

# WISCONSIN DAIRY DATA

Fact sheet series from the Center for Dairy Profitability

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## **A Summary of Basic Costs and Their Impact on Confinement vs. Managed Intensive Rotational Grazing (MIRG) by Jim Olsen**

In an attempt to isolate trends in basic costs between dairy herds utilizing two different management styles, confinement vs. Manager Intensive Rotational Grazing (MIRG) financial data has been collected over a three-year period (2000-2002) from farms using the Agricultural Financial Advisor (AgFA) computer software. Data is presented on the following page in the form of Basic Costs per Head and Average Cost over the three-year period from 2000-02. Surprisingly, the effect on basic costs between these two management styles on average was not as significant as one might think. However, some cost categories stand out and possibly could be examined to determine exactly why they vary with management style.

The No.1 cost efficiency comes as a savings in the category of rent/lease. MIRG farms apparently rent/lease significantly less land, facilities and equipment on a per head basis than the typical confinement dairy. This fact appears as an average savings of over \$87/hd/yr. Another cost efficiency associated with MIRG came in the area of Other Livestock Expenses. The savings of \$82/hd/yr makes this a significant category by itself. In grazing herd averaging 84 cows this accounts for nearly \$6900 per year in cost savings.

One basic but non-cash expense that favored MIRG operations was Depreciation of Purchased Breeding Livestock which averaged \$65/hd/yr. One possible explanation could be that MIRG farms are not expanding as fast as confinement operations and are able to meet their needs for replacements without purchasing further replacement animals. For whatever the reason it does amount to a significant cost savings. Other mentionable cost savings came as a decrease in Purchased Feed Costs and Veterinary Expenses of \$45 and \$43/hd/yr respectively. The confinement herds did show an advantage in Marketing and Hedging (\$50/hd/yr) and Other Farm Expenses (\$23/hd/yr).

In summary when looking only at Basic Costs/hd/yr, the farms that are utilizing MIRG show an advantage of \$476/hd/yr on average over the years 2000-02. Over the same three-year period the average total basic cost for confinement herds was \$2162 compared to only \$1686 for the grazing herds. This is not to say that some basic costs aren't higher in grazing herds than in confinement herds but overall graziers seem to incur less expense for their herd on a per head basis. This also does not imply overall profitability of one management style over another. It only suggests that the average farm incorporating grazing into its management technique should see a decrease in basic costs. Perhaps a closer look into the reasons for the lower expense from this management style could help farmers to further decrease their expenses and squeeze a tiny bit more profit out of an already tight market.

## Basic Costs per Head

### Confinement vs. Managed Intensive Rotational Grazing (MIRG)

Report Basis: Whole Farm, per Head

	2002			2001			2000			2000-02
	Confined	MIRG	diff	Confined	MIRG	diff	Confined	MIRG	diff	ave. diff.
Number of Farms	229	95	-	283	136	-	311	135	-	-
Average Cows per Farm	122	85	-	117	84	-	113	82	-	-
Average Milk per Cow	21488	15145	-	20,879	15298	-	21359	16515	-	-
Crop Acres per Cow	3.3	3.1	-	3.3	3.3	-	3.4	3.1	-	-

Basic Cost	2002			2001			2000			2000-02
	Confined	MIRG	diff	Confined	MIRG	diff	Confined	MIRG	diff	ave. diff.
Cost of Items for Resale	1.46	0.48	0.98	0.99	0.21	0.78	0.18	0.00	0.18	0.65
Breeding Fees	47.03	31.06	15.97	47.33	32.58	14.74	39.47	28.70	10.77	13.83
Car and Truck Expenses	14.49	5.65	8.84	14.40	6.28	8.12	17.22	6.07	11.15	9.37
Chemicals	40.67	15.79	24.89	47.23	19.89	27.35	41.54	22.12	19.42	23.88
Conservation Expenses	0.01	0.00	0.01	0.22	0.63	-0.41	0.00	0.00	0.00	-0.13
Custom Heifer Raising Expenses	15.10	0.33	14.77	10.83	0.79	10.05	8.86	1.44	7.42	10.75
Custom Hire (Machine Work)	106.04	69.28	36.77	100.83	64.07	36.77	103.27	62.01	41.25	38.26
Feed Purchase	666.21	622.80	43.41	688.96	617.64	71.31	593.27	572.27	21.00	45.24
Fertilizer and Lime	63.92	51.95	11.98	77.22	66.62	10.61	66.90	50.07	16.83	13.14
Freight and Trucking	32.39	21.11	11.28	48.71	22.76	25.95	39.55	22.42	17.14	18.12
Gasoline, Fuel, and Oil	62.55	50.15	12.40	72.73	58.49	14.24	71.71	61.66	10.05	12.23
Farm Insurance	43.08	38.05	5.03	38.16	38.14	0.02	38.18	41.17	-2.99	0.69
Rent/Lease Equipment	22.98	10.47	12.52	29.67	10.46	19.21	27.40	11.05	16.35	16.03
Rent/Lease Other	126.33	50.87	75.46	129.51	53.50	76.01	128.52	65.96	62.56	71.34
Repairs and Maintenance	176.26	170.39	5.87	192.45	195.88	-3.43	163.09	170.60	-7.51	-1.69
Seeds and Plants Purchased	63.25	29.66	33.58	68.14	32.17	35.98	60.84	30.61	30.23	33.26
Storage and Warehousing	0.07	0.40	-0.33	0.02	0.03	-0.01	0.02	0.00	0.02	-0.11
Supplies Purchased	89.67	60.81	28.85	86.91	77.14	9.78	86.58	73.65	12.93	17.19
Taxes - Other	37.39	41.99	-4.60	43.28	47.10	-3.82	43.94	53.26	-9.32	-5.91
Taxes - Payroll	1.04	0.18	0.86	1.07	0.00	1.07	0.72	0.23	0.49	0.81
Utilities	73.78	65.35	8.43	67.20	67.99	-0.79	63.12	69.25	-6.13	0.50
Veterinary Fees and Medicine	110.22	63.96	46.25	106.21	61.46	44.75	98.70	61.18	37.52	42.84
Other Farm Expenses	40.93	65.30	-24.37	34.21	56.18	-21.96	30.67	54.06	-23.39	-23.24
Marketing & Hedging	38.15	86.29	-48.14	39.41	81.69	-42.28	36.56	95.30	-58.74	-49.72
Other Crop Expenses	22.89	3.57	19.32	21.48	3.66	17.82	21.80	2.31	19.49	18.88
Other Livestock Expenses	147.55	79.92	67.64	176.58	63.44	113.14	137.37	71.65	65.71	82.16
- Change in Prepaid Expenses	64.62	18.15	46.47	(32.08)	(26.93)	-5.15	25.95	18.43	7.53	16.28
Change in Accounts Payable	36.66	29.53	7.13	(1.78)	(6.79)	5.02	16.89	8.20	8.69	6.95
Depreciation on Purchase Breeding Stock	79.61	24.84	54.77	88.57	24.84	63.73	102.18	25.99	76.19	64.90
<b>Total Basic Cost</b>	<b>2,224.37</b>	<b>1,708.33</b>	<b>516.04</b>	<b>2,198.50</b>	<b>1,669.91</b>	<b>528.58</b>	<b>2,064.51</b>	<b>1,679.67</b>	<b>384.85</b>	<b>476.49</b>