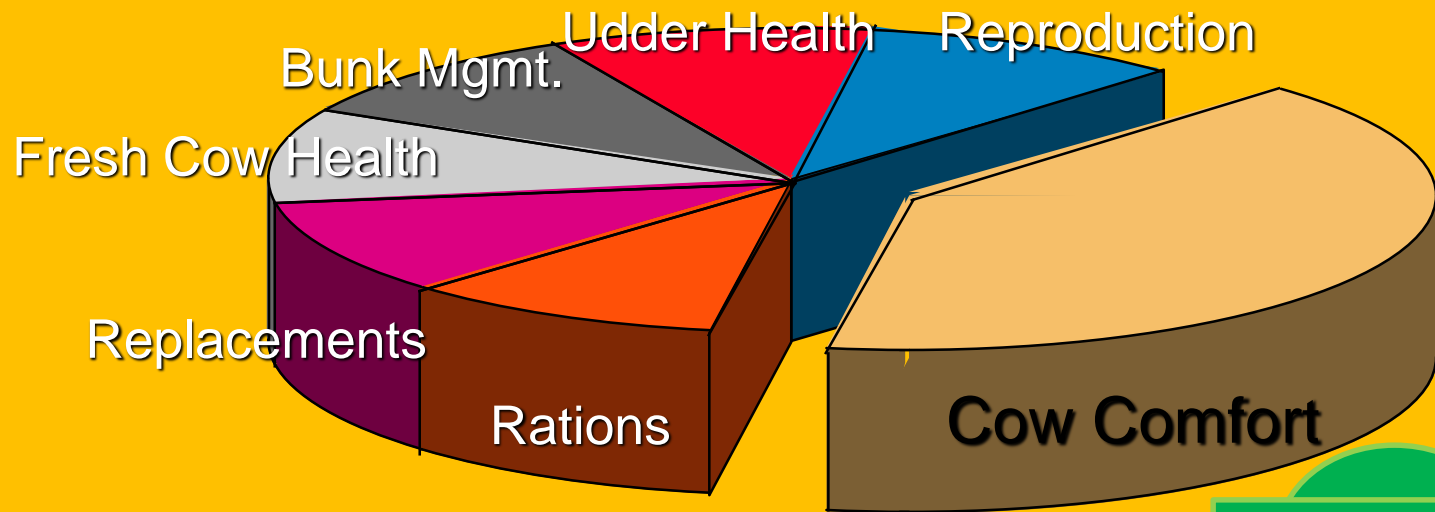
to \$525,537 for 934 cows in 2006!

Controlling the Controllable

Chasing 'marginal milk' per cow leads to unrestrained spending.

'Marginal milk' per driveway leads to consistent profits.

Controlling Cashflow: *Factors Affecting Milk Production*



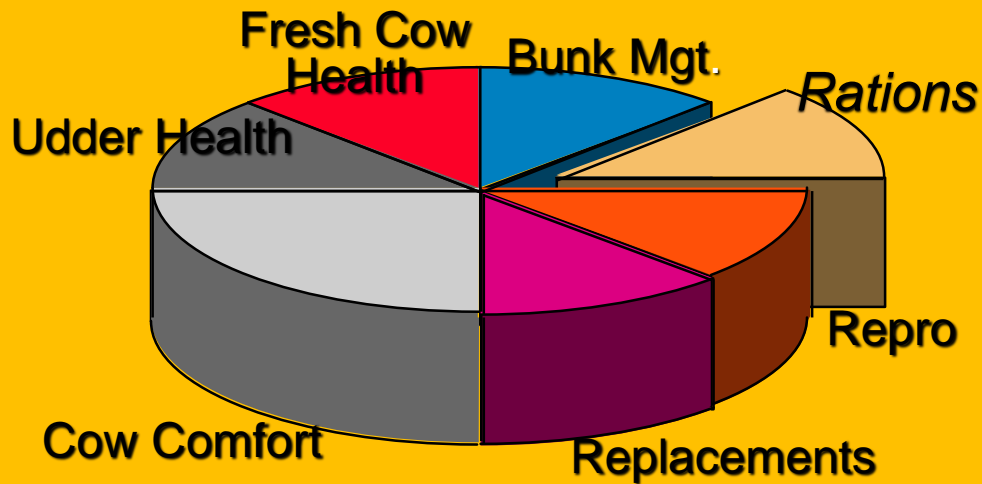
Milk Street Dairy

Controlling the Controllable

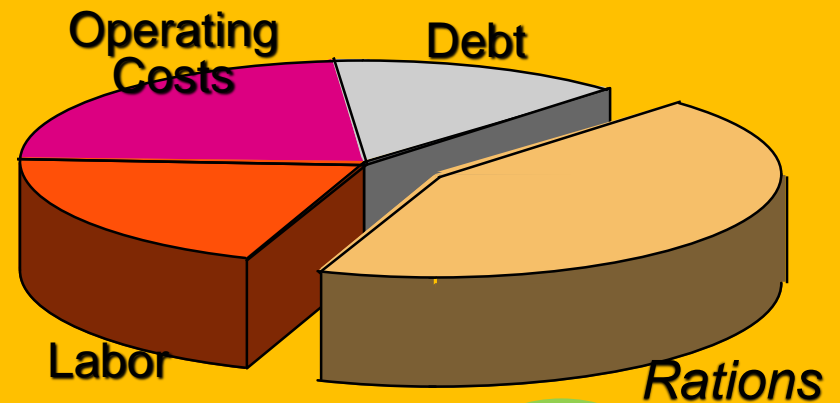
Cow comfort—healthy cows created a 16 percentage point drop in the cull rate (42 down to 26%), which drove the dramatic increase in driveway milk.

Control the Controllable

Production Factors



Input Cost Factors



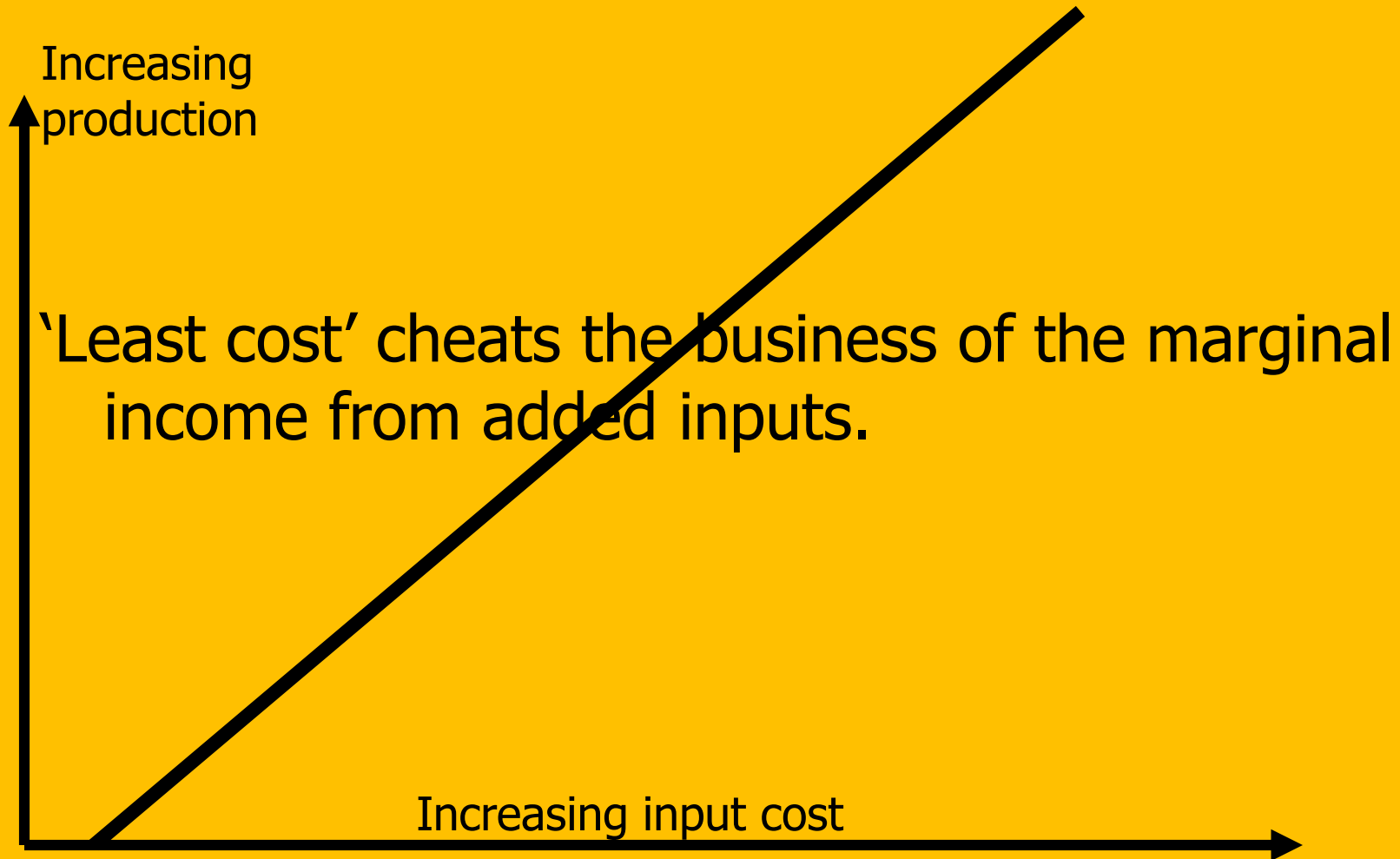
Milk Street Dairy

Controlling the Controllable

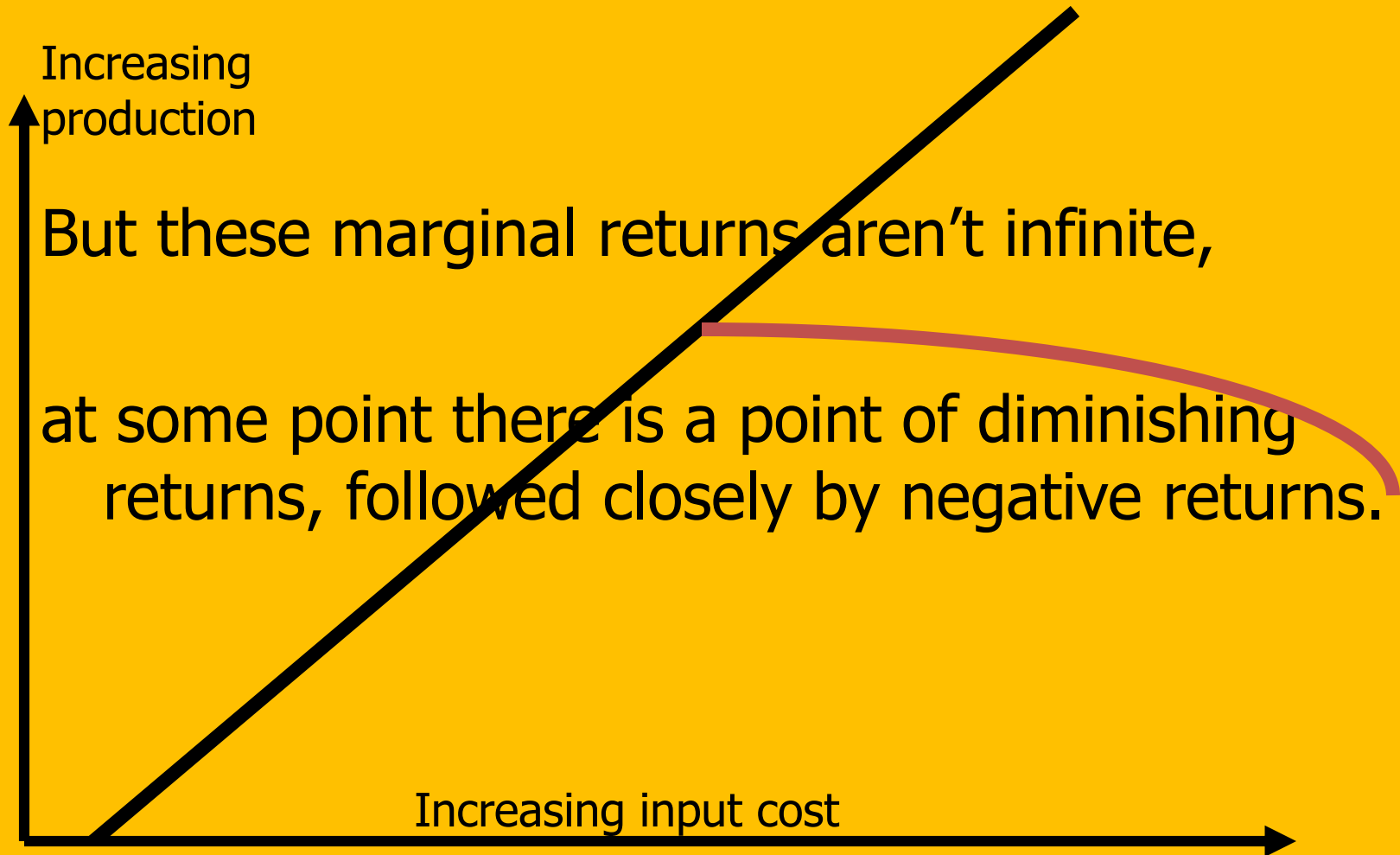
In the example herd we slashed
costs, but

I am not advocating 'least cost'!

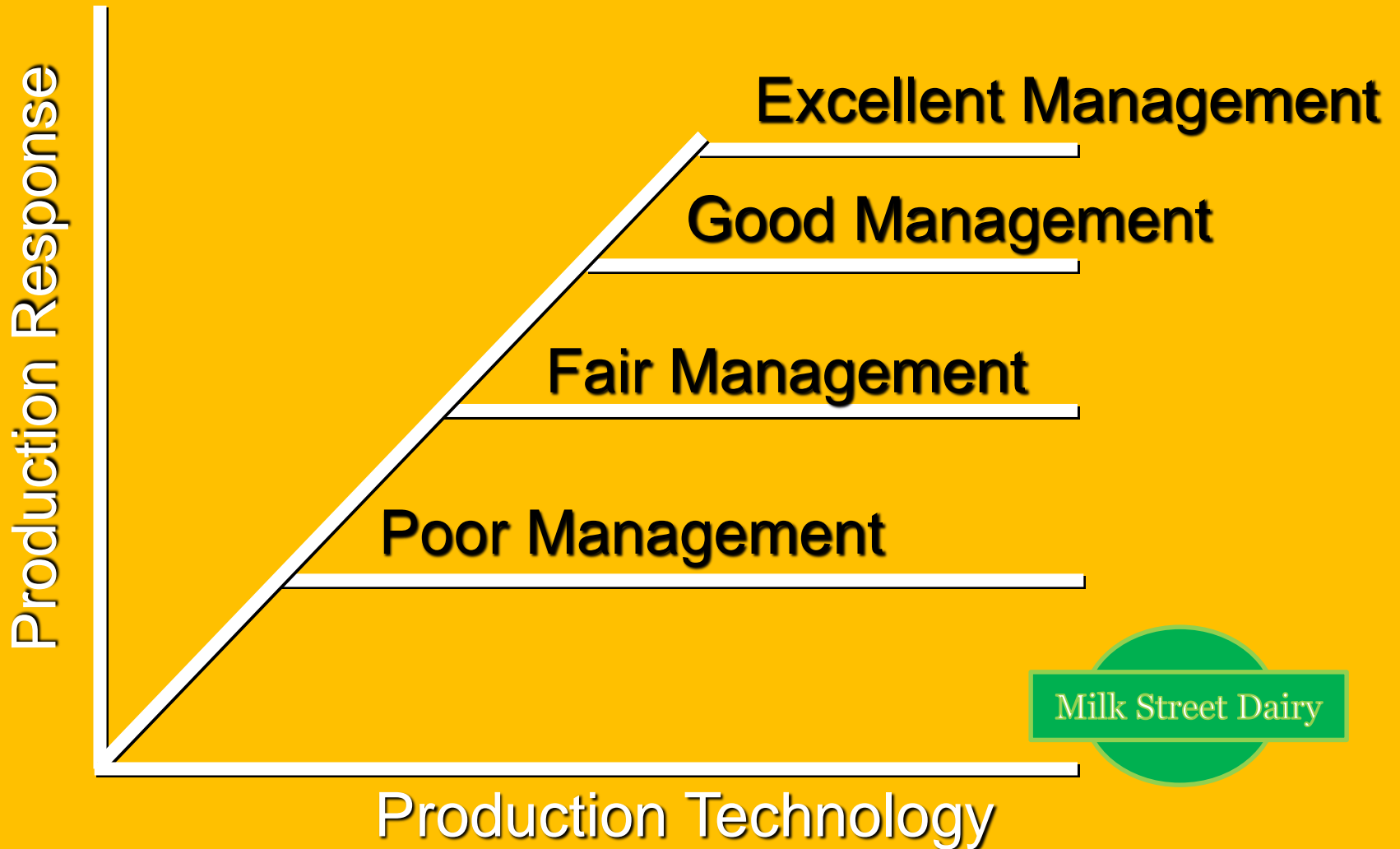
Maximizing Profit



Maximizing Profit



Control the Controllable



Milk Street Dairy

Partial Budgeting

	Milk to payback
1 st consultant, hire middle mgm't	3 lb
2 nd consultant, use BMR silage	3 lb
3 rd consultant, apply silage preserve	3 lb
4 th consultant, new feed additive	3 lb
5 th consultant, rumination technology	<u>3 lb</u>
Response needed to breakeven	15 lb

Partial Budgeting

The dairy adopts all 5 and milk production increases 9 lb.

Partial Budgeting

The dairy adopts all 5 and milk production increases 9 lb.

The dairy is broke, but all 5 consultants claim a 3/1 return on their advice.

Cash Flow Analysis

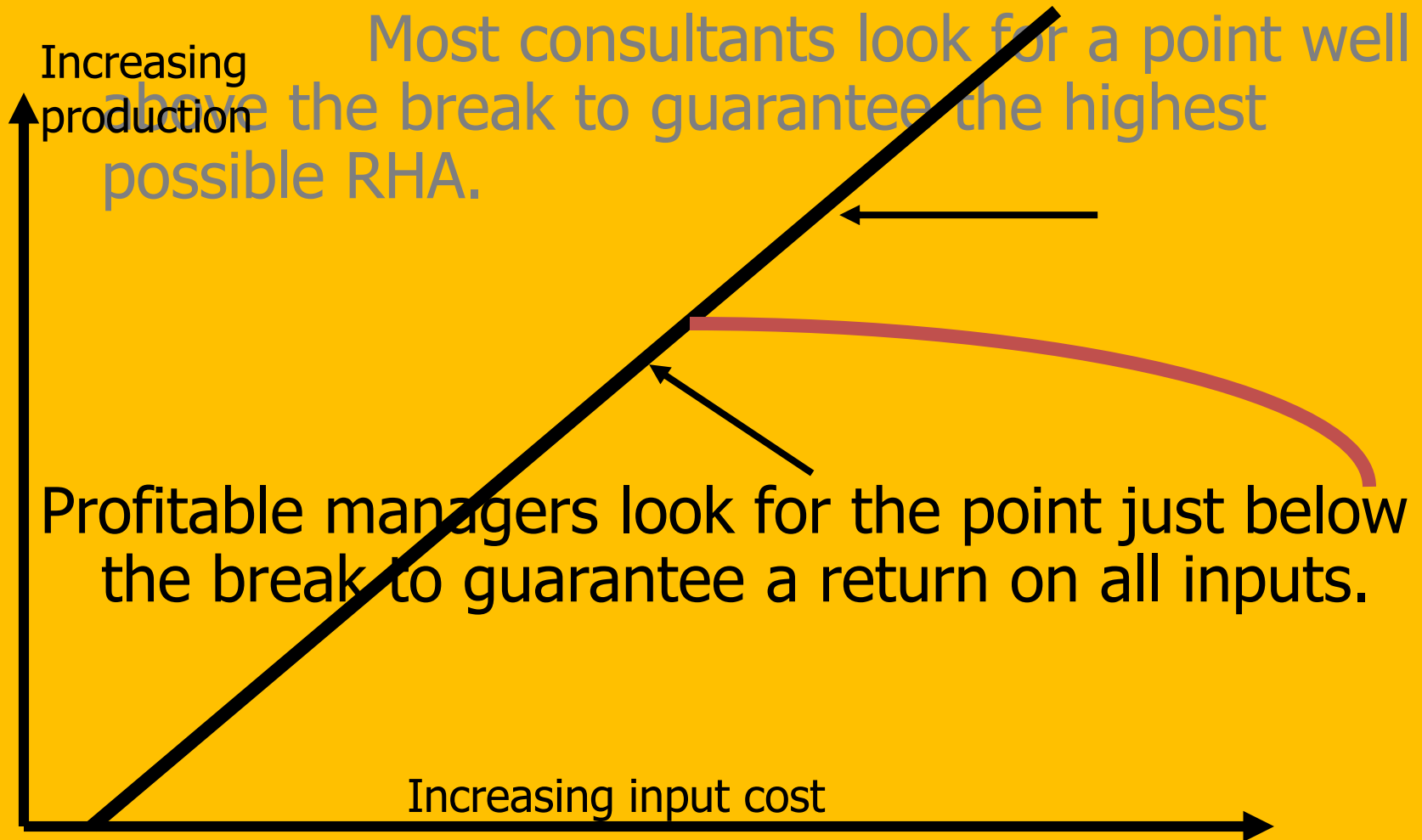
What's wrong with partial budgets?

Cash Flow Analysis

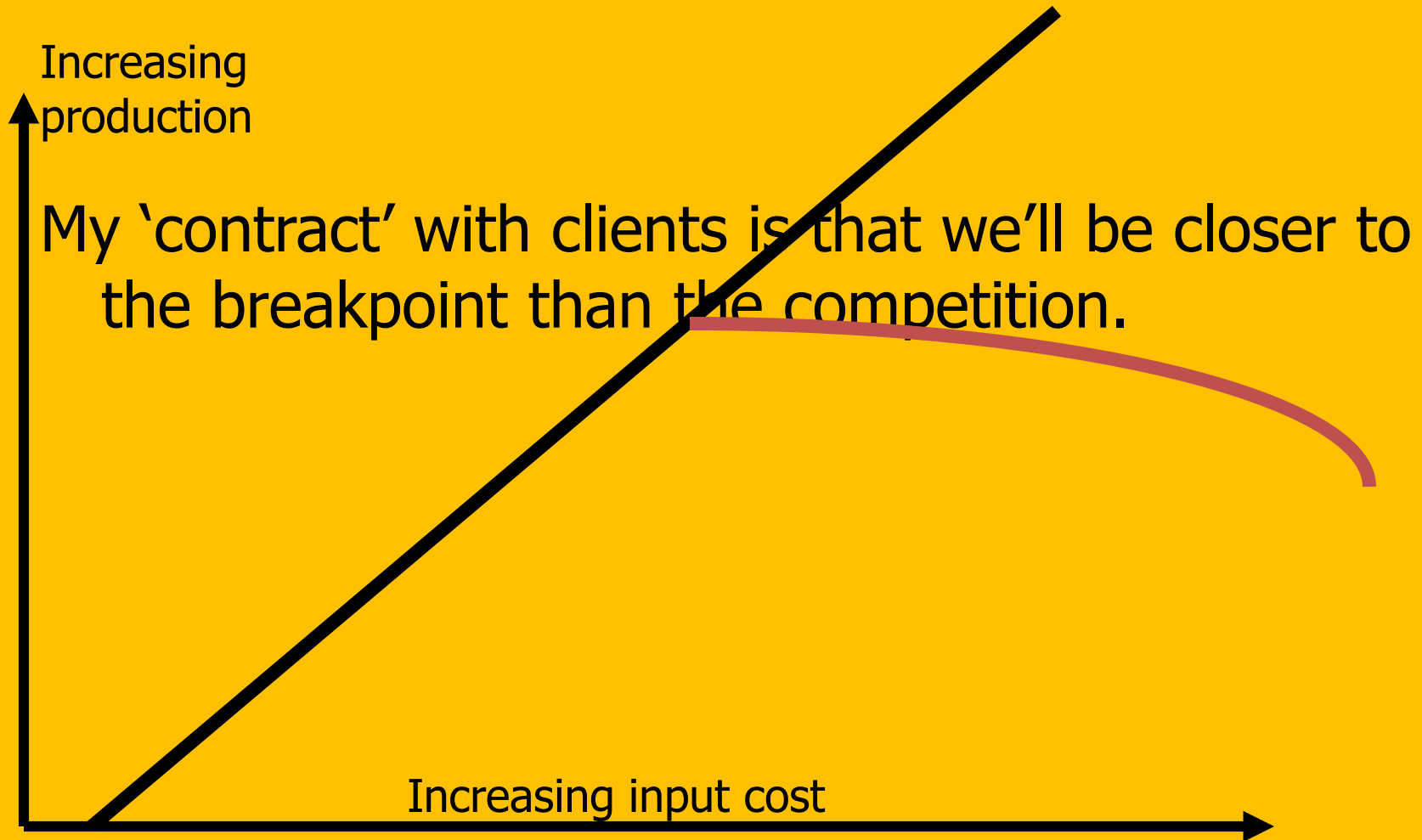
What's wrong with partial budgets?

They're partial!

The 'Marginal Profit' Promise



Maximizing Profit



Controlling the Controllable

And now I can prove it!!

The logo for Milk Street Dairy, featuring a green oval with a white horizontal bar across the center. The text "Milk Street Dairy" is written in white serif font on the bar.

Milk Street Dairy

Cornell DFBS 2013

	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	23724	1208272	\$18.10	\$3687
Average herd	25316	1141729	\$19.18	\$3647
Top 10 RHA	29697	1409579	\$19.29	\$4305

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a green horizontal oval shape.

Milk Street Dairy

Cornell DFBS 2013

	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	23724	1208272	\$18.10	\$3687
Average herd	25316	1141729	\$19.18	\$3647
Top 10 RHA	29697	1409579	\$19.29	\$4305

In mid 2012 our debt per cow peaked over \$5000.

Milk Street Dairy

Cornell DFBS 2016

	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	25483	1485891	\$14.88	\$2967
Average herd	26343	1229433	\$17.55	\$4185
Top 10 RHA	30381	1277862	\$18.50	\$5287

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a green horizontal bar. This bar is superimposed on a larger green circular background that is partially obscured by the bar.

Milk Street Dairy

Cornell DFBS 2013 vs 2016

2013	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	23724	1208272	\$18.10	\$3687
Average herd	25316	1141729	\$19.18	\$3647
Top 10 RHA	29697	1409579	\$19.29	\$4305

2016	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	25483	1485891	\$14.88	\$2967 down \$720-20%
Average herd	26343	1229433	\$17.55	\$4185 up \$538-15%
Top 10 RHA	30381	1277862	\$18.50	\$5287 up \$982-23%

2016	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
HIRED LABOR	\$656	\$2.58	\$884	\$2.91



2016	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
DAIRY GRAIN	\$1262	\$4.95	\$1756	\$5.78



	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
2016 GRAIN	\$1262	\$4.95	\$1756	\$5.78
2017 GRAIN	\$1194	\$4.77	\$1615	\$5.46



	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
2016 GRAIN	\$1262	\$4.95	\$1756	\$5.78
2017 GRAIN	\$1194	\$4.77	\$1615	\$5.46
2018 GRAIN	\$1182	\$4.81	\$1715	\$5.83



	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
2016 LABOR	\$656	\$2.58	\$884	\$2.91
2017 LABOR	\$676	\$2.68	\$866	\$2.93



	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
2016 LABOR	\$656	\$2.58	\$884	\$2.91
2017 LABOR	\$676	\$2.68	\$866	\$2.93
2018 LABOR	\$676	\$2.75	\$815	\$2.77



	MSD		TOP 10	
	PER COW	PER CWT	PER COW	PER CWT
2016 LABOR	\$656	\$2.58	\$884	\$2.91
2017 LABOR	\$671	\$2.68	\$866	\$2.93
2018 LABOR	\$676	\$2.75	\$815	\$2.77
CUSTOM HIRE	\$24	\$.10	\$144	\$.49
	\$900	\$2.85	\$959	\$3.26
HEIFER BOARD				



Cornell DFBS 2013 vs 2018

	Pounds per cow 2013	Pounds per cow 2018	Debt per cow 2013	Debt per cow 2018
MSD	23724	24566	\$3687	\$1966
Average herd	25316	25785	\$3647	\$4305
Top 10 RHA	29697	29416	\$4305	\$6038

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a green horizontal bar. This bar is superimposed on a larger green circular background that is partially obscured by the bar.

Milk Street Dairy

Cornell DFBS 2013 vs 2018

	Pounds per cow 2013	Pounds per cow 2018	Debt per cow 2013	Debt per cow 2018
MSD	23724	24566	\$3687	\$1966 (-)1721
Average herd	25316	25785	\$3647	\$4305
Top 10 RHA	29697	29416	\$4305	\$6038 (+)1733

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a green horizontal bar. This bar is superimposed on a larger green circular background that is partially obscured by the bar.

Milk Street Dairy

Cornell DFBS 2013 vs 2018

	Pounds per cow 2013	Pounds per cow 2018	Debt per cow 2013	Debt per cow 2018
MSD	23724	24566	\$3687	\$1966 (-)1721
Average herd	25316	25785	\$3647	\$4305
Top 10 RHA	29697	29416	\$4305	\$6038 (+)1733

Instead of, “I have a list of things I want, I hope the bank will lend me the money.”, our philosophy is “How can I pay off my debt”.

Milk Street Dairy

Cornell DFBS 2013 vs 2018

	Pounds per cow 2013	Pounds per cow 2018	Debt per cow 2013	Debt per cow 2018
MSD	23724	24566	\$3687	\$1966 (-)1721
Average herd	25316	25785	\$3647	\$4305
Top 10 RHA	29697	29416	\$4305	\$6038 (+)1733

Convincing the bank to let you have all your wants impresses the neighbors, but it isn't financial success.

The logo for Milk Street Dairy features a green circular background with a horizontal green bar across the center. The text "Milk Street Dairy" is written in white, serif font within the bar.

Milk Street Dairy

Cornell DFBS 2013 vs 2018

	Pounds per cow 2013	Pounds per cow 2018	Debt per cow 2013	Debt per cow 2018
MSD	23724	24566	\$3687	\$1966 (-)1721
Average herd	25316	25785	\$3647	\$4305
Top 10 RHA	29697	29416	\$4305	\$6038 (+)1733

And we now have an exit plan. We don't need to sell the farm, we can just take out the money.

Milk Street Dairy

Controlling the Controllable

Chasing 'marginal milk' per cow leads to unrestrained spending.

'Marginal milk' per driveway leads to consistent profits.

Making a Profit in Unprofitable Times

- Know your cost of production
- Use a budget (milk out the driveway and cost control)

Cash Flow Analysis

Cashflow analysis reviews the *entire* budget.

It is not partial budgeting.

Partial Budgeting

What seems obvious isn't always true!

Wages					
Workmen's comp					
Insurance					
Benefits					
Payroll costs					
FICA					
labor housing					
Labor Subtotal					
Purchased Cow Feed					
Purchased Heifer Feed - includes milk replacer					
Field Equip. Repairs					
include parts & supplies					
Crop					
Machine hired					
Fuel and Oil					
Feed Subtotal					
Supplies					
subcategory milkhouse/parlor					
subcategory barn supplies, supplies for repairs go under repairs					
Bedding					
Breeding					
Veterinary / Medicine					
Hoofcare					
Hooftrimming					
Footbath chemicals					
Taxes(non-labor)					
Insurance(non-labor)					
Utilities - not including phone					
Marketing					
Consulting & DHI					
Repairs-bdg. & equip.					
Administration					
subcategory office (somewhat of a catchall expense area)					
phone - rather than under utilities					
dues/subscription/advertising					
legal/accounting					
other - hopefully nothing goes here					
hST					



	Actual 2015		Actual 2016		Projected 2017	132000
Pounds shipped	38,792,020		46,035,076		48,180,000	
Breakeven		\$17.52		\$15.10		\$15.98
Income	\$8,204,418	\$21.15	\$8,030,241	\$17.44	\$8,333,800	\$17.30
Labor	\$1,283,982	\$3.31	\$1,199,852	\$2.61	\$1,475,000	\$3.06
Feed	\$3,690,944	\$9.51	\$3,363,527	\$7.31	\$3,825,000	\$7.94
Operating Expense	\$1,717,697	\$4.43	\$1,614,829	\$3.51	\$1,581,080	\$3.28

Milk Street Dairy

Making a Profit in Unprofitable Times

- Know your cost of production
- Use a budget
- Organize labor, minimize middle mng't
- (treat your coworkers so well they don't need middle mng't)

We need to find the
balance between the
worker, the
environment and the
economy.

Pope Francis Laudato Si'

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in a white, serif font within the bar.

Milk Street Dairy



Making a Profit in Unprofitable Times

- Know your cost of production
- Use a budget
- Organize labor, minimize middle mngm't
- (treat your coworkers so well they don't need middle mngm't)
- Maximize your least cost feed stuffs, which for us is forage. We feed high forage rations (60% wout BMR)

Making a Profit in Unprofitable Times

- Know your cost of production
- Use a budget
- Organize labor, minimize middle mgm't
- (treat your coworkers so well they don't need middle mgm't)
- Feed high forage rations (60% wout BMR)
- Maximize low pens

Maximize low pens

At MSD,

59% of our cows are in low pens

11% fresh

30% is maximum in high

The logo for Milk Street Dairy features the text "Milk Street Dairy" in a white serif font, centered within a horizontal teal bar. This bar is superimposed on a larger teal circular background that is partially obscured by the bar.

Milk Street Dairy

Maximize low pens

At MSD,

59% of our cows are in low pens

11% fresh

30% is maximum in high

Oct. 2018,

high grain=\$3.26/cow, low=\$2.87

39c grain savings

The logo for Milk Street Dairy, featuring a green oval with a white horizontal bar across the middle. The text "Milk Street Dairy" is written in white serif font on the bar.

Milk Street Dairy

Making a Profit in Unprofitable Times

Don't overfeed cow meals, just add forage or least expensive byproduct.

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in a white, serif font within the bar.

Milk Street Dairy

Controlling the Controllable

Random management thoughts:

Keep an oversized herd to guarantee milk out the driveway. With current low energy dry cow diets, cows can be dry 4-5 months.

Controlling the Controllable

Random management thoughts:

Be proactive in designating cows DNB.

4th lactation and greater will have a 50% cull rate anyway, so dnb poor legs and udders. Milk them 400-1000 days.

Thin cows should get a longer lactation. They're often your best cows, give them a rest.

Making a Profit in Unprofitable Times

- Know your cost of production
- Use a budget
- Organize labor, minimize middle mngm't
- (treat your coworkers so well they don't need middle mngm't)
- Feed high forage rations (60% wout BMR)
- Maximize low pens
- Avoid debt, buy what you can pay cash for

Controlling the Controllable

Managing a low cycle...

Controlling the Controllable

Managing a low cycle...

You've got no money, so you can't spend any.
But you can plan for the next high cycle.

Controlling the Controllable

No capital expenditure should ever occur that wasn't on a planned list.

And you buy what you can afford, not what you want.

DuPont Model

Debt must also reflect sufficient spending to position the business for the future.

Controlling the Controllable

Managing a HIGH cycle...

Before all other spending, the first priority is to pay next year's crop costs this fall, and leave \$1/cwt available in your revolving line.

Controlling the Controllable

Random management thoughts:

DO NOT SURPRISE YOUR BANKER!

Controlling the Controllable

Random management thoughts:

DO NOT HAVE COST OVERRUNS IN CAPITAL PROJECTS!

When you make a loan request, do your homework and take off the rose colored glasses.



2010

2009 2008

2014 2013 2012

2011

2015

Making a Profit in Unprofitable Times

- Know your cost of production
- Use a budget
- Organize labor, minimize middle mng't
- (treat your coworkers so well they don't need middle mng't)
- Feed high forage rations (60% wout BMR)
- Maximize low pens
- Avoid debt, buy what you can pay cash for
- **Keep your cows healthy – low involuntary cull rate**



Dairies need to know
their mission.



Taking the best
care of every cow
every day.

Controlling the Controllable

Cooperate philosophy

Healthy cows always win

Cost control always wins

But experiment with new products backed by sound science...

if you have a method to measure the results.

Make a plan and stick to it.

Controlling the Controllable

Characteristics of successful businesses...

Fiscally conservative

Focused on their mission

Cooperate philosophy

From Wharton School data

And in all things, give thanks...





DuPont Model

ROE = Return On Equity

ROE = percent return to the owner's investment in the business

ROE = asset turnover X net profit margin X leverage

DuPont Model

Debt increases Return On Equity
by increasing leverage

*So,
a Key to Improving ROE is
BALANCING DEBT*

Controlling Cashflow

Use of Debt

- **Planning**
 - **Needs vs. Wants**
 - **Balance**
- **Cashflow analyses**
- **Debt structure**

Controlling Labor

Recruitment

Induction

Training

Motivation

Monitoring

Retraining

The logo for Milk Street Dairy features a green circular emblem with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the bar.

Milk Street Dairy

Controlling Labor

Do simple things well.

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in a white, serif font within the bar.

Milk Street Dairy

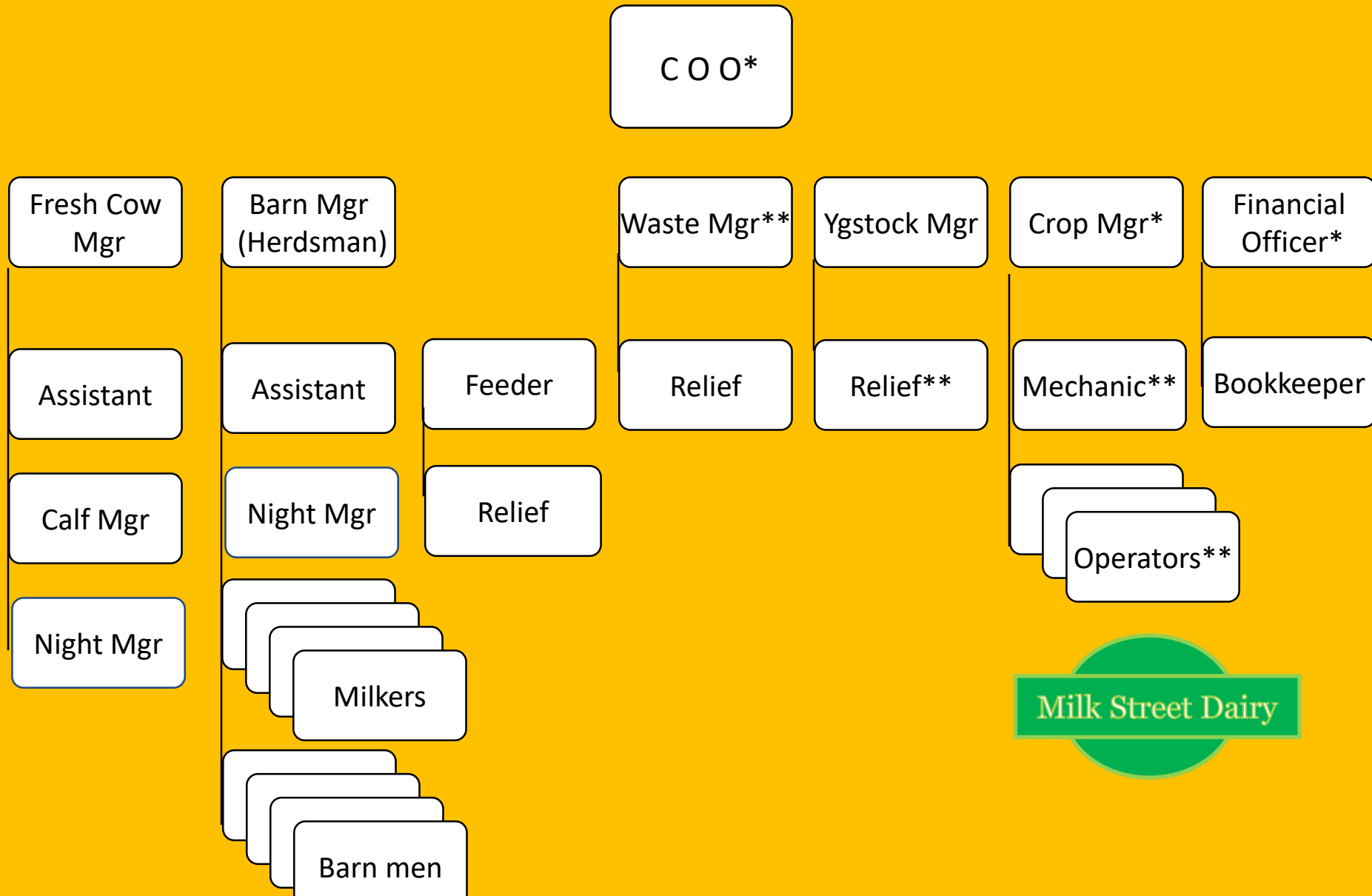
Controlling Labor

*“You can’t hit and think
at the same time.”*

Yogi Berra

Milk Street Dairy

Organizing Labor Systems



Labor Management

?

What should I
do next ?

?

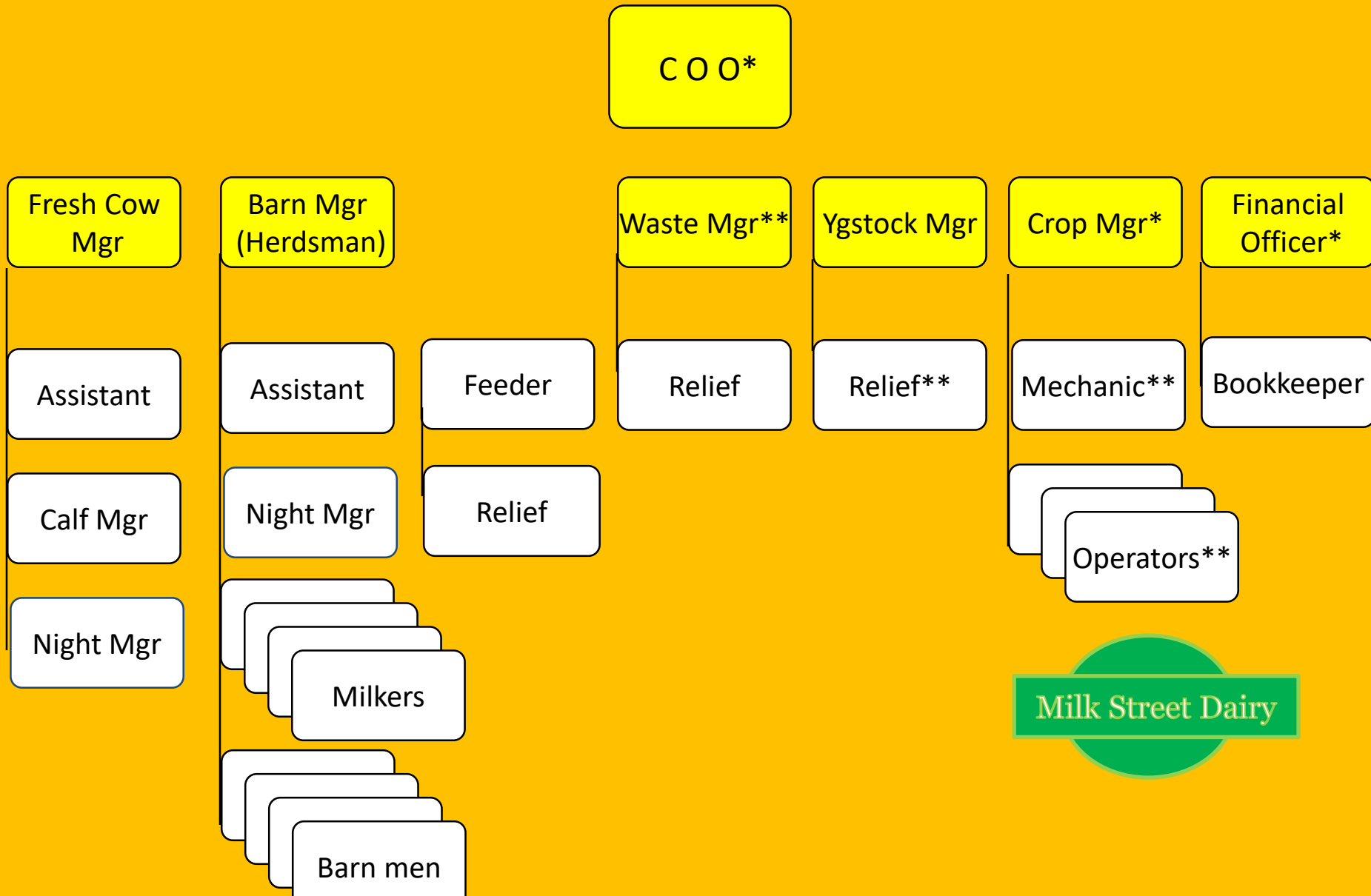
?

Will you need
me tomorrow ?

?



Organizing Labor Systems



Organizing Labor Systems

“It is virtually impossible to produce a consistent result in a business that depends on extraordinary people.”

Michael Gerber in “The E Myth”

The logo for Milk Street Dairy features a teal-colored oval with a horizontal bar across its center. The text "Milk Street Dairy" is written in white, serif font within the bar.

Milk Street Dairy

Organizing Labor Systems

As the Chief Operating Officer, you are ultimately accountable for performance.

Delegating your accountability is abdication of responsibility.

Organizing Labor Systems

The primary reason for poor completion of a task is employees that don't know how you want them to do the job.

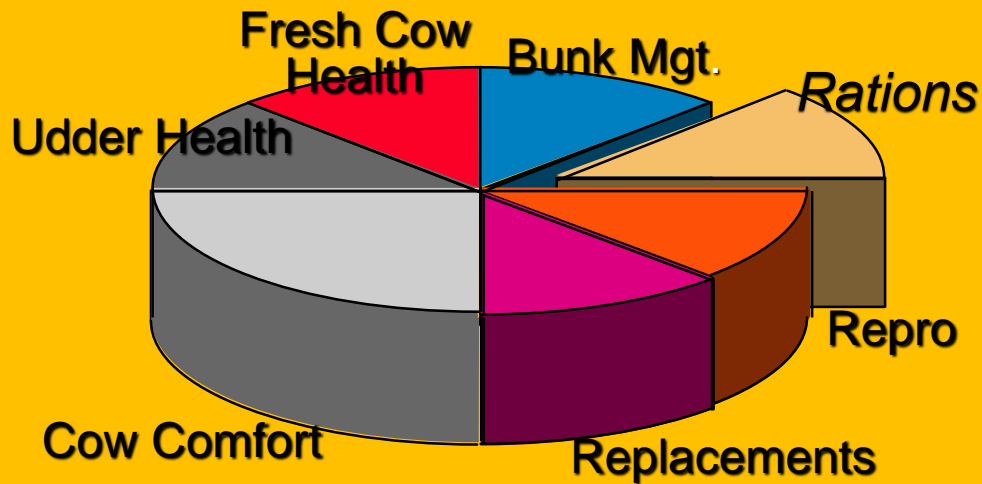
When's the last time you told them?



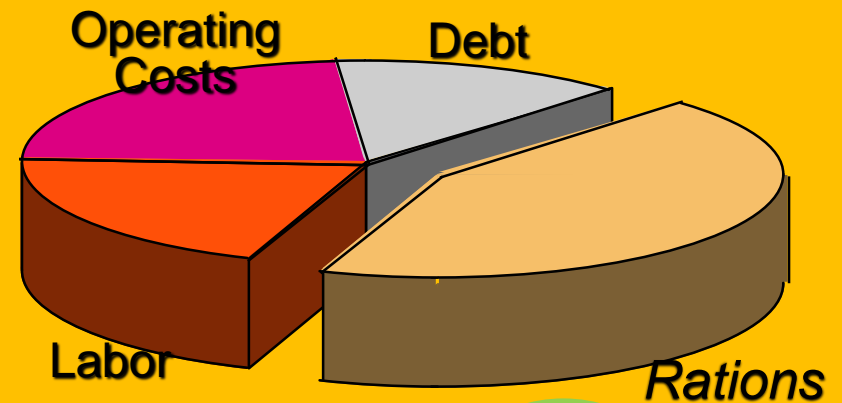


Control the Controllable

Production Factors



Input Cost Factors



Milk Street Dairy

	2018 budget	2018 actual
Pounds shipped daily	130,000	131,559
Purchased supplement	\$1,950,000	\$1,881,070
Milk price to breakeven	\$16.03	\$15.20



Cornell DFBS 2013 vs 2016

2013	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	23724	1208272	\$18.10	\$3687
Average herd	25316	1141729	\$19.18	\$3647
Top 10 RHA	29697	1409579	\$19.29	\$4305

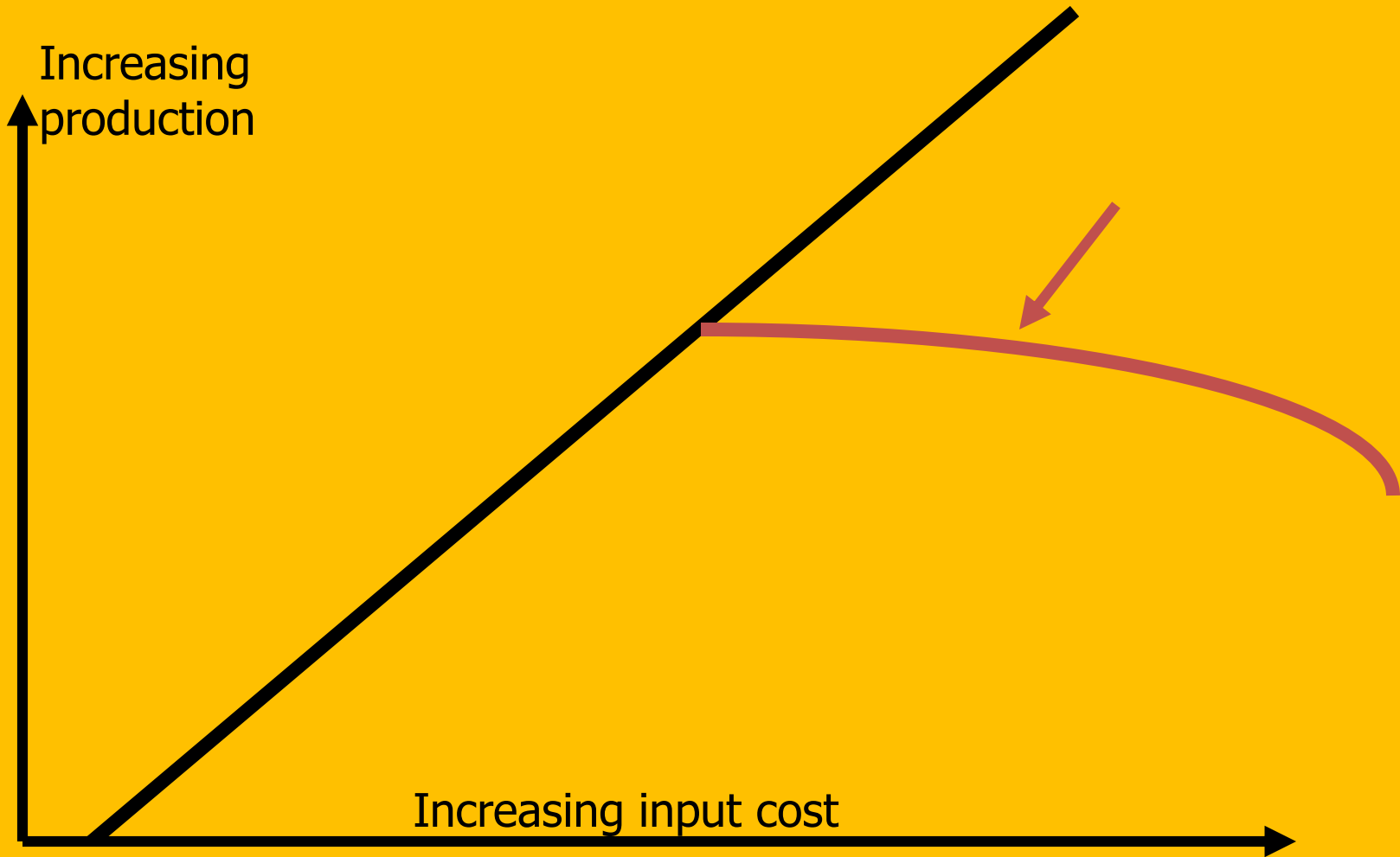
2016	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	25483	1485891	\$14.88	\$2967 down \$720-20%
Average herd	26343	1229433	\$17.55	\$4185
Top 10 RHA	30381	1277862	\$18.50	\$5287

Cornell DFBS 2013 vs 2016

2013	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	23724	1208272	\$18.10	\$3687
Average herd	25316	1141729	\$19.18	\$3647
Top 10 RHA	29697	1409579	\$19.29	\$4305

2016	Pounds per cow	# per worker	Operating cost	Debt per cow
MSD	25483	1485891	\$14.88	\$2967 down \$720-20%
Average herd	26343	1229433	\$17.55	\$4185 up \$538-15%
Top 10 RHA	30381	1277862	\$18.50	\$5287

The 'Marginal Profit' Promise



Profit Per Cow

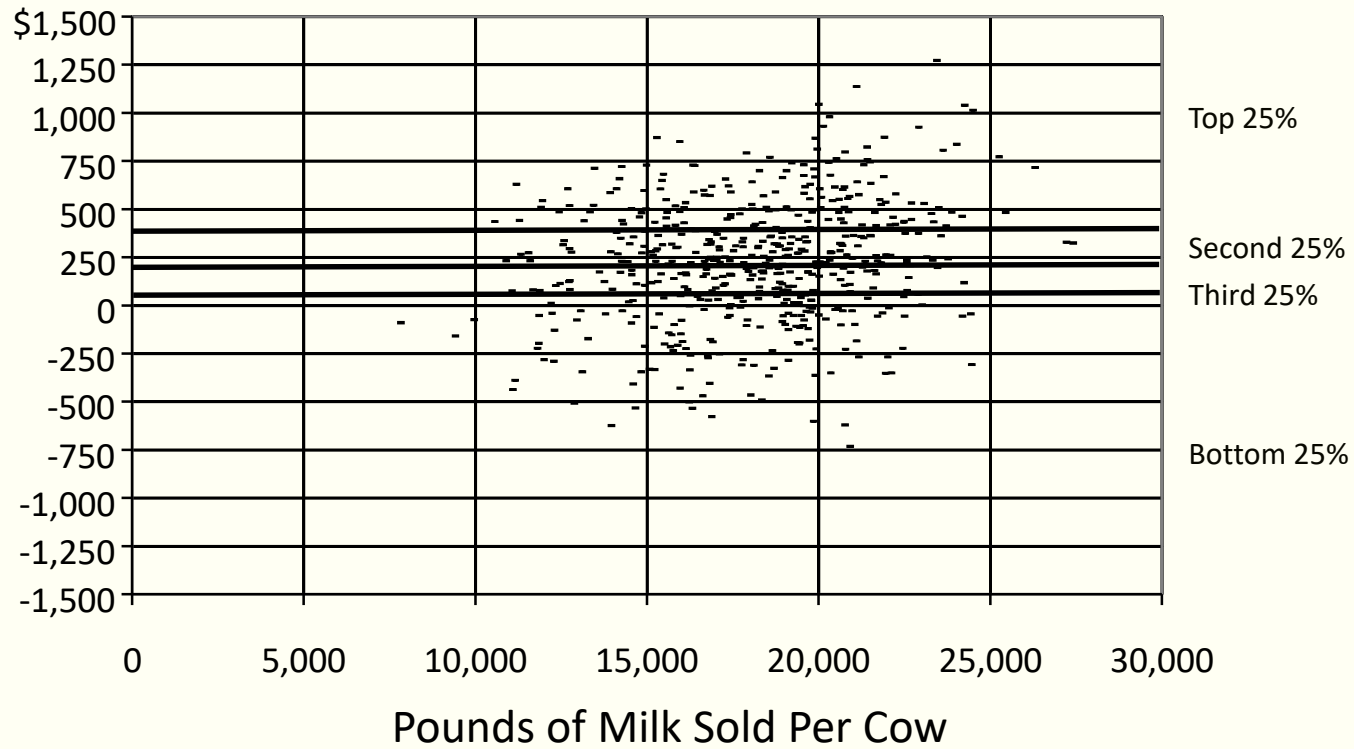


Figure 2. Profit versus milk sold per cow.

Profit Per Cwt.

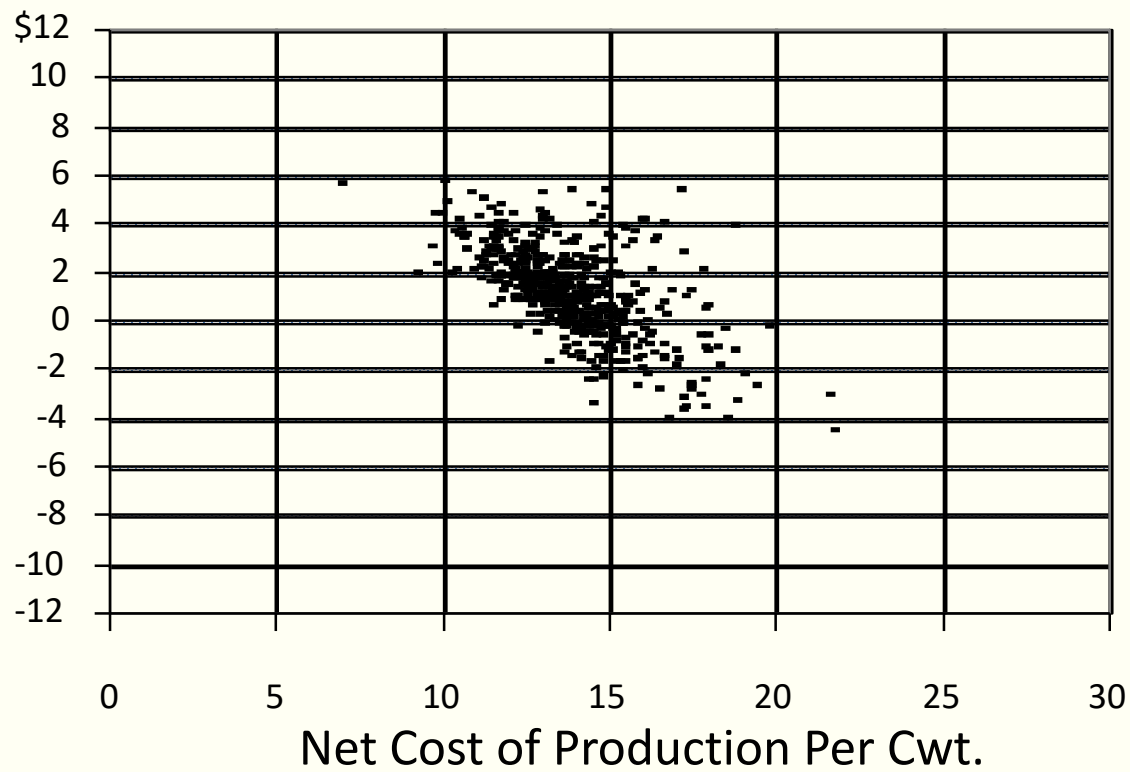


Figure 3. Profit versus net cost of production.

2020 Winter Meeting

Savannah, GA

January 20-22, 2020



History at a Glance

- Division(s): 011 Atlanta
- FT Primary Department: 01 GROCERY
- FT Recap Department: 01 GROCERY
- Jan to Dec 2018 (Previous)
- Jan to Dec 2019 (Current)

2013 – 2019 Bottled Milk History

Estimate

Centennial Farms	Produced Milk Qts	Gallons	Pounds
2019	94,091,988	23,522,997	202,297,774.20
2018	101,037,634	25,259,409	217,230,913.10
2017	105,882,152	26,470,538	227,646,626.80
2016	117,004,228	29,251,057	251,559,090.20
2015	115,257,892	28,814,473	247,804,467.80
2014	106,182,504	26,545,626	228,292,383.60
2013	105,931,980	26,482,995	227,753,757.00

Down 19.58%
Roughly 1000 Trucks

745,388,378	186,347,095	1,602,585,013
-------------	-------------	---------------

Total Grocery

GTIN Code	Dept. Description	Scanned UNITS			Scanned Retail \$				Avg Movement Retail	
		CURRENT	PREVIOUS	VARIANCE	CURRENT	PREVIOUS	VARIANCE	% CHANGE	CURRENT	PREVIOUS
	Total	1,056,366,781	1,078,083,555	-21,716,774			\$17,533,031	0.7	\$2.39	\$2.33
68	01 GROC-ALL OTHER	498,972,574	510,821,444	-11,848,870			\$6,974,884	0.62	\$2.27	\$2.21
69	02 REFRIG GROCERY	71,627,261	71,767,795	-140,534			\$3,479,552	1.89	\$2.62	\$2.57
72	05 DAIRY	126,016,755	127,066,631	-1,049,876			(\$6,622,679)	-2.55	\$2.01	\$2.04
81	12 SOFT DRINKS	57,999,664	58,902,196	-902,532			\$4,189,801	3.04	\$2.45	\$2.34
105	45 FROZEN GROCERY	120,470,695	122,924,135	-2,453,440			\$2,488,731	0.72	\$2.90	\$2.82
113	52 PET	31,576,384	32,238,190	-661,806			\$6,602,142	6.08	\$3.65	\$3.37
121	60 CKY/CRKR/SNK	92,683,500	95,567,983	-2,884,483			\$3,570,651	1.54	\$2.54	\$2.43
140	75 COMMERCIAL BKY	55,245,075	57,416,703	-2,171,628			(\$2,879,645)	-2.47	\$2.06	\$2.03
185	98 END OF ORD COUP	1,774,873	1,378,478	396,395			(\$270,408)	-10.41	(\$1.62)	(\$1.88)

Dairy

GTIN Code	Commodity Description	Scanned UNITS			Scanned Retail \$				Avg Movement Retail	
		CURRENT	PREVIOUS	VARIANCE	CURRENT	PREVIOUS	VARIANCE	% CHANGE	CURRENT	PREVIOUS
	Total	126,016,755	127,066,631	-1,049,876			(\$6,622,679)	-2.55	\$2.01	\$2.04
543	060 FLUID MILK PRODUCTS	38,566,503	39,566,422	-999,919			(\$2,113,794)	-2.33	\$2.30	\$2.30
545	061 MILK BY-PRODUCTS	8,887,350	9,274,810	-387,460			(\$455,052)	-2.86	\$1.74	\$1.72
547	062 YOGURT	32,130,796	32,699,290	-568,494			\$1,131,941	2.51	\$1.44	\$1.38
549	063 REFRGRATD JUICES/DRINKS	21,394,277	21,460,591	-66,314			\$265,244	0.5	\$2.47	\$2.45
551	064 EGGS	18,581,089	17,901,503	679,586			(\$6,757,392)	-18.02	\$1.65	\$2.09
1760	079 REFRIGERATED COFFEE CREAMERS	6,452,439	6,157,154	295,285			\$1,313,194	7.49	\$2.92	\$2.85
1105	159 MISCELLANEOUS TRANSACTIONS	4,301	6,861	-2,560			(\$6,820)	-42.62	\$2.13	\$2.33

Fluid Milk

GTIN Code	Commodity Description	Scanned UNITS			Scanned Retail \$				Avg Movement Retail	
		CURRENT	PREVIOUS	VARIANCE	CURRENT	PREVIOUS	VARIANCE	% CHANGE	CURRENT	PREVIOUS
	Total	38,566,503	39,566,422	-999,919			(\$2,113,794)	-2.33	\$2.30	\$2.30
17751	18296 HALF & HALF	2,572,153	2,505,919	66,234			(\$325,825)	-5.5	\$2.17	\$2.36
17752	18297 WHIPPING CREAM	1,979,311	1,781,785	197,526			\$886,904	18.78	\$2.83	\$2.65
17754	18299 SOY MILK	3,231	38,270	-35,039			(\$116,606)	-92.76	\$2.82	\$3.28
6223	34525 BUTTERMILK	1,135,269	1,165,217	-29,948			(\$68,187)	-2.97	\$1.96	\$1.97
6225	34526 FLAVORED MILK	2,298,531	2,690,204	-391,673			(\$395,529)	-7.01	\$2.28	\$2.10
6227	34527 EGG NOG/BOILED CUSTARD	407,989	403,975	4,014			\$111,121	8.87	\$3.34	\$3.10
6229	34528 SPECIALTY/LACTOSE FREE MILK	2,824,863	2,545,225	279,638			\$1,048,508	10.39	\$3.94	\$3.96
6233	34530 FLUID MILK/WHITE ONLY	26,311,069	27,436,285	-1,125,216			(\$3,647,072)	-6.26	\$2.08	\$2.12
22620	34570 AEROSOL TOPPINGS	1,034,087	999,542	34,545			\$392,893	15.29	\$2.87	\$2.57

Natural Foods

GTIN Code	Commodity Description	Scanned UNITS			Scanned Retail \$				Avg Movement Retail	
		CURRENT	PREVIOUS	VARIANCE	CURRENT	PREVIOUS	VARIANCE	% CHANGE	CURRENT	PREVIOUS
	Total	11,007,495	10,980,055	27,440			\$858,845	2.38	\$3.36	\$3.29
24874	28701 WHITE MILK	3,068,310	3,120,752	-52,442			(\$33,302)	-0.26	\$4.12	\$4.06
24875	28702 PLANT BASED MILK	6,574,389	6,451,169	123,220			\$831,227	4.41	\$3.00	\$2.92
24876	28703 FLAVORED MILK	128,473	141,462	-12,989			(\$46,509)	-9.59	\$3.41	\$3.43
24877	28704 SPECIALTY MILK	679,915	727,952	-48,037			(\$139,425)	-5.99	\$3.22	\$3.20
24878	28705 HALF & HALF	416,193	416,056	137			\$81,353	6.47	\$3.22	\$3.02
24879	28706 WHIPPING CREAM	96,632	96,454	178			\$93,027	22.59	\$5.22	\$4.27
21394	98800 FLUID MILK	16,817	18	16,799			\$75,897	2,079,373.4 2	\$4.51	\$0.20
21395	98804 NON-DAIRY MILKS	26,766	26,192	574			(\$3,423)	-4.46	\$2.74	\$2.93

Cheese

GTIN Code	Commodity Description	Scanned UNITS			Scanned Retail \$				Avg Movement Retail	
		CURRENT	PREVIOUS	VARIANCE	CURRENT	PREVIOUS	VARIANCE	% CHANGE	CURRENT	PREVIOUS
	Total	71,627,261	71,767,795	-140,534			\$3,479,552	1.89	\$2.62	\$2.57
1575	051 DRY CHEESE	1,955,497	2,002,535	-47,038			(\$186,073)	-2.35	\$3.96	\$3.96
553	065 CHEESE	38,063,938	38,137,616	-73,678			\$611,831	0.61	\$2.66	\$2.64
555	066 REFRGRATED DOUGH PRODUCTS	9,271,668	9,781,514	-509,846			(\$462,502)	-2.55	\$1.90	\$1.85
557	067 BUTTER/MARGARINE	11,816,623	11,534,922	281,701			\$2,038,646	6.51	\$2.82	\$2.72
559	068 REFRIGERATED HISPANIC GROCERY	1,811,950	1,608,711	203,239			\$540,589	9.87	\$3.32	\$3.40
561	069 REFRIGERATED KOSHER	81,831	77,806	4,025			\$10,510	3.34	\$3.97	\$4.04
1594	072 BAGELS&CREAM CHEESE	5,997,316	6,058,329	-61,013			\$469,527	3.63	\$2.24	\$2.14
1595	073 REFRIGERATED DESSERTS	1,820,950	1,785,841	35,109			\$260,302	6.82	\$2.24	\$2.14
1596	074 REFRIGERATED ITALIAN	793,205	759,252	33,953			\$240,311	6.73	\$4.80	\$4.70
1286	159 MISCELLANEOUS TRANSACTIONS	38	0	38			\$114	100	\$3.00	\$0.00
1924	357 REFRIGERATED ASIAN	14,245	21,269	-7,024			(\$43,703)	-35.29	\$5.63	\$5.82