

Best Practices Benchmarking

Participant Assessment Meeting



"Application of Best Practices Benchmarking Techniques to Characterize Profitability and Improve Performance of Calf Raising Processes on NY Dairy Farms"

April 1, 2007 – September 30, 2008

NYFVI Funding \$111,000

Best Practices Benchmarking

A
research
project
to:

Improve
Process
Control

Quality Management
System (QMS)

Improve
Employee
Performance

Improve
Financial
Performance

Overview

“Best Practices” does not mean that there is only one best way to do something.

“Best Practices” is what works best for your farm. It is a method for continual improvement of a specific process.

Industry calls this
Quality Management System (QMS)

Definitions: QMS

Elements of a Quality Management System (QMS)

Defined goals and objectives.

Documented processes and procedures (SOP's and protocols).

Consistently meeting customer requirements.

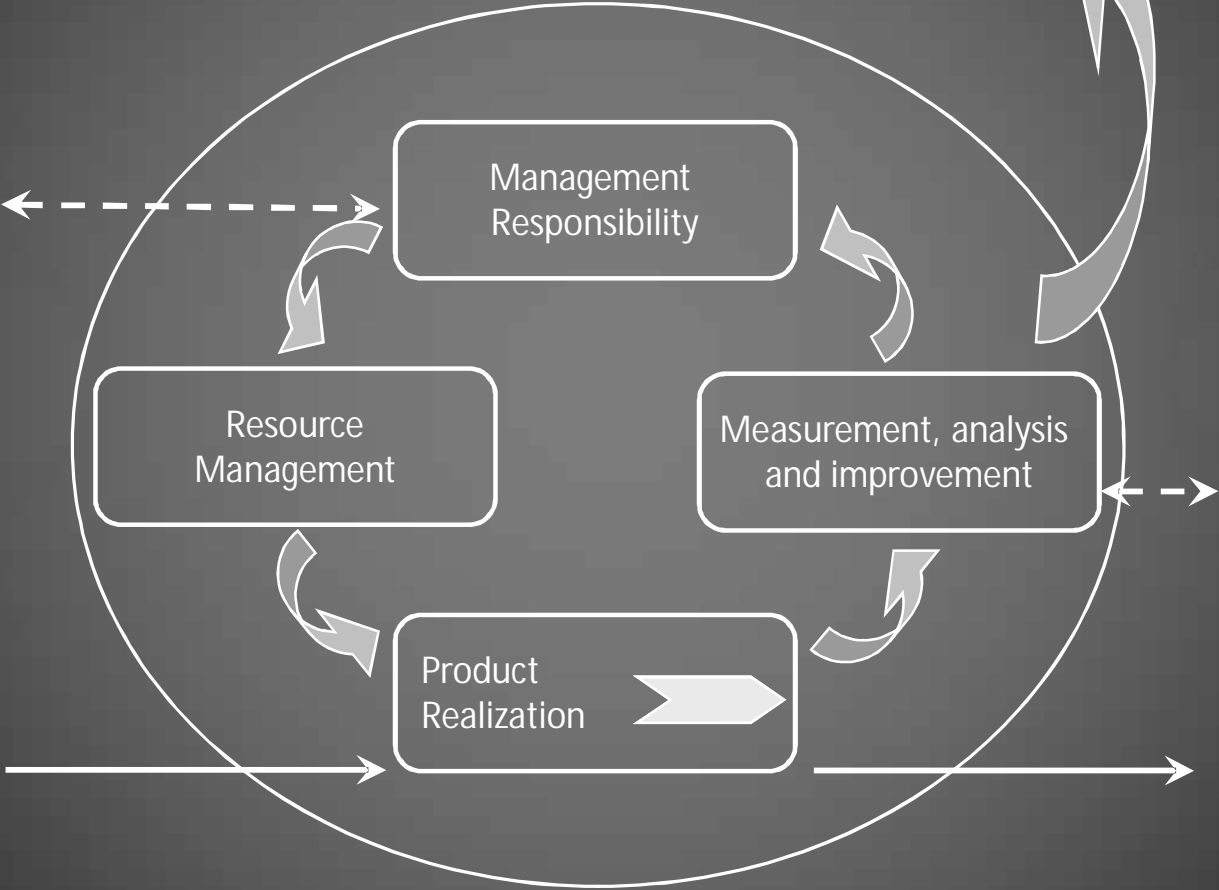
Definitions: ISO 9001:2000

International Organization of Standards (ISO)

A standard that defines requirements for a QMS

Used to demonstrate ability to consistently provide product meeting customer and regulatory requirements.

Intended to provide customers assurance in the quality of products or services.



ISO 9001 Quality System Model

Programs using QMS / ISO Systems

National Dairy Animal Well Being Initiative - Dairy industry coalition

Dairy Animal Welfare Review Program - Approved USDA Process Verified Program based on ISO 9001:2000

Animal Welfare Approved – Animal Welfare Institute

Certified Humane – Humane Farm Animal Care

Validus – Private company certification

Best Practices Calf Raising Goals

- Develop on-farm SOP's for calf raising process.
- Develop a system to measure the results of this process and report to the farm.
- Develop a system to benchmark the results of a farm's process as a tool for continual improvement.

Immediate Benefits

- Lower Calf Mortality
- Lower Incidence of Disease
- Improved Employee Morale and Performance

Secondary Benefits

Benchmarking against other farms to:

- Improve adherence to protocols
- Improve information to managers
- Improved employee job performance
- Improved employee training materials

Secondary Benefits

NWA Northwest Analytical
Building a Better Burger



*Improving Food Safety
in the Food Supply Chain*
A new episode of Feast or Famine

"Animal Care Certified" Eggs

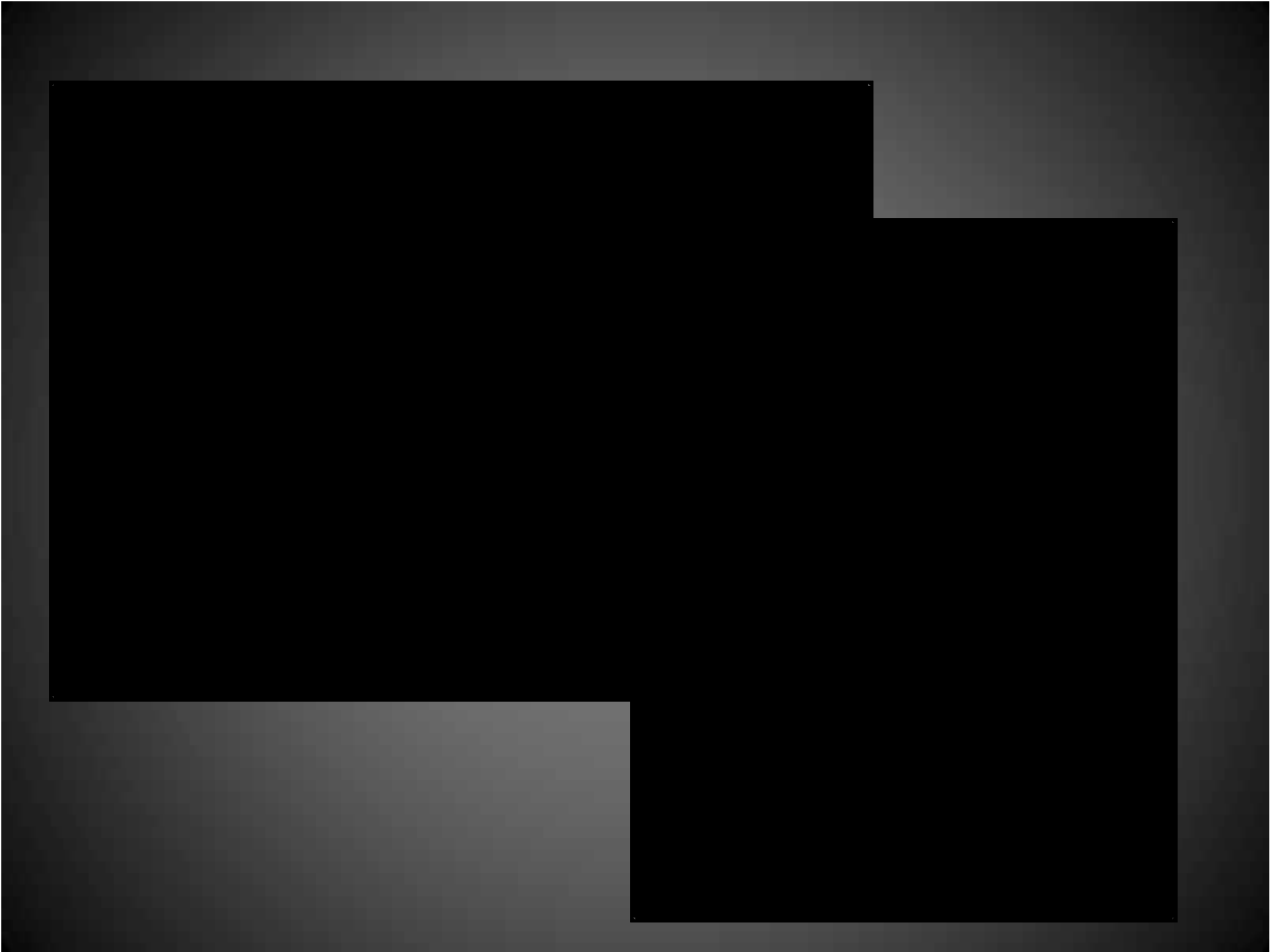


ANIMAL CARE CERTIFIED

- Food Safety / ISO Certification
- Animal Welfare Certification

Secondary Benefits

- Develop a business service that:
 - Creates more value to the farm than the service costs.
 - Can be used by others for business development.
 - Describes the processes behind financial benchmarks



Project Tasks

1. Develop Critical Information Needs
2. Recruit Producers, Collect Data
3. Develop Database To Organize Information
4. Develop Reports and Rating Systems

Develop Critical Information

Special Thanks to Sam Leadley

- Housing Bedding, Air Quality, Wind, Temperature and Humidity
 - Feeding Colostrum Quality, Timing, Amount Fed
-
- Growth Average Daily Gain
 - Health Cough, Nasal, Eye, Ear, Fecal
 - Mortality Non-completion rate

Critical Information – Calf Raising

<u>INPUT MEASUREMENTS</u>	<u>US</u>	<u>FARM</u>
Ammonia levels	X	
Change in rel. humidity %	X	
Birth weight		X
Thriftiness at birth		X
Ig-G draw	X	X
Ig-G draw Ins.	X	
Milk replacer temp.	X	X
Bedding rating	X	
Calving pen rating	X	
-Ammonia level	X	
-Cleanliness	X	
Colostrum		X
Naval dip		X

<u>OUTPUT MEASUREMENTS</u>	<u>US</u>	<u>FARM</u>
Growth weight	X	
- Incidence of scours/ Fecal score		
Mortality #; age; reason		X
Calf healthscore	X	
- cough	X	
- nasal	X	
- eye	X	
- ear	X	
- fecal	X	

<u>TREATMENT</u>	<u>US</u>	<u>FARM</u>
# of scours treated		X
with what		X
# of respiratory treated		X
with what		X
# of labor hours		X

<u>MEASUREMENTS-START UP</u>	<u>US</u>	<u>FARM</u>
Calf starter inv. (beg)	X	
Calf starter inv. (end)	X	
Amount of calf starter used		X
Amount purchased	X	X
Amount of milk used		X
Milk filled		X
Milk dumped		X
Milk replacer inv. (beg.)	X	
Milk replacer inv. (end)	X	
Milk replacer purchased	X	X
Pen Size	X	
# of pens	X	
Average daily temp	X	

Data Collection Methods

- Design Data Collection Forms
 - Test Forms
 - Redesign

On-Farm Forms

New Calf Worksheet

Hoja de Registro de los Terneros Recien Nacidos

Identification (Identificación)	_____	Calving difficulty (dificultad en la parición)	Good Condition Buena Condición	Poor Condition Mala Condición
Date Born (Fecha de Nacimiento)	_____			
Sex (Sexo)	M F		0 1 2 3	
Time Born (Hora de Nacimiento)	_____ AM PM			
Birth Weight (Peso al Nacer):	_____	Thriftyess at calving Firmeza al nacer	Good Condition Buena Condición	Poor Condition Mala Condición
			0 1 2 3	
Colostrum (Calostro)		Thriftyess After Colostrum Firmeza después del calostro	Good Condition Buena Condición	Poor Condition Mala Condición
Amount Fed (Cantidad Administrada)	_____			
Time Fed (Tiempo Administrado)	_____		0 1 2 3	
Termerature (Temperatura)	_____			
		Navel Dipped (Limpieza del Ombligo)	Yes/Si	No
		Dipped by: (Initial) Limpinado por (iniciales)	_____	
Comments (Comentarios): _____				

Farm Technician Forms

Calf Visit Worksheet

Farm Name: _____ Date: _____ Time Start: _____ Time End: _____
 Technician: _____

----- For The Month -----

Heifers Born	Bulls Born	Heifers Dead	Bulls Dead	Twins	DOA	# Calves Treated For Respiratory	Scours
_____	_____	_____	_____	_____	_____	_____	_____

This information for the month of: _____

----- For Today -----

Heifer Calves on Site: _____ Temperature: _____ Humidity: _____
 Bull Calves on Site: _____ Inside _____ Inside _____
 Number of Calves Observed: _____ Outside _____ Outside _____
 Colostrometer Reading: _____
 Colostrum Bacteria Count: _____
 Milk Replacer Temperature: _____

Facilities				
	Good Condition		Poor Condition	
Calving Pen Rating				
Bedding	0	1	2	3
Ammonia	0	1	2	3
Air Flow	0	1	2	3
Over Crowding	0	1	2	3
Calf Pen Rating				
Bedding	0	1	2	3
Ammonia	0	1	2	3
Air Flow	0	1	2	3
Cleanliness	0	1	2	3

Calf Health Scores	Number of Observations					
	Rating	Cough	Nasal	Eye	Ear	Fecal
0						
1						
2						
3						

Calf Feeding	Level 1	Level 2	Level 3
	Average Amount Per Head		
Whole Milk	_____	_____	_____
Milk Replacer	_____	_____	_____
Calf Starter	_____	_____	_____

Calf Weight Worksheet

Farm:

Technician:

Date:

Calf I. D.	Weight	IgG	Comments

```

Dairy Comp 305 ----- DAIRY-KNOLL FARMS ----- Page 1
Command : LIST ID BDAT FOR BDAT=6/1/08-7/19/08\2PU
Expanded:
C:\COWFILE1.DAT ----- DAIRY KNOLL FARMS. ----- 7/19/08

```

ID	BDAT	ID	BDAT	ID	BDAT	ID	BDAT	
2776	6/ 1/08	2787	6/22/08	2798	6/29/08	2809	7/ 6/08	82
2777	6/ 6/08	2788	6/24/08	2799	6/30/08	2810	7/ 7/08	79 ↑
2778	6/10/08	2789	6/24/08	2800	7/ 2/08	2811	7/ 8/08	79 ↓
2779	6/11/08	2790	6/25/08	2801	7/ 3/08	2812	7/10/08	79
2780	6/12/08	2791	6/25/08	2802	7/ 4/08	2813	7/11/08	78
2781	6/13/08	2792	6/25/08	2803	7/ 4/08	2814	7/16/08	83 BLD
2782	6/13/08	2793	6/25/08	2804	7/ 5/08	2815	7/19/08	75 See
2783	6/14/08	2794	6/26/08	2805	7/ 5/08	2816	7/19/08	76 Key
2784	6/17/08	2795	6/26/08	2806	7/ 6/08	2817	7/19/08	72 B. 4
2785	6/19/08	2796	6/27/08	2807	7/ 6/08			
2786	6/20/08	2797	6/27/08	2808	7/ 6/08			

Total: 42

7/7/08 Visit 2800-2810
 Row 2
 2800-2803
 Row 2
 2804-2808
 Row 3
 ✓ 2809-2810 2811-12
 Row 4
 ✓ 2813 → 18?
 Row 5
 2817-15

Blood pulled on 2814

Calf Data Record Counts by Farm

<u>Farm Name</u>	<u>Visit</u>	<u>Month</u>	<u>New Calves</u>	<u>Weight/IgG</u>	<u>Health</u>	<u>Health - Calf ID</u>
Boxler Farms	22	10	462	266	34	0
Carbu Farms	16	7	131	225	16	6
Dairy Knoll Farm	15	7	374	80	35	0
Dueppengeiser Dairy Co.	10	7	197	138	17	0
Emerling Farm	17	8	417	330	126	0
Fitch Farms Inc	16	6	229	285	18	188
Logwell Acres	16	8	79	192	0	0
Luce Dairy Farm	18	8	109	227	20	11
Old Acres Farm	15	6	219	268	31	0
Schreiberdale Holsteins	20	9	251	305	4	0
Schum-Acres	17	8	365	349	23	0
Schwab Dairy Farm	4	3	2	0	27	0
Swiss Valley Farm	15	6	198	323	0	0
True Farms	10	5	190	61	15	0
Total	211	98	3223	3049	366	205

Calf Best Practices Benchmark

Time tracking by farm and by activity.

08/28/08

Best Practices Benchmark Time by Job Summary

All Transactions






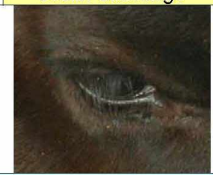








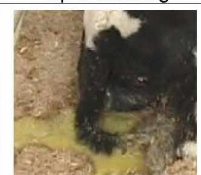

	Apr...	May...	Jun...	Jul...	Aug...	Sep...	Oct...	Nov...	Dec...	Jan...	Feb...	Mar...	Apr...	May...	Jun...	Jul...	Aug...	TOTAL	
On-Farm Activity Driving	0	0	1 10	3 20	6 00	2 00	4 30	6 10	2 00	7 05	0	0	0	0	0	0	0	32 45	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	4 35	0	0	0	0	0	0	0	4 35	
Organization	0	0	0 00	1 20	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	4 20	
Outbooks entry	0	0	0 00	0 00	0 00	0 00	0 00	0 00	2 25	3 30	0	0	0	0	0	0	0	5 55	
Total Office	0 00	0 00	2 10	36 10	27 45	59 00	33 00	45 50	55 20	19 20	45 15	0 40	0 00	0 00	0 00	12 30	13 30	353 30	
Old Acres																			
Old Acres	0	0	0 00	0 00	0 00	0 00	0 00	0 00	1 05	0 00	0	0	0	0	0	0	0	1 05	
Meeting	0	0	0 00	2 50	1 30	3 30	1 45	3 00	5 05	4 10	0	0	0	0	0	0	0	19 50	
On-Farm Activity Data Collection	0	0	0 00	0 00	0 20	0 10	0 10	0 15	0 50	0 35	0	0	0	0	0	0	0	2 20	
On-Farm Activity Driving	0	0	0 00	0 00	1 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	1 00	
On-Farm Activity Farm Tour / Familiarization	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
On-Farm Activity Taping Calves	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	2 00	7 00	9 00	
Total Old Acres	0 00	0 00	4 00	2 50	2 50	1 40	1 55	3 15	7 00	4 45	0 00	0 00	0 00	0 00	2 00	7 00	6 12	37 27	
on-farm visits																			
on-farm visits	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	14	0 00	0 00	14 00	
On-Farm Activity Data Collection	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	3 00	
On-Farm Activity Driving	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	3 30	
On-Farm Activity Farm Tour / Familiarization	0	0	0 00	3 30	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	3 30	
On-Farm Activity Taping Calves	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	7 30	0 00	7 30	
Total on-farm visits	0 00	0 00	0 00	3 30	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	14 30	0 00	0 00	26 00	
Schreberdale Holsteins																			
IGD Testing	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 30	0	0	0	0	0	0	0	1 30	
On-Farm Activity Data Collection	0	0	0 00	5 40	5 50	6 20	4 15	6 45	5 10	4 50	0	0	0	0	0	0	0	30 50	
On-Farm Activity Driving	0	0	0 20	0 00	1 20	0 30	0 25	0 15	1 20	1 00	0	0	0	0	0	0	0	5 10	
On-Farm Activity Farm Tour / Familiarization	0	0	0 00	1 25	1 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	1 00	0 00	0 00	3 25	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	3 10	0	0	0	0	0	0	0	3 10	
On-Farm Activity Taping Calves	0	0	0 00	0 00	0 40	0 00	0 00	0 00	0 00	0 00	0	0	0	0	1 45	5 15	0 00	7 40	
Sales and Marketing Sales Visit	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
Total Schreberdale Holsteins	0 00	0 00	0 20	7 05	6 50	6 50	4 40	12 00	6 30	10 30	0 00	0 00	0 00	0 00	2 45	5 15	0 00	64 45	
Schum Acres																			
Schum Acres	0	0	0 00	0 00	1 10	0 00	0 00	0 00	4 00	1 40	3 10	0	0	0	0	0	0	10 00	
On-Farm Activity Data Collection	0	0	1 50	0 00	2 00	0 00	0 00	1 00	1 30	2 50	0	0	0	0	0	0	0	9 10	
On-Farm Activity Driving	4	0	4 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	4 10	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
On-Farm Activity Taping Calves	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	4 00	
Total Schum Acres	0 00	0 00	6 00	0 00	3 10	0 00	0 00	5 00	3 10	6 00	0 00	0 00	0 00	0 00	0 00	4 00	0 00	27 20	
Schwab Dairy																			
Schwab Dairy	0	0	0 00	0 00	1 20	0 00	0 00	0 00	2 10	1 10	0	0	0	0	0	0	0	4 40	
On-Farm Activity Data Collection	0	0	1 30	0 00	1 00	0 00	0 00	0 00	2 05	0 50	0	0	0	0	0	0	0	5 25	
On-Farm Activity Driving	0	0	5 40	0 00	0 00	0 00	0 00	0 00	1 20	0 00	0	0	0	0	0	0	0	7 00	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
Total Schwab Dairy	0 00	0 00	7 10	0 00	2 20	0 00	0 00	0 00	5 35	2 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	17 05	
Swiss Valley																			
Swiss Valley	0	0	0 00	1 30	1 50	4 00	0 00	0 00	1 55	4 00	2	0	0	0	0	0	0	15 45	
On-Farm Activity Data Collection	0	0	0 40	0 50	1 00	0 40	0 00	0 00	1 10	2 10	0	0	0	0	0	0	0	7 10	
On-Farm Activity Driving	0	0	0 00	2 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	1 00	0 00	0 00	3 00	
On-Farm Activity Farm Tour / Familiarization	0	0	3 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	3 00	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	4 00	
On-Farm Activity Taping Calves	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	4 00	
Total Swiss Valley	0 00	0 00	3 40	4 20	2 50	4 40	0 00	0 00	3 65	6 10	3 10	0 00	0 00	0 00	1 00	4 00	0 00	32 55	
True Farms																			
True Farms	0	0	0 00	4 30	1 20	2 00	3 15	2 00	3 00	4 55	0	0	0	0	0	0	0	21 00	
On-Farm Activity Data Collection	0	0	0 00	0 00	0 10	0 10	0 20	0 15	0 30	0 45	0	0	0	0	0	0	0	2 20	
On-Farm Activity Driving	0	0	0 00	1 30	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	1 30	
On-Farm Activity Farm Tour / Familiarization	0	0	2 30	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	5 25	
On-Farm Activity Protocol Discovery	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
Total True Farms	0 00	0 25	3 10	6 00	1 30	2 10	3 35	2 15	3 30	5 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	30 15	
No job assigned																			
No item assigned	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	0	0	0	0	0	0	0 00	
Total No job assigned	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
TOTAL	0 10	4 35	98 30	109 00	123 00	60 10	73 50	81 80	83 10	120 65	7 20	0 00	0 00	0 00	0 00	72 56	97 49	10 06	564 81

Data Collection Methods

On-Farm Data Collection Procedures

- Frequency
- How to Sample
- Develop Consistent Measurements



Calf Health Scoring Criteria			
0	1	2	3
Rectal temperature			
100-100.9	101-101.9	102-102.9	≥103
Cough			
None	Induce single cough	Induced repeated coughs or occasional spontaneous cough	Repeated spontaneous coughs
Nasal discharge			
Normal serous discharge	Small amount of unilateral cloudy discharge	Bilateral, cloudy or excessive mucus discharge	Copious bilateral mucopurulent discharge
			
Eye scores			
Normal	Small amount of ocular discharge	Moderate amount of bilateral discharge	Heavy ocular discharge
			
Ear scores			
Normal	Ear flick or head shake	Slight unilateral droop	Head tilt or bilateral droop
			
Fecal scores			
Normal	Semi-formed, pasty	Loose, but stays on top of bedding	Watery, sifts through bedding
			



5834

ei
DOMP
WIS
INTROD



Software Development

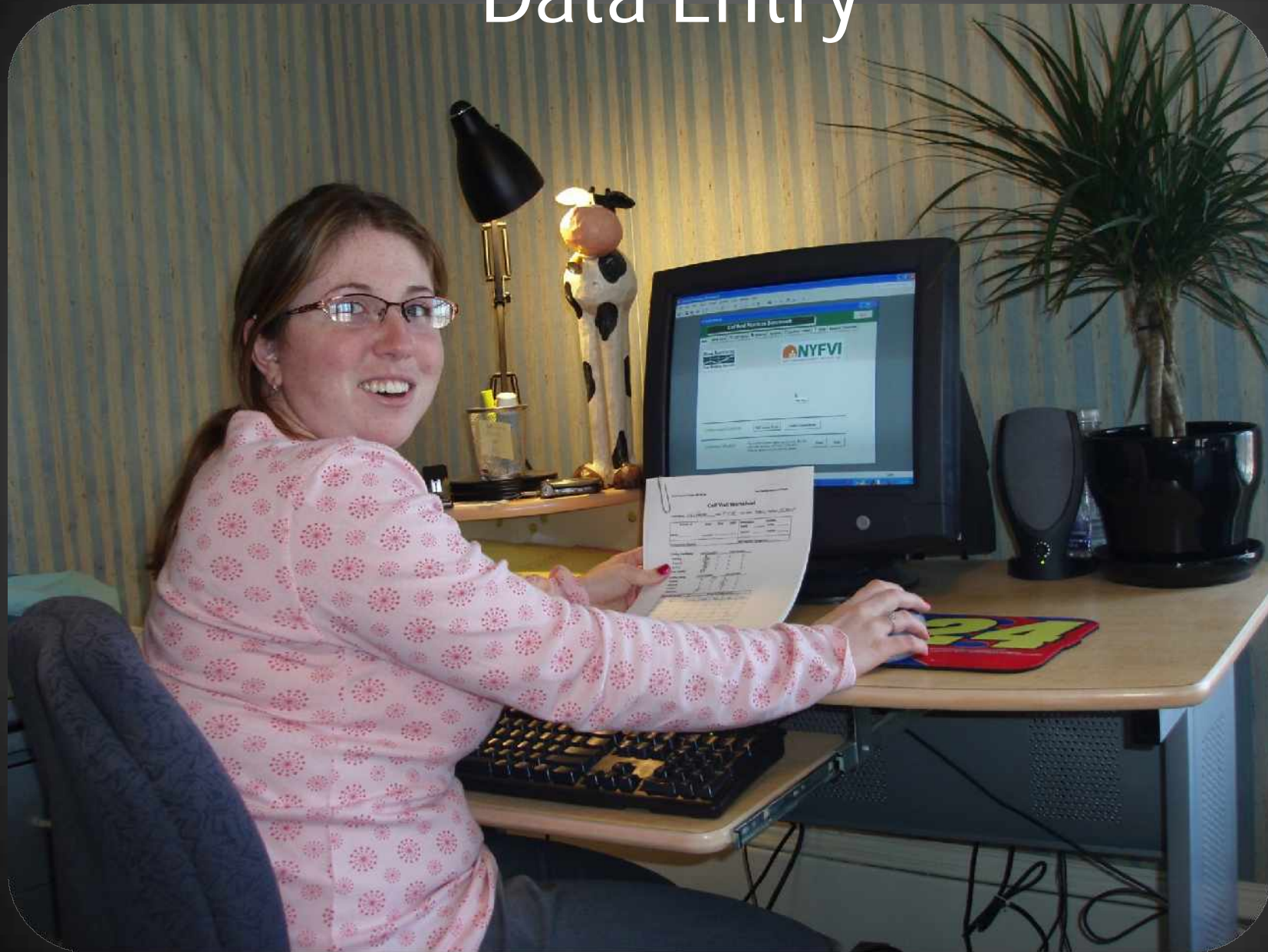
Two Software Programs

1. Reports and Benchmark Software
Microsoft Access
Custom built by Sandra Zohari
2. SOP Software
Microsoft Visio
Custom designed by Lori Cohen

Calf Raising Process Handouts

Best Practices MS Access Database

Data Entry

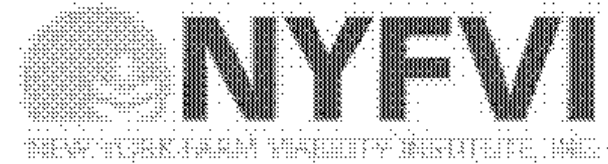


Develop Reports and Rating Systems

- Charts, Tables, Time Scale, Readability
- Are Reports Understandable?
- Do Reports Provide Decision Making Information?



Reporting Data Definitions



Calf Birth Report

Data_source:

Number of Farm Visits	Number of Visit records for the selected farm where the visit date is within the selected report period	Calf Visit Table
-----------------------	---	------------------

Temperature Inside	Average: The sum of inside temperatures recorded for the selected records divided by the number of visits that had an inside temperature recorded	Calf Visit Table
--------------------	---	------------------

Low: Lowest Inside Temperature recorded for the selected records

High: Highest Inside Temperature recorded for the selected records

Temperature Outside	Average: The sum of outside temperatures recorded for the selected records divided by the number of visits that had an outside temperature recorded	Calf Visit Table
---------------------	---	------------------

Low: Lowest Outside Temperature recorded for the selected records

High: Highest Outside Temperature recorded for the selected records

Heifer	Defined as Sex not equal to "M" ("F" or unknown)	Calf Birth Table
--------	--	------------------

Reports



Past Performance
Schum-Acres and Associates



Last Farm Visit: Saturday, August 23, 2008

Visit Date	Time		Technician	Temperature		Humidity		Milk Replacer Temperature
	Start	End		Inside	Outside	Inside	Outside	
8/23/2008	12:30	14:45	DDF	83.8	80.6	50.4	47.9	
Heifer Calves On Site			77	Calving Pen Rating			Calf Pen Rating	
Bulls Calves On Site			1	Bedding			2	Bedding 0
Heifer Calves Observed			78	Ammonia			2	Ammonia 0
Colostrometer Reading				Air flow			2	Air flow 1
Colostrum Bacteria Count				Over Crowding			3	Cleanliness 0

Calf Health Scores

	Cough	Nasal	Eye	Ear	Fecal
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0

Calf Feeding

	Level 1	Level 2	Level 3
Whole Milk			
Milk Replacer			
Calf Starter			

Comments Air flow in calf pen - curtains could be opened all the way to help

Last Month with Recorded Statistics

Month	Number Born			Number Died			Number Treated For	
	Heifers	Bulls	Twins	Heifers	Bulls	DOA	Respiratory	Scours
Aug, 2008	25	22	3	0	0	3	2	0

Comments 2 navel infection in August

Last Weight and IgG Recorded for each Calf

Calf	Sex	Birth Date	Last Visit Date	Last Weight	IgG	Disposition
2333	F					
2427	F		1/3/2008	163		
2814	F		8/17/2007	135		
2816	F		10/1/2007	146		
2817	F		10/1/2007	180		
2819	F		8/17/2007	93		
2821	F		10/1/2007	182		

Calf Best Practices Benchmark



Calf Birth Report



Beginning Date 1/1/2008
Ending Date 8/29/2008

Schum-Acres and Associates
 Report Date 8/29/2008

Number of Farm Visits	Temperature Inside			Temperature Outside		
	Average	Low	High	Average	Low	High
9	59.5	28.5	88	56.4	15.7	88.7

	Heifers		Bulls	
	Number	Percent	Number	Percent
Born	184	98.4%	3	1.6%
DOA	0	0.0%	0	0.0%
Twins	2	1.1%	0	0.0%
Navels Dipped	142	77.2%	1	33.3%
	Average	# Observations	Average	# Observations
Birth Weight	94	132	43	1
Gender Efforts	57	55	10	1
Timeliness of Calving	68	142	10	1
Timeliness of Calving	68	134	10	1

Heifer Birth Weight Range

High	Low	Standard Deviation	Variance
100	70	15.4	238

Comments

- 8/29 Heifer Changed BW from 85 to 70
- 8/29 Heifer Changed BW from 45 to 50
- 8/29 Heifer Added for Weight data
- 8/29 Heifer Added for Weight data



Calf Health Report



Beginning Date 1/1/2008

Schum-Acres and Associates

Ending Date 8/29/2008

Report Date 8/29/2008

Number of Farm Visits	Temperature Inside			Temperature Outside		
	Average	Low	High	Average	Low	High
9	59.5	28.5	88	56.4	15.7	88.7

Calf Treatments

	Total	Number	Percent	Average # of Heifer Calves on Site:
Scours	0	0	0.0	5
Respiratory	5	5	100.0	
Other	0	0	0.0	
Number of Treatment Observations:	1	Based on 1 Observations that included a count of Calves		

Calf Growth

Number of Heifers born in report period 184 Number born with Birth Weight recorded 132
 Number of Heifers with any Weight observations at subsequent visits 74
 Total Number of Weight Observations at subsequent visits for selected calves 105

Key Statistics / Metrics

Weight Gain 1 - 30 Days 115 34
 Weight Gain 31 - 60 Days 413 21
 Weight Gain All Days measured 108 57

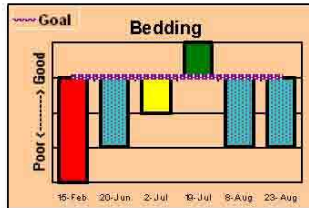
	Over Farm	Average	Over Farm	Average
Colic Prevalence				
Colic Prevalence	1.3	0.7	Average Prevalence	
Bloating	0.3	0.2	Cough	0.3 0.4 1.0 0.5
Acidosis	0.3	0.2	Nasal	0.1 0.0 0.2 0.3
No Bow	0.2	0.2	Eye	0.0 0.0 0.0 0.0
Over Breeding	0.7	0.1	Ear	0.0 0.0 0.0 0.0
Calf Pen				
Bloating	0.3	0.7	Feet	0.0 0.0 0.0 0.0
Acidosis	0.3	0.2	Total Calfs Observed	10 105
No Bow	0.4	0.2	Heifers followed on site for	14 Days
Overbreeding	0.7	0.1		

Calf Care Practices Breakdown

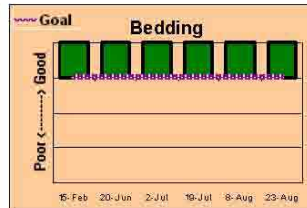
Page 1 of 2
 Date: 08/29/08

Calf Visit Report For the Last 6 Visits Prior To 8/29/2008

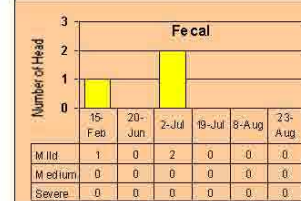
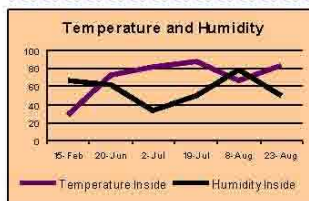
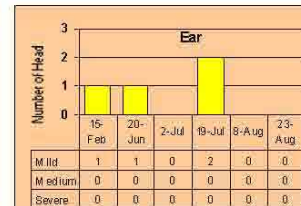
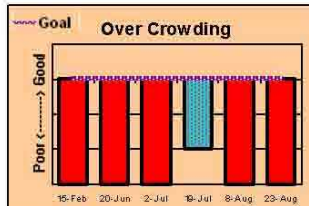
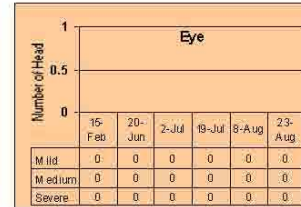
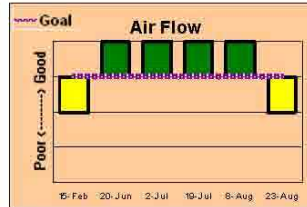
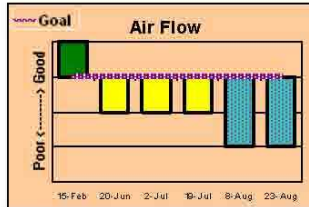
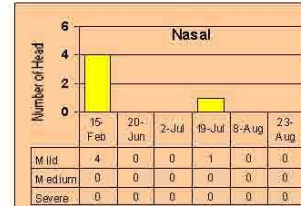
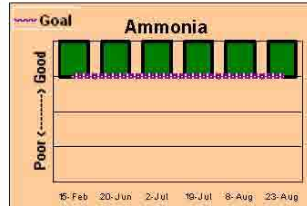
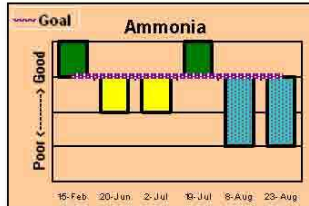
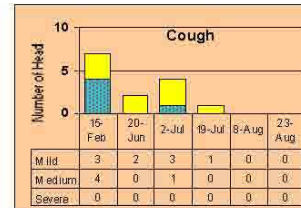
Calving Pen Ratings



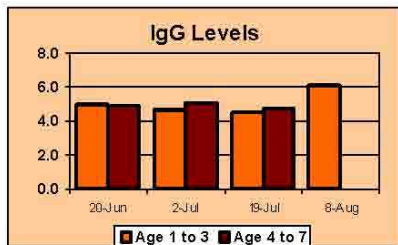
Calf Pen Ratings



Calf Health Scores



IgG Levels For the Last 6 Visits Prior To 8/29/2008



For the Last 12 Months Prior To Aug, 2008 All Farms Your Farm

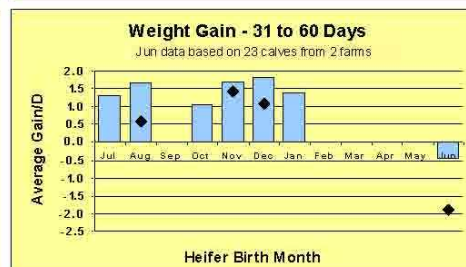
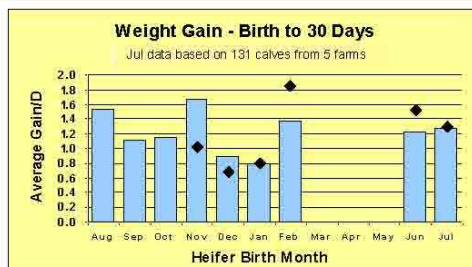
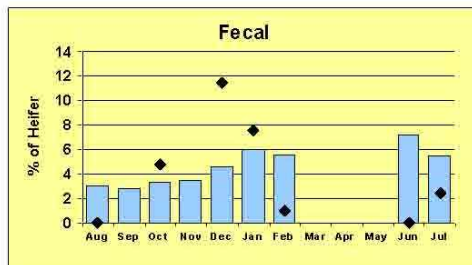
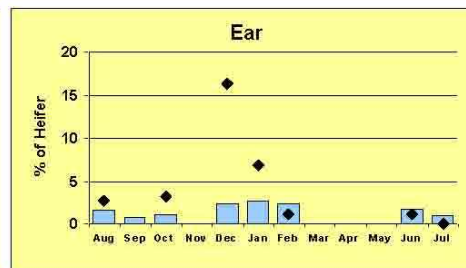
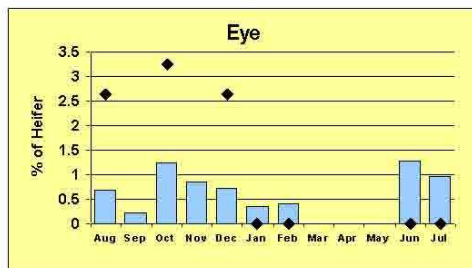
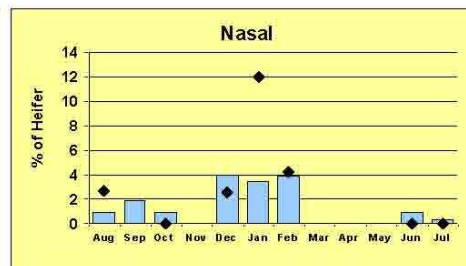
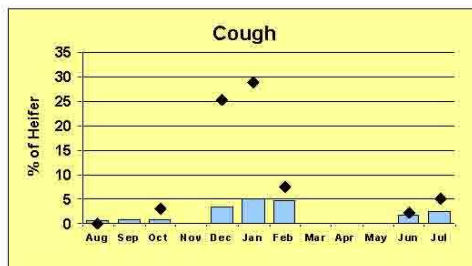


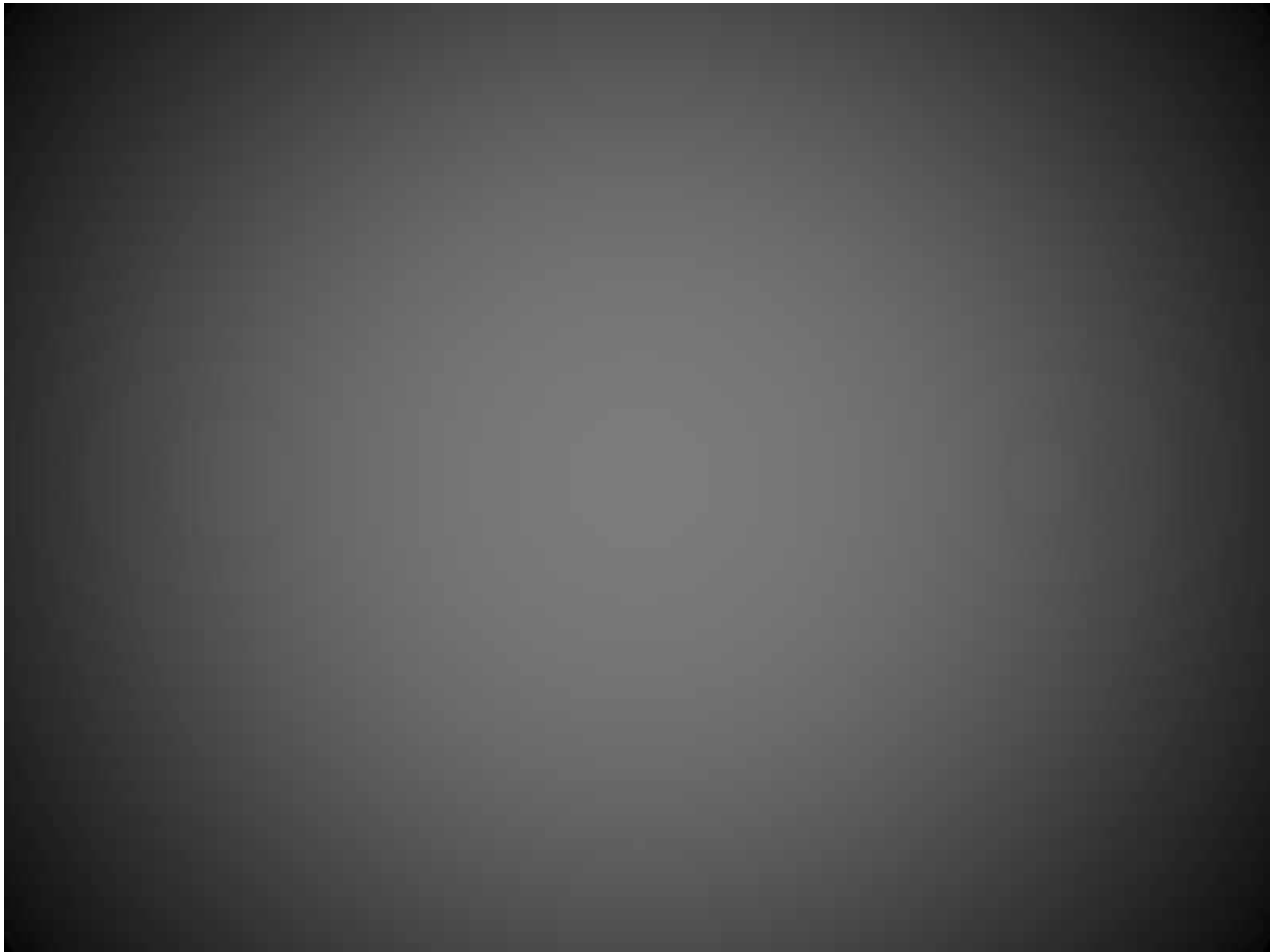
Best Practices Calf Raising Benchmark

For the Last 12 Months Prior To Aug, 2008

Calf Health Scores

□ All Farms ♦ Your Farm











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