Using Precision Feed Management to Improve Profitability on Dairy Farms

NY farm viability INSTITUTE

David R. Balbian, M.S., P.A.S.
Area Dairy Management Specialist
Cornell Cooperative Extension
Central New York Dairy, Livestock, & Field Crops Team

March 27, 2018 Morrisville, NY

Precision Feeding?

- How do we define it?
- For our purposes, we define it as hitting a set of nutritional & environmental benchmarks.
- The recently completed NYFVI grant project, *Using Precision Feed Management to Improve Profitability on Dairy Farms*, combined economics into the equation.

Example Farm High 12/9/15

Farm Inputs	
Date	12/9/2015
Farm Name	Example Farm
Cow Group	High
Number of Cows per group	211
Average Body Weight of Cows	1600
Pounds milk per cow per day	104
Milk %Fat	3.53
Milk %True Protein	3.04
Other Solids	5.74
MUN-Milk Urea Nitrogen	12.1
1st calf heifers - number	0
Months - age of first calving	23
2nd lactation animals - number	145

Cornell University Cooperative Extension
Precision Feed Management Benchmark Calculator

Forage Inputs	Feed	C.S. Silage 2014	2nd Cut Haylage	4th Cut Haylage			
Pounds as fed per cow per day		74.6	17.1	5.0			
Cost per ton as fed		$37.40	$46.55	$49.00			
Purchased?		No	No	No			
DM %		34.0	38.0	40.0			
CP % (DM Basis)		7.1	17.3	19.7			
NDF % (DM Basis)		57.6	52.0	43.20			
P % (DM Basis)		0.24	0.37	0.34			

Example Farm High 12/9/15

	Min Est.	Actual	Max Est.	
DM Intake	59.1	59.0	65.1	lbs per day

Concentrate Inputs	Feed	Protein Mix	Fine Corn Meal	Snaplage	Canola	Sugar	Megalac & Palmk 80
Pounds as fed per cow per day		10.9	7.3	6.0	5.1	1.0	0.8
Cost per ton as fed		$386.23	$175.00	$90.00	$264.00	$220.00	$1,312.17
Purchased?		Yes	Yes	No	Yes	Yes	Yes
DM %		91.1	86.5	50.0	88.0	60.0	99.0
CP % (DM Basis)		39.1	8.4	7.9	35.5	4.7	0.0
P % (DM Basis)		0.69	0.29	0.30	1.05	0.12	0.00

Example Farm High 12/9/15

Benchmarks	Goal	Your Value
Forage NDF intake as % of body weight	≥ 0.9%	0.86
Forage as a percent of diet	≥ 60%	57.4
Home grown feeds as a percent of diet	≥ 60%	62.5
Ration P as percent of requirement	< 110%	98.6
Diet crude protein	< 16.5%	16.3
Milk Urea Nitrogen (MUN)	8-12 mg/dl	12.1
Cows dead or culled less than 60 DIM/year	< 8%	8.6
Pounds components per cow per day	≥6 lbs	6.8

Efficiencies	Goal	Your Value
% CP in Ration	< 16.5%	16.3
% N use efficiency	30%	34.7
Manure N excreted g/day		455.7
Purchased Feed N - Milk N, g/cow/day		196.7
Requirement % P in Ration	0.405	0.400
% P use efficiency	35%	39.7
Manure P excreted g/day		64.4
Purchased Feed P - Milk P, g/cow/day		18.7

Component Value	Milk Price Fixed	Milk Price Current
Fat value per pound	$2.9087	$2.9087
Protein value per pound	$1.7019	$1.7019
Other solids value per pound	$0.0328	$0.0328
Additions per cwt	$2.7200	$2.7200
Deductions per cwt	$1.0360	$1.0360
Net Additions and Deductions per cwt	$1.6840	$1.6840
Component value per cwt	$15.63	$15.63
Net milk price per cwt	$17.31	$17.31

Profitability: $ per cow per day	Milk Price Fixed	Milk Price Current
Milk income	$18.01	$18.01
Forage cost	$1.92	$1.92
Concentrate feed cost	$4.29	$4.29
Purchased feed cost	$4.02	$4.02
Total feed cost	$6.21	$6.21
Milk income-concentrate feed cost	$13.71	$13.71
Milk income-purchased feed cost	$13.98	$13.98
Milk income-total feed cost	$11.80	$11.80

Goals of the Program

- 75% of participating farms will improve net milk income/cow/day minus total feed cost by $0.30/cow/day.
- 75% of participating farms will improve net milk income/cow/day minus concentrate cost by $0.40/cow/day
- This was based on the "fixed milk price" established for each farm when the initial set of data was collected.
- Analysis done each quarter followed up with discussion group meetings. 3 distinct groups were based on geography. In addition to discussion group sessions, individual consultations explored opportunities for improvement.

Participants

- 22 farms started the program. A variety of farm sizes and production levels. 2 organic, 1 grass fed organic. Comment about some top producing herds made me a bit nervous (how much better could they do?).
- 1 farm dropped out after 1st quarter due to "no time." They were actually performing fairly well.
- 2 farms sold out during the program. Neither of these farms were "forced" to sell out, but were frustrated with low milk prices & poor returns. 1 is custom raising heifers & also has other enterprises they are concentrating on. On the other farm the son got a job. They are raising replacements & selling feed.
- 1 farm has sold out after the program ended. This was the poorest performing farm (economically). Got employment on another dairy. Spouse has off farm employment. Finishing up raising replacements. Not forced to sell the farmstead itself. This was probably a good choice for this farm. He attended 1 discussion group meeting.

Feed Pricing

- All purchased feed entered at the actual price paid.
- Corn Silage priced at $1.0/pt. of D.M., +10% for Shredlage, + 37.5% for BMR.
- Haylage/Baleage priced at $1.225/pt. of D.M.
- Dry hay at a current market estimate –kept the same throughout the project.
- Pasture priced at ½ the price of haylage.
- Home grown grains priced at a current market estimate, prices adjusted for D.M., but kept the same throughout the project.
- Organic forages & grains priced at 2X of conventional forages.

Central NY Dairy & Field Crops Team Spring Forage Quality Monitoring Report

Summary of Alfalfa Height and Prediction of % NDF May 17, 2016

Chenango	Bainbridge	Robinson Road	1660	12	41.4	34.5	26.9	5/19/16	5/28/16	6/8/16
Chenango	[illegible]	County Road 32	970	16	50.8	38.8	29.7	5/16/16	5/24/16	6/2/16
Chenango	Sherburne	Gash Hill Rd	1242	13	46.2	35.4	27.6	5/18/16	5/27/16	6/6/16
Chenango	Sherburne	Schmidt Rd	[illegible]	13	46.2	35.4	27.6	5/18/16	5/27/16	6/6/16
Chenango	Sherburne	State Route 12	1050	16	50.8	38.0	29.7	5/16/16	5/24/16	6/2/16
Chenango	Smyrna	County Road 14	1480	14	48.1	36.3	28.5	5/17/16	5/26/16	6/5/16
Fulton	Ephratah	County Road 140	833	17	51.7	38.8	30.4	5/15/16	5/23/16	6/1/16
Fulton	Johnstown	State Route 67	765	19	53.4	40.6	31.8	5/14/16	5/21/16	5/29/16
Herkimer	Columbia	Jordanville Road	1500	13	48.2	35.4	27.6	5/18/16	5/27/16	6/6/16
Herkimer	Danube	Tisdale Road	560	15	[illegible]	37.1	29.0	5/17/16	5/25/16	6/4/16
Herkimer	German Flatts	Robinson Road	1377	13	48.2	35.4	27.6	5/18/16	5/27/16	6/6/16
Herkimer	Norway	State Route 170A	1207	13	48.2	35.4	27.6	5/18/16	5/27/16	6/6/16
Herkimer	Schuyler	Carder Lane	466	17	51.7	38.8	30.4	5/15/16	5/23/16	6/1/16
Herkimer	Winfield	North Winfield Road	[illegible]	13	48.2	35.4	27.6	5/18/16	5/27/16	6/6/16
Montgomery	Canajoharie	Maring Road	[illegible]	16	52.6	39.7	31.1	5/14/16	5/22/16	5/30/16
Montgomery	Florida	Cemetery Road	[illegible]	18	52.6	39.7	31.1	5/14/16	5/22/16	5/30/16
Montgomery	Florida	Mohr Road	960	21	55.1	41.8	33.2	5/11/16	5/19/16	5/26/16
Montgomery	Minden	Airport Road	653	18	52.6	39.7	31.1	5/14/16	5/22/16	5/30/16
Montgomery	Minden	Kerr Road	417	20	54.3	41.4	32.5	5/12/16	5/20/16	5/28/16
Montgomery	Minden	Schuyler Road	[illegible]	17	51.7	38.8	30.4	5/15/16	5/23/16	6/1/16
Montgomery	Mohawk	Hickory Hill Road	970	19	53.4	40.6	31.8	5/13/16	5/21/16	5/29/16
Montgomery	Mohawk	Old Trail Road	570	21	55.1	41.8	33.2	5/11/16	5/19/16	5/26/16
Montgomery	Palatine	Dygert Road	584	17	51.7	38.8	30.4	5/15/16	5/23/16	6/1/16

How to get the most out of your Corn Silage

With continued low milk prices, getting the biggest bang for your buck out of your home grown corn silage can help you to get improved performance from your herd while also lowering your dependence on purchased feed. Plan to attend one of the following on-farm Corn Silage Pre-harvest meetings to get up to speed on the latest research backed strategies you can put to work on your dairy.

What: Corn Silage Pre-Harvest meetings
Where: Various local dairy farms (see listings below)
When: Various dates @ 1:00 p.m. – 3:00 p.m. +/- (see listings below)
To Register: Call CCE Herkimer 315.866.7920, email herkimer@cornell.edu or online at http://cnydfc.cce.cornell.edu/events.php

While there is no charge for attending, we ask that you pre-register so we can be ready at each location and that we can contact you in unlikely event of cancellation or rescheduling. Deadline to register is the day before each event.

8/26/16 – Entwistle Family Farm
105 Birdseye Rd.
Frankfort, NY 13340-3950

8/29/16 - Ingerto Farm LLC
1479 Beaver Meadow Rd. Smyrna, NY 13464

8/30/16 – Barber Brothers Dairy
1028 NY Rt. 32 North
Schuylerville, NY 12871

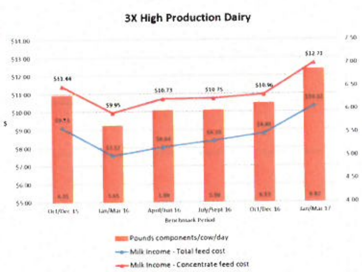
8/31/16 – Argus Acres
428 Schoolhouse Rd. Sharon Springs, NY 13459

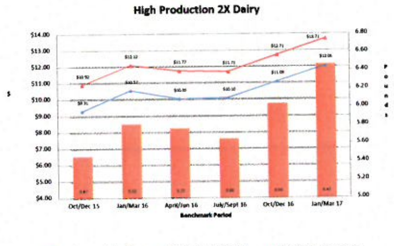
9/1/16 - Southtown Dairy
868 County Rd. 18
South New Berlin, NY 13843

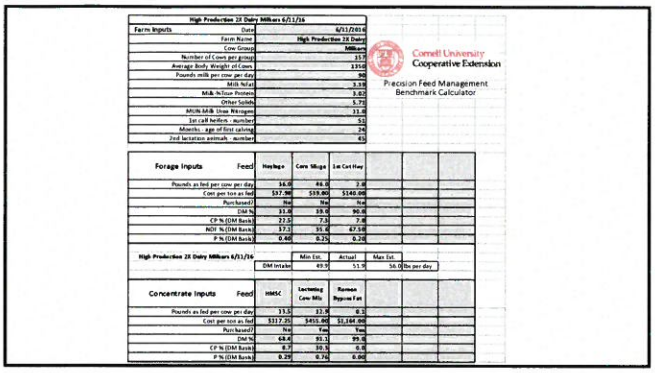
- Attended well by project participants. Lots of great discussion. Kernel processing garnered lots of interest.
- Project participant who bought a used chopper with a processor learned that the dealer DID NOT adjust the unit properly (actually not at all).

NYFVI Project Corn Silage Quality Results

CS	uNDF Int	uNDFRu	uNDF30In	35DM_MEA	35DM_MPM	ExpectedDM	uNDFME	uNDFMPmil	UNDF240%N	Starch	UNDF240%DM	ProssScore	C.Protein	Lbs. Components
A	5.03	8.24	4.70	107.9	102.8	69.7	129.7	123.1	19.7	34.7	7.6	65.9	6.3	6.1
B	5.77	9.54	5.75	104.6	101.1	60.8	106.7	103.2	28.0	36.0	10.4	74.2	7.9	6.1
C	6.43	10.42	6.33	100.8	94.0	54.5	89.4	84.1	31.5	28.7	12.8	54.4	7.8	5.9
D	5.71	9.45	5.24	105.1	98.2	61.4	108.7	101.4	27.5	35.9	10.1	67.1	8.1	5.8
E	5.82	9.65	5.54	105.5	100.2	60.2	106.5	101.2	28.9	37.4	10.3	58.6	7.8	6.0
F	5.95	9.98	6.00	103.0	88.6	58.9	101.2	87.1	31.9	39.2	10.7	63.9	8.1	5.1
G	6.16	9.87	6.28	101.8	98.6	56.9	95.6	93.0	27.8	26.4	11.8	60.9	7.5	3.6
H	6.00	9.96	6.47	102.0	90.3	58.4	99.0	87.9	30.8	38.8	11.3	73.1	6.8	5.8
I	5.82	9.75	6.23	103.9	93.2	60.2	104.9	94.1	30.3	41.0	10.6	73.8	7.2	5.8
J	7.06	11.19	7.40	97.4	94.1	49.7	76.0	75.1	34.2	21.8	15.3	48.3	8.7	4.7
K	6.64	10.85	6.97	100.9	91.6	52.8	85.8	78.9	34.8	35.8	13.2	60.6	7.9	5.1
L	6.38	10.47	6.46	102.1	94.3	55.0	91.7	85.3	33.0	33.5	12.7	52.3	8.3	5.3
M	6.09	9.83	5.93	103.7	98.2	57.6	98.9	93.9	28.0	32.1	11.2	63.9	6.7	6.3
N	6.40	10.46	6.75	101.1	93.6	54.8	90.3	84.4	32.5	33.4	12.8	55.0	7.9	5.2
O	6.56	10.66	6.69	99.9	92.0	53.5	86.4	80.4	33.3	32.9	13.0	74.5	8.4	5.0
P	5.81	9.64	6.58	103.2	94.6	60.3	104.5	95.7	28.9	38.2	10.6	49.5	6.4	3.7
Q	6.80	10.94	6.13	102.1	97.9	51.5	84.0	81.9	33.9	31.7	14.5	62.6	7.5	6.3
R	6.54	10.75	6.73	102.7	93.4	53.6	89.2	82.0	34.7	36.6	13.3	67.1	7.2	5.3
S	6.27	10.18	6.52	101.4	96.6	55.9	93.2	89.3	30.5	31.8	11.9	60.6	7.9	5.7
T	6.22	10.15	7.01	99.1	86.5	56.4	91.9	80.7	30.6	35.7	11.8	31.7	7.7	4.6
U	5.87	9.77	6.04	103.9	90.5	59.8	103.9	90.5	29.9	40.5	10.5	71.7	6.8	6.5
Av	6.16	10.08	6.27	102.5	94.8	57.2	97.0	90.1	30.5	34.4	11.7	61.4	7.6	



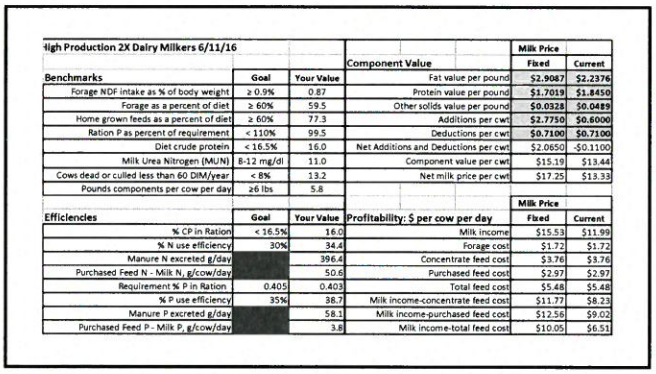




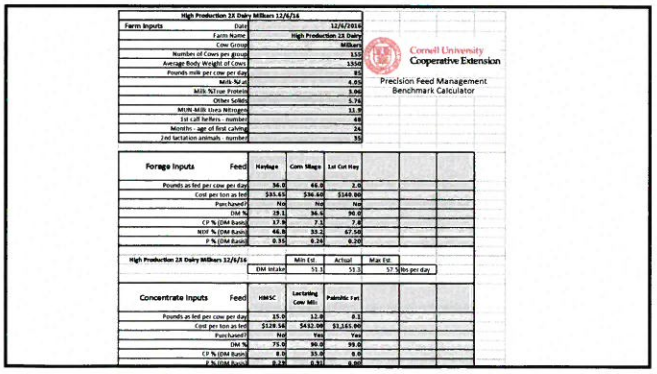
High Production 2X Dairy Milkers 6/11/16							
Farm Inputs	Date		6/11/2016				
	Farm Name		High Production 2X Dairy				
	Cow Group		Milkers				
	Number of Cows per group		153				
	Average Body Weight of Cows		1350				
	Pounds milk per cow per day		90				
	Milk %Fat		3.70				
	Milk %True Protein		3.02				
	Other Solids		5.73				
	MUN Milk Urea Nitrogen		11.0				
	1st calf heifers - number		51				
	Months - age of first calving		24				
	2nd lactation animals - number		43				
Forage Inputs	Feed	Haylage	Corn Silage	1st Cut Hay			
	Pounds as fed per cow per day	16.0	46.0	2.0			
	Cost per ton as fed	$37.90	$39.00	$140.00			
	Purchased?	No	No	No			
	DM %	31.0	35.0	90.0			
	CP % (DM Basis)	21.5	7.5	7.0			
	NDF % (DM Basis)	37.1	35.0	67.50			
	P % (DM Basis)	0.40	0.25	0.20			
High Production 2X Dairy Milkers 6/11/16		Min Est	Actual	Max Est			
	DM Intake	49.9	51.9	56.0 lbs per day			
Concentrate Inputs	Feed	HMSC	Lactating Cow Mix	Ramen Bypass Fat			
	Pounds as fed per cow per day	13.5	12.0	0.1			
	Cost per ton as fed	$317.25	$455.40	$1,164.00			
	Purchased?	No	Yes	Yes			
	DM %	68.4	91.1	99.0			
	CP % (DM Basis)	8.7	30.3	0.0			
	P % (DM Basis)	0.29	0.76	0.00			

Cornell University Cooperative Extension

Precision Feed Management Benchmark Calculator



High Production 2X Dairy Milkers 6/11/16				Milk Price	
			Component Value	Fixed	Current
Benchmarks	Goal	Your Value	Fat value per pound	$2.9087	$2.2376
Forage NDF intake as % of body weight	≥ 0.9%	0.87	Protein value per pound	$1.7019	$1.8450
Forage as a percent of diet	≥ 60%	59.5	Other solids value per pound	$0.0328	$0.0489
Home grown feeds as a percent of diet	≥ 60%	77.3	Additions per cwt	$2.7750	$0.6000
Ration P as percent of requirement	< 110%	99.5	Deductions per cwt	$0.7100	$0.7100
Diet crude protein	< 16.5%	16.0	Net Additions and Deductions per cwt	$2.0650	-$0.1100
Milk Urea Nitrogen (MUN)	8-12 mg/dl	11.0	Component value per cwt	$15.19	$13.44
Cows dead or culled less than 60 DIM/year	< 8%	13.2	Net milk price per cwt	$17.25	$13.33
Pounds components per cow per day	≥6 lbs	5.8			
				Milk Price	
Efficiencies	Goal	Your Value	Profitability: $ per cow per day	Fixed	Current
% CP in Ration	< 16.5%	16.0	Milk income	$15.53	$11.99
% N use efficiency	30%	34.4	Forage cost	$1.72	$1.72
Manure N excreted g/day		396.4	Concentrate feed cost	$3.76	$3.76
Purchased Feed N - Milk N, g/cow/day		50.6	Purchased feed cost	$2.97	$2.97
Requirement % P in Ration	0.405	0.403	Total feed cost	$5.48	$5.48
% P use efficiency	35%	38.7	Milk income-concentrate feed cost	$11.77	$8.23
Manure P excreted g/day		58.1	Milk income-purchased feed cost	$12.56	$9.02
Purchased Feed P - Milk P, g/cow/day		3.8	Milk income-total feed cost	$10.05	$6.51



High Production 2X Dairy Milkers 12/6/16							
Farm Inputs	Date		12/6/2016				
	Farm Name		High Production 2X Dairy				
	Cow Group		Milkers				
	Number of Cows per group		153				
	Average Body Weight of Cows		1350				
	Pounds milk per cow per day		91				
	Milk %Fat		4.65				
	Milk %True Protein		3.06				
	Other Solids		5.74				
	MUN Milk Urea Nitrogen		11.9				
	1st calf heifers - number		48				
	Months - age of first calving		24				
	2nd lactation animals - number		53				
Forage Inputs	Feed	Haylage	Corn Silage	1st Cut Hay			
	Pounds as fed per cow per day	36.0	46.0	2.0			
	Cost per ton as fed	$35.65	$36.60	$140.00			
	Purchased?	No	No	No			
	DM %	29.1	36.5	90.0			
	CP % (DM Basis)	17.9	7.5	7.0			
	NDF % (DM Basis)	46.8	33.2	67.50			
	P % (DM Basis)	0.35	0.24	0.20			
High Production 2X Dairy Milkers 12/6/16		Min Est	Actual	Max Est			
	DM Intake	51.1	51.3	57.5 lbs per day			
Concentrate Inputs	Feed	HMSC	Lactating Cow Mix	Palmitic Fat			
	Pounds as fed per cow per day	15.0	12.0	0.1			
	Cost per ton as fed	$128.58	$432.00	$1,165.00			
	Purchased?	No	Yes	Yes			
	DM %	75.0	90.0	99.0			
	CP % (DM Basis)	8.5	33.0	0.0			
	P % (DM Basis)	0.29	0.83	0.00			

Cornell University Cooperative Extension

Precision Feed Management Benchmark Calculator

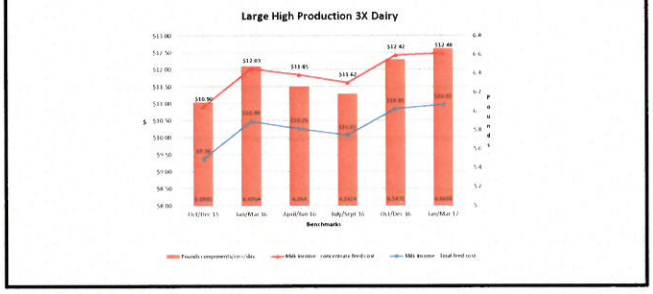
High Production 2X Dairy Milkers 12/6/16

Benchmarks	Goal	Your Value
Forage NDF intake as % of body weight	≥ 0.9%	0.87
Forage as a percent of diet	≥ 60%	56.8
Home grown feeds as a percent of diet	≥ 60%	78.7
Ration P as percent of requirement	< 110%	105.0
Diet crude protein	< 16.5%	15.4
Milk Urea Nitrogen (MUN)	8-12 mg/dl	11.9
Cows dead or culled less than 60 DIM/year	< 8%	13.2
Pounds components per cow per day	≥6 lbs	6.0

Efficiencies	Goal	Your Value
% CP in Ration	< 16.5%	15.4
% N use efficiency	30%	34.7
Manure N excreted g/day		374.0
Purchased Feed N - Milk N, g/cow/day		75.7
Requirement % P in Ration	0.393	0.413
% P use efficiency	35%	36.2
Manure P excreted g/day		61.3
Purchased Feed P - Milk P, g/cow/day		9.9

Component Value	Milk Price Fixed	Current
Fat value per pound	$2.9087	$2.0493
Protein value per pound	$1.7019	$2.2975
Other solids value per pound	$0.0328	$0.1351
Additions per cwt	$2.7750	$0.6900
Deductions per cwt	$0.7100	$0.7200
Net Additions and Deductions per cwt	$2.0650	-$0.0300
Component value per cwt	$17.16	$16.09
Net milk price per cwt	$19.22	$16.06

Profitability: $ per cow per day	Milk Price Fixed	Current
Milk income	$16.34	$13.65
Forage cost	$1.62	$1.62
Concentrate feed cost	$3.63	$3.63
Purchased feed cost	$2.66	$2.66
Total feed cost	$5.25	$5.25
Milk income-concentrate feed cost	$12.71	$10.03
Milk income-purchased feed cost	$13.68	$10.99
Milk income-total feed cost	$11.09	$8.40



NYFVI Farm Comparisons – 6th Quarter

	Milk	Fat	Protein	Lbs. Components	MUN	Diet CP	Net Add. Ded.	Net Milk Pr	Milk Income	Forage $	Conc. $	Purch. $	T. Feed $	Milk-Conc	Milk-Purc	Milk-Total		Milk - Con
A	81	4.12	3.28	6	11.9	17	0.8008	19.8	16.07	1.55	4.36	4.36	5.91	11.71	11.71	10.16	3X	
B	81	3.93	3.19	5.8	11	17	1.0496	19.37	15.69	1.48	4.88	4.18	6.17	11.01	11.51	9.53		
C	75	4	3.19	5.2	11.8	16.7	-2.0536	16.39	11.86	1.49	3.95	3.95	5.44	7.91	7.91	6.42		15th
D	92	4	3.13	6.6	11	17.8	0.43	19.08	17.52	1.51	4.86	4.59	6.37	12.45	12.93	11.14	3X	3rd
E																	3X	
F																		
G																		
H	95	3.62	3.14	6.4	12	17.1	0.553	17.98	17.06	1.77	4.34	3.72	6.01	12.8	13.82	11.05	3X	1st
I	70	4.23	3.14	5.2	11	16.2	0.4321	19.41	13.59	2.12	3.64	3.64	5.76	8.95	9.95	7.81		
J	97	3.99	3.09	6.8	10	16.6	-0.5263	17.72	17.1	2.39	4.47	3.67	6.87	12.69	13.43	10.34	3X	4th
K	70	3.9	3.21	5	10	17.4	1.498	18.2	16.68	3.44	7.86	6.73	11.3	18.83	19.96	15.98	O	
L	72	4.08	3.14	5.2	7.8	17.9	0.37	18.96	13.65	1.98	2.83	2.83	4.81	10.82	10.82	8.84		
M	77	3.6	3.02	5.1	11	16.5	-0.2898	15.82	12.11	1.9	3.94	3.2	5.84	8.18	8.92	6.28	3X	14th
N	39	4.59	3.39	2.6	11.3	16.7	32.6801	47.41	15.65	3.8	0.79	0.29	4.09	15.36	15.36	11.56	OO	
O	91	4.03	3.05	6.5	12.5	13.9	-0.19	18.07	16.52	1.66	3.81	3.84	5.47	12.75	13.67	11.05		2nd
P	89	4.06	3.21	6.5	8.8	16.5	-0.78	18.51	16.47	1.34	4.54	4.54	5.88	11.82	11.92	10.58	3X	5th
Q	49	4.21	3.23	3.6	12	15.7	1.4651	30.66	18.77	3.97	3.78	4.78	7.75	14.99	13.99	11.01	O	
R	66	4.08	3.25	5	12.6	17.8	-0.99	18.45	12.49	2.11	3.11	5.1	5.3	9.5	7.19	7.19		
S	69	4.1	3.29	5.1	11	16.7	0.0483	18.99	13.1	1.48	2.89	1.97	4.37	10.21	11.24	8.75		
T	73	3.9	3.06	5.1	12.5	15.4	-0.15	17.79	12.99	1.98	3.2	3.2	5.18	9.79	9.79	7.8		
U	67	3.84	3.04	4.6	10	16.1	-1.0907	16.79	11.25	1.85	3.38	3.38	5.23	7.87	7.87	6.01		18th
V	83	4.3	3.15	6.2	11	16.4	-0.4105	18.74	15.55	1.53	4.55	3.63	6.08	11	11.92	9.47		

Project Results & Other Changes as a Result

- 14/19 (73.7%) achieved $.30 + improvement in net milk income minus total feed cost/cow.
- 10/19 (52.6%) achieved $.40 + improvement in net milk income minus concentrate cost/cow.
- 15/19 (78.9%) achieved a + improvement in net milk income minus total feed cost/cow.
- 14/19 (73.7%) achieved a + improvement in net milk income minus concentrate cost/cow.
- Average Net Improvement = $.65 in net milk income minus total feed cost/cow.
- Average Net Improvement = $.57 in net milk income minus concentrate cost/cow.

Project Results & Other Changes continued

- Organic dairies fared very well economically
- For the most part, the better performing herds at the beginning improved the most
- One participant was on the 7 lb. club panel at Empire Farm Days
- 5 farms changed nutritionists:
  - 2 changed because of low butterfat test (1 of these also had high concentrate cost)
  - 1 changed because of poor service
  - 1 changed because or persistently high concentrate cost compared to other participants
  - 1 changed after project ended because of major transition cow problems
- 2 of the larger dairies traded in & bought new self propelled choppers

Questions?