

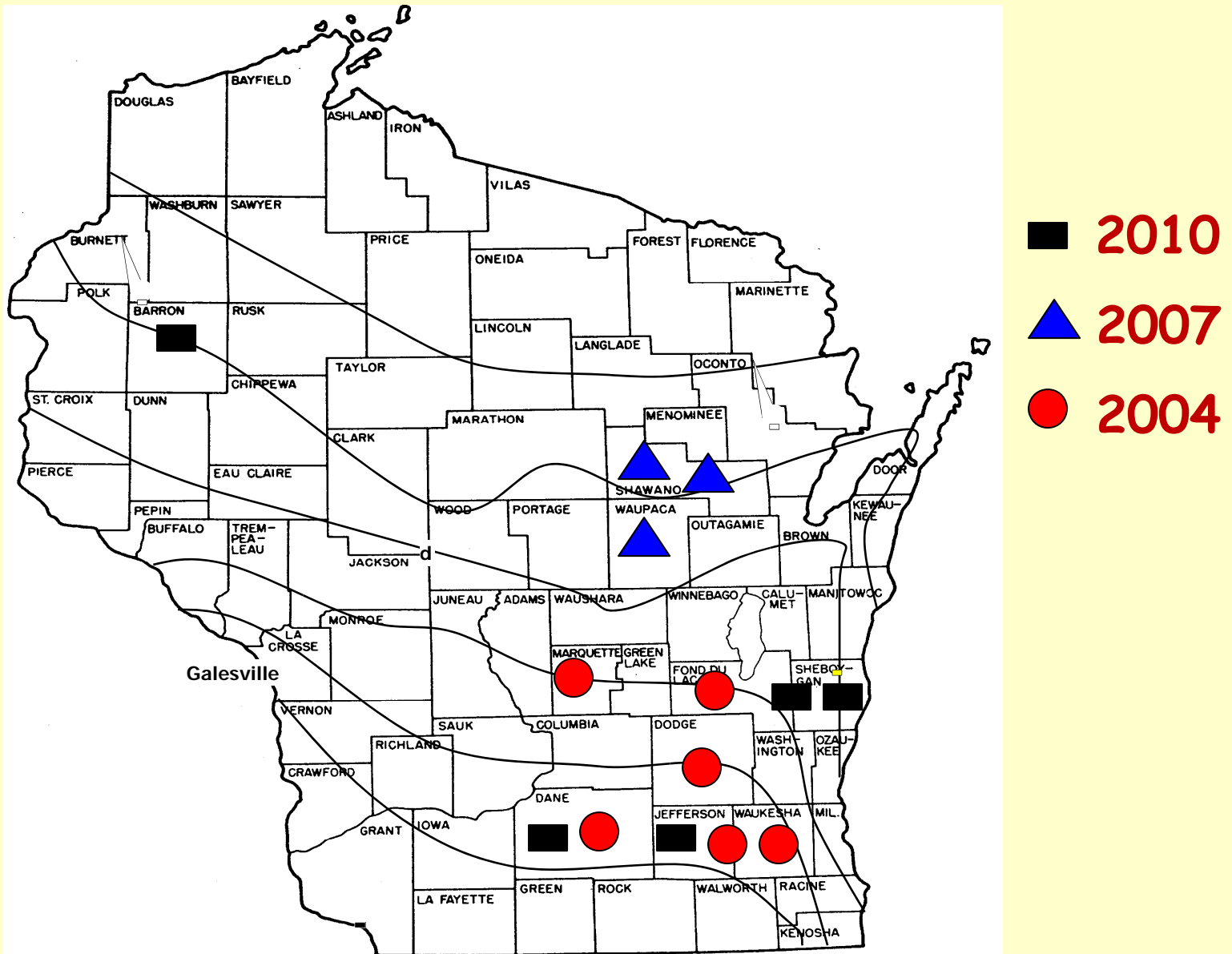
Diets Fed in Selected WI High-Producing Dairy Herds



EXCELLENCE IN
EDUCATION AND DISCOVERY
UNIVERSITY OF WISCONSIN - MADISON
www.wisc.edu/dysci

Randy Shaver
Department of Dairy Science
University of Wisconsin - Madison

Survey Herd Locations



2010 Survey Herds

<u>Farm Name</u>	<u>Bethany Valley</u>	<u>Ripps Dairy Valley</u>	<u>Siemers Holstein Farm Inc.</u>	<u>Tom & Gin Kestell & Sons</u>	<u>JC KOW Farms</u>
Location	Comstock	Dane	Newton	Waldo	Whitewater
<u>RHA, lb</u>					
Milk	33356	31557	33544	36045	36729
Fat	1343	1151	1226	1350	1202
TP	1062	927	1000	1091	1081
Cheese Yield	3597	3102	3322	3645	3395

2010 Survey Herds

Farm Name	Bethany Valley	Ripps Dairy Valley	Siemers Holstein Farm Inc.	Tom & Gin Kestell & Sons	JC KOW Farms
Milking freq.	3x	3x	3x	3x	3x
No. Milking	100	875	2274	85	146
MLM, lb.	114	100	104	128	108

2010 Survey Herds

<u>Farm Name</u>	<u>Bethany Valley</u>	<u>Ripps Dairy Valley</u>	<u>Siemers Holstein Farm Inc.</u>	<u>Tom & Gin Kestell & Sons</u>	<u>JC KOW Farms</u>
DIM	169	184	129	215	213
Milk, lb/d	108	110	111	104	100
Fat %	3.83	3.63	3.45	4.26	3.21
TP%	3.21	2.95	2.90	3.08	3.00
SCC, x1000	196	234	141	255	239

2010 Survey Herds

<u>Farm Name</u>	<u>Bethany Valley</u>	<u>Ripps Dairy Valley</u>	<u>Siemers Holstein Farm Inc.</u>	<u>Tom & Gin Kestell & Sons</u>	<u>JC KOW Farms</u>
BST, % of herd	60	60	50	70	70
Stall Stocking, %	110	121	121	Tie-stalls	100
Bunk space, ft.	1.8	2.0	1.3	Tie-stalls	1.6
Feeding freq.	5x	1x	2x	2x	2x
Push-up freq.	0	5x	12x	6x	4x
Refusal, %	0	3	3	3	2

2010 Survey Herds

<u>Farm Name</u>	<u>Bethany Valley</u>	<u>Ripps Dairy Valley</u>	<u>Siemers Holstein Farm Inc.</u>	<u>Tom & Gin Kestell & Sons</u>	<u>JC KOW Farms</u>
DMI, lb/d	68	65	63	57	61
Milk/Feed	1.59	1.69	1.76	1.82	1.64
FCM/Feed	1.55	1.60	1.62	1.90	1.45

2010 Survey Herds

<u>Farm Name</u>	<u>Bethany Valley</u>	<u>Ripps Dairy Valley</u>	<u>Siemers Holstein Farm Inc.</u>	<u>Tom & Gin Kestell & Sons</u>	<u>JC KOW Farms</u>
No. milking cow formulations	1	1	3	1	1
Testing freq., d	30	30	30	30	30
DM freq., d	3	as needed	7	as needed	as needed
Formulation freq.	30	30	30	30	30

2010 Survey Herds

<u>Farm Name</u>	<u>Bethany Valley</u>	<u>Ripps Dairy Valley</u>	<u>Siemers Holstein Farm Inc.</u>	<u>Tom & Gin Kestell & Sons</u>	<u>JC KOW Farms</u>
<u>Mixer</u>					
Make	Valmetal	Kuhn-Knight	Supreme	Valmetal	Knight
Type	4-auger	4-auger	Twin Vertical Screw	4-auger	Vertical Screw

2010 Survey Herds

	Ron Olson	Chuck Ripp Graham Webster	Jeff Rortvedt	Steve Woodford	Jim Stelse
Basis	Herd	HGRP	HGRP	Herd	Herd
Model	NRC-01	CPM	CNCPS	NRC-01	CNCPS
Company	Vita Plus	Private Consultant	Hubbard	Private Consultant	Landmark Coop.

2007 Survey Herds

- Bruce & Brenda Long – New London
 - 60 cows; 32,725 lb. RHA 2x; no BST
 - Tie stalls; TMR
- Scott & Dawn Seward – Pine River
 - 331 milking cows; 29,982 lb RHA 3x; 75% BST
 - Freestall-parlor; TMR
- Ron & Nicole Wussow – Cecil
 - 130 milking cows
 - 32,882 lb. Holstein & 24,712 lb. Jersey RHA 3x
 - Tie stalls; TMR

2004 Survey Herds*

- Hensen Bros. Dairy Inc., Waunakee
- Koepke Farms Inc., Oconomowoc
- Rosy Lane Holstein LLC, Watertown
- Crave Brothers Farm, Waterloo
- SoFine Bovines LLC, Westfield
- Oechsner Farms, Brownsville

***All freestall-parlor-TMR herds; 280 – 570 milking cows; 29,100 – 31,200 lb. RHA 3x; BST 63% - 83% milking cows**



Alfalfa Silage Nutrient Composition

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
DM, % of as fed	33 - 46	44 - 50	28 - 52
CP, % of DM	17 - 25	19 - 23	19 - 26
NDF, % of DM	34 - 47	37 - 38	35 - 42
IVNDFD, % of NDF	- - -	57 - 59	39 - 58
NFC, % of DM	22 - 35	31 - 34	24 - 35
Ash, % of DM	9 - 13	9 - 10	10 - 14
TDN _{1x} , % of DM	56 - 65	63 - 64	58 - 65



Corn Silage Nutrient Composition

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
DM, % of as fed	28 - 35	35 - 37	29 - 36
CP, % of DM	6 - 9	8	8 - 11
NDF, % of DM	37 - 43	40 - 44	39 - 49
IVNDFD, % of NDF	60 - 67	63 - 65	61 - 67
Starch, % of DM	33 - 36	29 - 38	25 - 32
TDN _{1x} , % of DM	72 - 75	69 - 72	66 - 73



Forage Program—Milking Cows

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Wheat Straw	- - -	1/3	2/6
Dry Hay	4/5	3/3	3/6
Alfalfa Silage	6/6	3/3	6/6
Corn Silage	6/6	3/3	6/6

Herd or High Group Forage

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Forage % of Diet DM	50 - 60	51 - 58	45 - 63
Corn Silage % of Forage DM	35 - 67	40 - 60	41 - 68



Herd or High Group Corn

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Dry Corn	1/5	2/3	3/6
HM Corn	5/5	2/3	4/6
% Moisture	27 - 34	27 - 34	24 - 26



Supplements—Herd or High Group

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Starch	1/5	1/3	1/6
CGF	2/5	--	3/6
DDG	2/5	2/3	2/6
WCS	5/5	3/3	6/6
Soyhulls	2/5	2/3	1/6
Beet Pulp	--	--	1/6
LFS/Molasses	3/5	1/3	2/6
Liquid Whey	2/5	--	1/6

Supplements—Herd or High Group

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
SBM solv.	3/5	3/3	5/6
SBM exp., htd.	4/5	3/3	1/6
Rst. SB	3/5	2/3	4/6
Linseed Meal	--	--	1/6
CGM-60	2/5	2/3	2/6
Blood/AP Blend	5/5	3/3	4/6
Fish Meal	1/5	--	1/6
Feather Meal	--	--	1/6

Supplements—Herd or High Group

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Pork MBM	--	1/3	--
Formula Feed	--	--	1/6
Urea	1/5	2/3	3/6
Animal Fat	3/5	3/3	3/6
Rumen Inert Fat	3/5	2/3	3/6
Bi/Sesqui-Carb	5/5	3/3	4/6
Yeast	4/5	3/3	6/6
Organic TM	5/5	2/3	6/6

Supplements—Herd or High Group

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Biotin	4/5	1/3	4/6
Niacin	--	--	1/6
Rumensin	5/5	3/3	NA
Bacterial DFM	--	2/3	5/6
RP Methionine	4/5	1/3	1/6
Myco. Binder	3/5	1/3	3/6
Canola Meal	1/5	--	--
Oats	1/5	--	--



Herd/HGRP Diet Nutrient Composition

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
DM, % as fed	42 - 53	--	40 - 57
CP, % DM	16.3 - 17.5	17.3 - 18	17 - 18.5
RUP, % CP	33 - 43	38 - 40	35 - 38
NDF, % DM	25 - 31	28 - 31	26 - 32
Forage NDF, % DM	20 - 24	21 - 24	18 - 23
NFC, % DM	40 - 46	39	38 - 44
Fat, % DM	4 - 6	5 - 6	5 - 6
TDN _{1x} , % DM	75 - 77	75 - 77	75 - 77

Herd/HGRP Diet Nutrient Composition

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Ca, % of DM	0.8 – 1.1	1.0 – 1.1	0.8 – 1.0
P, % of DM	0.33 – 0.40	0.38 – 0.43	0.37 – 0.41
Mg, % of DM	0.27 – 0.38	0.33 - 0.38	0.33 – 0.39
K, % of DM	1.4 – 1.9	1.2 - 1.4	1.2 – 1.6
Added Salt, % of DM	0.15 – 0.50	0.36 – 0.42	0.22 – 0.50
Suppl. A, IU x1000/d	131 - 307	176 - 231	139 - 264
Suppl. D, IU x1000/d	43 - 73	39 - 61	34 - 68
Suppl. E, IU/d	658 - 1945	770 - 1100	627 - 2069



Herd or High Group DMI & Feed Efficiency

	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
DMI, lb per day	57 - 68	55 - 59	57 - 68
Milk/DMI	1.6 – 1.8	1.8 - 1.9	1.7 – 1.8
FCM/DMI	1.6 – 1.9	--	1.6 – 1.8



Herd or High Group Amino Acid Status

<u>% of MP</u>	Sept-2010 5-Herd <u>Summary</u>	Fall-07 3-Herd <u>Summary</u>	Feb-04 6-Herd <u>Summary</u>
Lysine	6.3 – 7.0	--	6.2 – 6.4
Methionine	1.8 – 2.4	--	1.8 – 2.1
Lys/Met	2.8 – 3.9	--	3.1 – 3.4

Visit UW Extension Dairy Cattle Nutrition Website

<http://www.uwex.edu/ces/dairynutrition/>

Cooperative Extension Extension

Dairy Cattle Nutrition UW-Extension

Home About Contact Search



Conferences
Presentations
Publications
Spreadsheets
Links

Download a copy of the free Adobe Acrobat Reader to view and print information provided as PDF files.
Get Adobe Reader







Welcome to Dairy Cattle Nutrition UW-Extension

The Dairy Cattle Nutrition UW-Extension site is designed to provide research-based information for the public seeking resources on applied aspects of the nutrition of dairy cattle.


Web Site Highlights

-  [Dairy Team News from the University of Wisconsin](#)
-  [2009 Four-State Dairy Nutrition & Management Conference Proceedings](#)



UW Feed Grain Evaluation System

-  [Technical note: A method to quantify prolamin proteins in corn that are negatively related to starch digestibility in ruminants](#) (Josh Larson and Pat Hoffman - JDS paper)
-  [Corn Biochemistry: Factors related to starch digestibility in ruminants](#) (Pat Hoffman and Randy Shaver - Conference paper)
-  [Corn Biochemistry: Factors related to starch digestibility in ruminants](#) (Pat Hoffman and Randy Shaver - slide set)
-  [A guide to understanding prolamins](#) (Pat Hoffman and Randy Shaver)
-  [UW Feed Grain Evaluation System](#) (Pat Hoffman and Randy Shaver)
-  [Relative Grain Quality - RGQ](#) (Pat Hoffman and Randy Shaver)



Spreadsheets


-  [MILK2006 Corn Silage: Calculates TDN-1x, NEL-3x, Milk per ton, and Milk per acre](#)

Publications

-  [Benchmarking forage nutrient composition and digestibility](#)
-  [Feeding Programs in High Producing Dairy Herds](#)


Presentations

-  [Benchmarking forage nutrient composition and digestibility](#)
-  [Diets fed in selected WI high-producing dairy herds](#)




Dr. Randy Shaver
Professor - UW Madison & Extension Dairy Nutritionist
280 Animal Sciences Building
1675 Observatory Drive
Madison, WI 53706-1284
Phone: (608) 263-3491
Fax: (608) 263-9412
rdshaver@wisc.edu

[Biographical Information](#)



Pat Hoffman
Professor - UW Extension
Marshfield Ag Research Station
8396 Yellowstone Drive,
Marshfield, WI 54449
Phone: (715) 387-2523
Fax: (715) 387-1723
pchoffma@wisc.edu

[Biographical Information](#)



EXCELLENCE IN
EDUCATION AND DISCOVERY
UNIVERSITY OF WISCONSIN - MADISON

UW Extension



**EXCELLENCE IN
EDUCATION AND DISCOVERY**

UNIVERSITY OF WISCONSIN - MADISON

www.wisc.edu/dysci



THE UNIVERSITY
of
WISCONSIN
MADISON