

Characterization of certified organic Wisconsin dairy farms: Management practices, feeding regimes and milk production. *C.A Hardie*¹, V.E Cabrera¹, M Dutreuil¹, R Gildersleeve², UW-Madison, Madison, WI, USA¹, UW-Extension, Lancaster, WI, USA²*

The purpose of this study was to characterize certified organic Wisconsin dairy farms and evaluate their feeding regimes during the course of 2010. Farms were identified by cross listing two separate directories: the Wisconsin Active Dairy Producers and the Wisconsin Certified Organic Producers. All resulting organic dairy herds from these lists were invited to participate (N=565) in this study. An on-sight survey containing sections on farm demographics, feeding, pasturing, cropping and nutrient management practices, sources of income, and farm satisfaction was conducted on 70 organic farms. Results from 66 farms are presented in Table 1.

Table 1: Characteristics of the surveyed organic Wisconsin dairy farms.

Trait	n	%	Minimum	Maximum	Average	SD
GENERAL						
Number of years certified organic	66	-	0.67	20	6.65	4.74
Number of years utilizing grazing	63	-	0	90	14.7	13.4
Total land (ac)	66	-	44	1915	303	326
Total pasture (ac)	66	-	15	360	98.6	78.0
Number of decision makers	66	-	1	5	2.38	0.97
Age of the respondent (years)	65	-	18	74	49.5	13.3
Raised on farm (% of respondents)	64	84.8	-	-	-	-
Relied entirely on family labor (% of farms)	66	43.9	-	-	-	-
DAIRY HERD						
Number of cows	66	-	12	650	69.2	85.8
Number of heifers	66	-	9	600	59.3	80.5
Milk production (lbs/cow per year)	66	-	5,190	22,630	13,798	3,970
Fat content (%)	60	-	3.47	5.19	3.98	0.35
Protein content (%)	60	-	2.82	3.67	3.15	0.18
SCC (x1,000 cells/ml)	60	-	97.5	707	244	99.4
Number of lactations before culled	66	-	2	7	4.51	1.16
Length of dry period (d)	66	-	35	140	63.4	15.8
Calving interval (d)	66	-	300	608	390.0	37.5
Age of first calving (months)	65	-	23	36	26.1	2.72
Purchased dairy replacements (% of farms)	66	10.6	-	-	-	-
Used bulls (% of farms)	66	60.6	-	-	-	-
Used AI (% of farms)	65	72.3	-	-	-	-
Predominant breed was Holstein or Holstein+Holstein crossbreds (% of farms)	66	57.6	-	-	-	-
FEEDING/GRAZING						
Estimated total DMI (lbs/cow per day)	64	-	26	62	43.5	8.2
Estimated peak pasture intake (% of total DMI)	63	-	1	100	69.3	26.1
Grazing rotation frequency (d)	62	-	0.21	14.0	1.81	2.61
Length of grazing season (d)	65	-	122	244	184	29.0
Supplemented grain (% of farms)	66	81.8	-	-	-	-
Supplemented protein (% of farms)	65	12.3	-	-	-	-
Supplemented corn silage (% of farms)	65	35.4	-	-	-	-

Based on this survey data, an average organic farm in Wisconsin has been certified organic for 6.65 years but grazing for twice as long. It operates 303 acres with one-third of the land being in pasture. Its herd consists of 69 cows and 59 female young stock. Its milk production is 13,798 lbs/cow per year with fat and protein contents of 3.98% and 3.15%, respectively. Cows in this average organic farm first calve at 26.1 months of age, calve every 390 days afterwards, and remain in the herd for 4.51 lactations. The estimated DMI is 43.5 lbs/cow per day with an estimated 69.3% of intake coming from pasture during the peak grazing season. As indicated by the ranges and SD displayed in Table 1, certified organic Wisconsin dairy farms varied widely in farm characteristics, feeding regimes, and animal production. Awareness of these extreme variations should help design extension programs and agricultural publications better suited to meet the educational needs of this growing dairy sector.