



Feed Management Practices at Pond Hill Dairy, LLC

Keith Moritz, Owner
Fort Atkinson, WI

Outline

- Farm Overview
- Ingredient Management
- Ration Management
- Bunk Management



Pond Hill Dairy

- 1996 – 85 milking cows
- 2000 – 450 milking cows
- 2001 – Expanded to 750 milking
- 2004 – Partnered with Rick Faber (VT '95, DVM) on High Index
- 2012 – Partner with PHD R&D on controlled dairy research facility



Jan 2012 Herd Statistics

- 93 lbs Milk
- 3.71% Fat
- 3.11% Protein
- 171 Days in Milk
- 20 months at first calving
- 135,000 SCC
- 12 full-time employees (1 cow feeder)

Feed Storage

- Ag-Bags - corn silage, alfalfa, straw, ethanol co-products, high moisture shell corn
- Upright Bulk Bins - large inclusion ingredients and mixes
- Tanks for liquid feeds

Ag-Bag Feed Storage

- Corn Silage – Inventory Segregation
- Alfalfa Silage – Inventory Segregation
- Wheat Straw – Storage Cost, Uniformity of Chop, Shrink



Chopped Wheat Straw



Cow Groups

- Far-off
- Close-up Heifers
- Close-up Mature Cows
- Fresh Heifers
- Fresh Mature Cows
- High Heifers
- High Mature Cows
- Mid Cows

Ingredients

- Ground Corn
- Ground Wheat
- Animal Protein
- Soybean Meal
- Heifer Protein
- High Protein Mix
- Mid Protein Mix



Ingredient Mixes

- Close-up Mature Cows (8 lb/c/d)
- Fresh Cows (20 lb/c/d)
- High Cows (7 lb/c/d)
- Mid Cows (6 lb/c/d)
- On-farm Super Mix
- Why So Many Mixes? - Mix Philosophy

Feeding Equipment

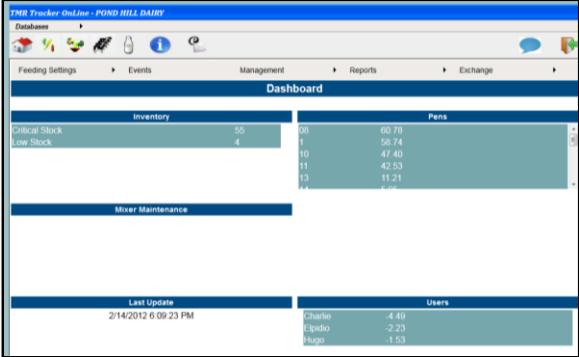
- 620 cu/ft Truck Mounted Roto-Mix Reel
- 900 cu/ft Trailer Roto-Mix Reel
- Caterpillar 924 Wheel Loader



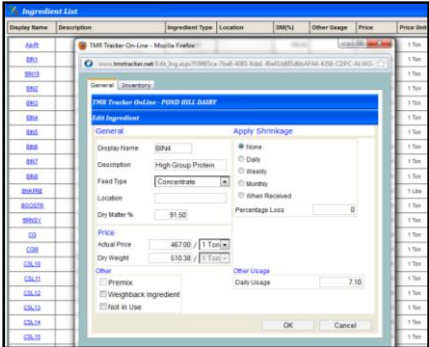
TMR Tracker (Digi-Star, Inc)

- Inventory Management
- Ration Management
 - Rations Fed
 - Load and Delivery Reports
- Feed Cost Per Head
- TMRTracker.NET
 - Manage Rations online
 - Daily email of reports – DMI by Pen, Milk by Pen

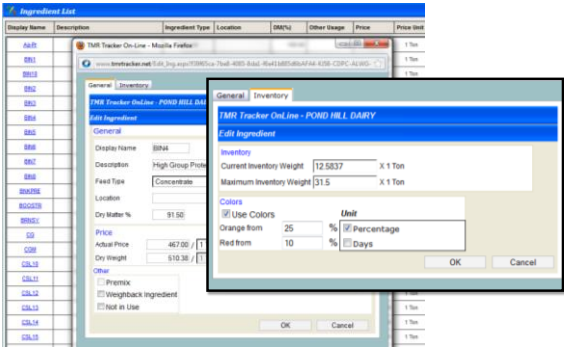
TMR Tracker Online Home Screen



Ingredient Inventory Management



Ingredient Management



Recipes

Display Name	Description	Density	DM	Amount/Head	Dry/Head	Price/Animal	Price/100lbs	# Ingr.
DELCOW	DRY COW RATION	38.00	37.92%	73.48	27.87	\$2.53	\$3.47	8
POST2	POST FRESH PENS 1.5	25.00	44.44%	100.20	47.23	\$5.58	\$6.19	4
PEN3	PEN 3	40.00	44.85%	128.58	57.41	\$7.85	\$6.11	5
PEN31	PEN 31	40.00	44.85%	128.58	57.41	\$7.85	\$6.11	5
PEN6	PEN 6	40.00	42.44%	134.39	57.04	\$6.82	\$5.07	6
PEN7	PEN 7	40.00	44.85%	128.58	57.41	\$7.85	\$6.11	5
PEN10	Bred heifers	25.00	43.98%	59.72	21.85	\$2.14	\$4.23	5
PEN11	PEN 11	25.00	43.39%	49.84	17.89	\$1.86	\$4.57	4
PEN18,13,18,23	PEN 18,13,18,23	38.00	44.22%	32.62	14.43	\$1.71	\$5.23	5
PRMO2	Primo	25.00	66.16%	46.42	30.71	\$5.27	\$11.39	3
PEN8 COWS	PEN 8 COWS	20.00	39.83%	88.20	27.09	\$3.34	\$4.89	4
pen2	pen 2	40.00	43.98%	109.07	46.96	\$6.25	\$5.73	5

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Ingredients		Actual Load		Dry Matter		
Display Name	Description	% DM	Lbs/Animal	% Load	Lbs/Animal	Price/Animal
PRMO2	Primo	65.16	46.42	56.19	30.71	\$5.29
HLC28	2ND CROP 2011	40.00	20.50	15.94	8.20	\$7.72
CSL10	2010	30.00	61.67	47.96	18.50	\$1.85
		44.85	128.58	100.00	57.41	\$7.85

Part in DM of ration: N.A. 53.49% Roughage 48.50%

Daily Emailed – Customizable Report



Pond Hill Dairy February 14, 2012 23:06

DM Intake per Head

Feb 09, 2012 - Feb 14, 2012

Date	Call Wt	Delivered Wt	Dry Wt	# Animals	Price	Price/Animal	W/B	W/B%	DMI
Pen : 08,8									
02/09/2012	3,020	3,015	1,213	39	\$148.79	\$3.78	0	0.00	31.11
02/10/2012	2,704	2,710	1,097	37	\$133.16	\$3.60	0	0.00	29.65
02/11/2012	2,631	2,580	1,052	36	\$127.58	\$3.54	0	0.00	29.21
02/12/2012	2,704	2,735	1,089	36	\$132.46	\$3.68	0	0.00	30.26
02/13/2012	2,479	2,485	987	33	\$122.12	\$3.70	0	0.00	29.92
AVG	2,708	2,705	1,088	36	\$132.42	\$3.67	0	0.00	30.03
Total	13,538	13,525	5,438	181	\$662.10	\$3.66	0	0.00	150.14
Pen : 1,1									
02/09/2012	647	660	297	10	\$40.29	\$4.03	0	0.00	29.70
02/10/2012	617	645	294	10	\$39.89	\$3.99	0	0.00	29.36
02/11/2012	802	805	368	13	\$50.38	\$3.88	0	0.00	28.33
02/12/2012	829	845	377	13	\$52.70	\$4.05	0	0.00	28.96
02/13/2012	893	910	399	14	\$55.15	\$3.94	0	0.00	28.49
AVG	758	773	347	12	\$47.68	\$3.25	0	0.00	28.97
Total	3,788	3,865	1,734	60	\$238.41	\$3.97	0	0.00	144.84

Far-off Dry Cow Load Report



Pond Hill Dairy

February 15, 2012 10:53

Load Report

Feb 08, 2012 - Feb 15, 2012

Load: DRYCOW											Feb 08, 2012		
Ingredient	Time	Call Wt		Loaded Wt		Deviation		Price			Name		
		Actual	Dry	Actual	Dry		%	Planned	Actual	Error			
BIN5	13:11	14	13	20	18	6	42.9%	\$7.00	\$10.00	\$3.00	Elpidio		
STRAW2	13:14	257	226	260	229	3	1.2%	\$7.00	\$7.00	\$0.00	Elpidio		
WBG	13:17	246	59	245	59	-1	0.4%	\$4.00	\$4.00	\$0.00	Elpidio		
HLG26	13:18	1269	558	1275	561	6	0.5%	\$44.00	\$45.00	\$1.00	Elpidio		
CSL9	15:26	1817	509	1815	508	-2	0.1%	\$55.00	\$54.00	\$-1.00	Elpidio		
DRYMIN	15:26	6	6	5	5	-1	16.7%	\$8.00	\$6.00	\$-2.00	Elpidio		
Total		3609	1371	3620	1380	11	10.3%	\$125.00	\$126.00	\$1.00			

Delivery: DRYCOW											Feb 08, 2012		
Pen	Time	Call Wt		Delivered Wt		Deviation		Price			Name		
		Actual	Dry	Actual	Dry		%	Planned	Actual	Error			
9	15:56	3609		3175		-434	12.0%	\$124.64	\$110.59	\$-14.05	Elpidio		
Total		3609		3175		-434	12.0%	\$124.64	\$110.59	\$-14.05			

Super Mix Concept



Pond Hill Dairy

February 15, 2012 10:53

Load Report

Feb 08, 2012 - Feb 15, 2012

Load: PMIX2											Feb 08, 2012		
Ingredient	Time	Call Wt		Loaded Wt		Deviation		Price			Name		
		Actual	Dry	Actual	Dry		%	Planned	Actual	Error			
HLG26	07:45	2218	976	2250	990	32	1.4%	\$78.00	\$79.00	\$1.00	Elpidio		
WBG	07:49	4086	976	4070	977	4	0.1%	\$65.00	\$65.00	\$0.00	Elpidio		
EB-100	07:56	444	391	450	396	6	1.4%	\$342.00	\$347.00	\$5.00	Elpidio		
HG MIX	08:12	3685	3372	3680	3367	-5	0.1%	\$860.00	\$859.00	\$-1.00	Elpidio		
CORN	08:18	4166	3562	4145	3544	-21	0.5%	\$500.00	\$497.00	\$-3.00	Elpidio		
PRC-LAK	08:18	163	147	175	159	12	7.4%	\$79.00	\$85.00	\$6.00	Elpidio		
SB HULL	08:22	1623	1659	1625	166	-2	0.1%	\$202.00	\$203.00	\$1.00	Elpidio		
WHEAT	08:23	1888	1708	1890	1726	22	1.2%	\$207.00	\$210.00	\$3.00	Elpidio		
Synop	8:39	2568	976	2795	1063	227	8.8%	\$66.00	\$72.00	\$6.00	Elpidio		
PMIX2	08:56	6131	4019	6125	4015	-6	0.1%	\$700.00	\$700.00	\$0.00	Elpidio		
HLG26	09:02	2916	1283	2935	1291	19	0.7%	\$102.00	\$103.00	\$1.00	Elpidio		
CSL9	09:07	10820	3030	10835	3034	15	0.1%	\$325.00	\$325.00	\$0.00	Elpidio		
Total		40868	22097	41175	22223	307	1.8%	\$3526.00	\$3545.00	\$19.00			

High Cow Load Report



Pond Hill Dairy

February 15, 2012 10:53

Load Report

Feb 08, 2012 - Feb 15, 2012

Load: PEN 3											Feb 08, 2012		
Ingredient	Time	Call Wt		Loaded Wt		Deviation		Price			Name		
		Actual	Dry	Actual	Dry		%	Planned	Actual	Error			
PMIX2	11:18	5803	3764	5785	3752	-18	0.3%	\$858.00	\$856.00	\$-2.00	Elpidio		
HLG26	11:21	2525	1010	2505	1009	-20	0.8%	\$88.00	\$88.00	\$0.00	Elpidio		
CSL9	11:26	10158	3251	10085	3227	-74	0.7%	\$305.00	\$303.00	\$-2.00	Elpidio		
Total		18487	8025	18375	7982	-112	0.6%	\$1051.00	\$1047.00	\$-4.00			

Delivery: PEN 3											Feb 08, 2012		
Pen	Time	Call Wt		Delivered Wt		Deviation		Price			Name		
		Actual	Dry	Actual	Dry		%	Planned	Actual	Error			
3	12:01	18486		18300		-186	1.0%	\$1081.47	\$1042.03	\$-39.44	Elpidio		
Total		18486		18300		-186	1.0%	\$1081.47	\$1042.03	\$-39.44			

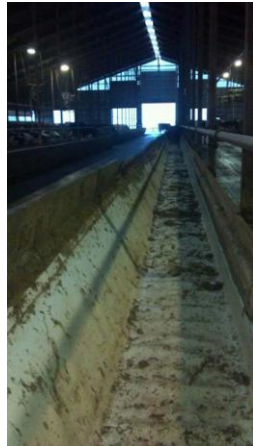
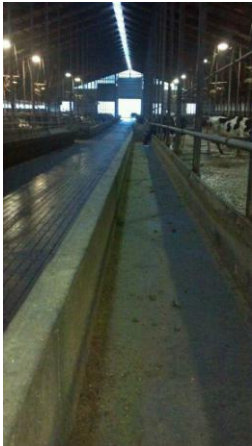
Use Feed Bunks vs Feed Apron



Why Feed Bunks?


- Slick bunks much easier to manage with an actual bunk rather than an open surface
- Not economical to feed \$0.12/ DM lb ration (refusals) to heifers
- Increases bunk space in some pens, cows can eat from both sides
- Capital and labor of pushing feed up to cows







Importance of Feed Delivery Time

Digi-Star  **Pond Hill Dairy** February 15, 2012 13:14

DMI Load/Delivery Time
Feb 08, 2012 - Feb 15, 2012

Pen	Date	# Animals	DMI	Cost	1st Mixing Time	1st Delivery
3	02/08/2012	129	59.44	8.09	11:24	12:05
3	02/09/2012	129	61.62	8.08	11:18	12:01
3	02/10/2012	135	59.51	7.88	10:33	10:58
3	02/11/2012	135	59.21	7.85	10:59	11:19
3	02/12/2012	135	58.73	7.89	08:12	08:25
3	02/13/2012	135	59.32	7.98	10:49	11:10
Average		133	59.64	7.96	10:32	10:59