

The Relationship Between Heifer Management Style and Profitability

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- For 2021, heifer cost of production for 20 southeast and central PA conventional dairy farms ranged from \$1,489 to \$3,789.
- For 2021, heifer cost of production for 20 southeast and central PA organic dairy farms ranged from \$1,082 to \$4,384.
- The most profitable dairies (conventional and organic) had the greatest heifer average daily gain for the birth and weaning measuring time points.

BACKGROUND/HYPOTHESIS

The dairy industry has been experiencing years of unsustainable margins due to increased price volatility for milk, supply chain disruptions that cause farms to be to dump milk, and lack of availability of feed ingredients in some market areas. One area that has been more difficult to examine is the heifer enterprise. The implementation of sexed semen has caused many heifers to be born and raised on farms with little to no evaluation of the impact on profitability. Extra heifers directly impact feed inventory, facilities, and milk income, and the costs associated with excess heifers being reared can negatively impact profitability. Is there a correlation between heifer growth and profitability?

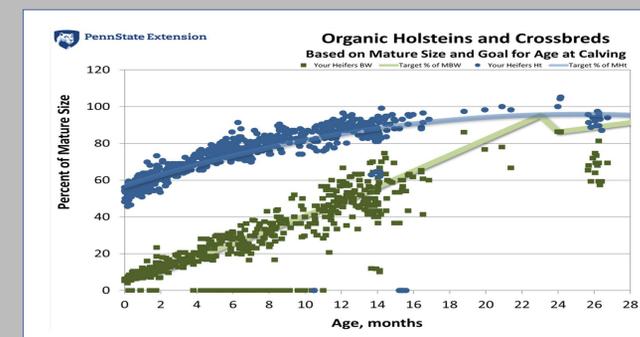
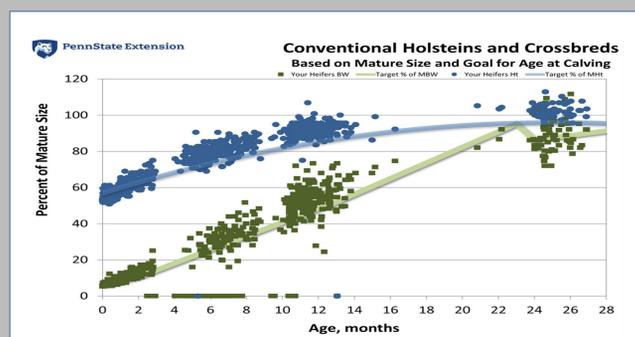
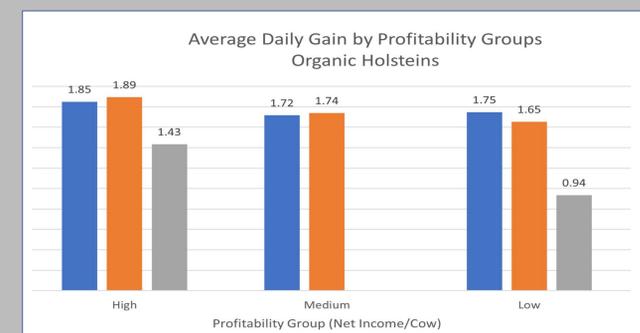
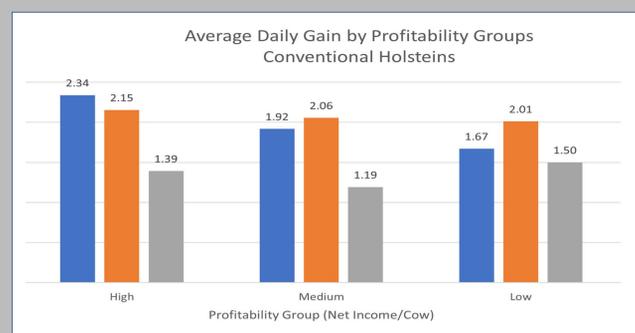
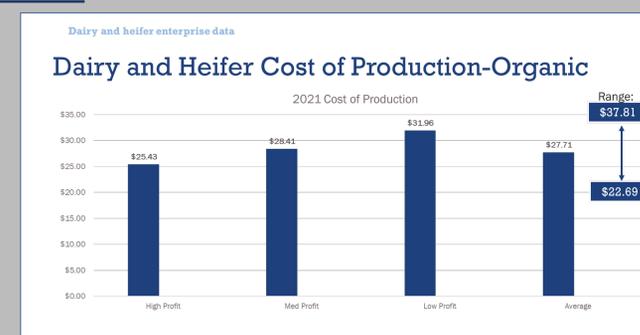
OBJECTIVES

- Perform a year-end financial analysis using FINAN® each year for the three-year study; including the budgeting of crops, dairy cows, and heifer enterprises.
- Hip height, body weight, and body condition score were collected for all heifers enrolled in the study (n = 540) at four time points– birth, weaning, pre-breeding, and freshening.
- Evaluate heifer management practices to assess animal performance, heifer rations and feeding management, and subsequent first lactation performance.
- Data collected is organized by profitability group- high, medium, or low profit group.

METHODS

- Collected herd DHIA information, balance sheet data, income and expense data and detailed feed and crop information for each farm and was used to produce FINAN® enterprise reports.
- The RankEm® tool was used to produce enterprise summary and individual benchmark reports for each farm.
- Aggregated financial ratios from FINPACK® will also identify financial strengths and weaknesses for each group of farms.
- The heifer management information was recorded through direct observation at the farm and by asking the farmer questions related to heifer rearing at the four measuring time points.
- The heifer growth, health and feeding information at the farm was collected and recorded.

RESULTS



Other Financial Values-Conventional

	Average	Low Profit	Med Profit	High Profit	Margin Range
Lbs. milk/cow/day	79.0	78.7	76.8	80.7	\$10.74
Milk margin	\$8.06	\$7.58	\$8.52	\$8.00	
Feed cost/cwt	\$10.40	\$10.54	\$10.16	\$10.49	\$5.82
Heifer cost/day	\$3.27	\$4.10	\$3.03	\$2.81	
Heifer feed cost/day	\$1.46	\$2.16	\$1.26	\$1.08	

Other Financial Values-Organic

	Average	Low Profit	Med Profit	High Profit	Margin Range
Lbs. milk/cow/day	53.9	48.5	62.1	52.6	\$28.75
Milk margin	\$17.13	\$13.12	\$13.98	\$20.72	
Feed cost/cwt	\$14.67	\$16.99	\$16.26	\$12.73	\$8.76
Heifer cost/day	\$3.59	\$6.55	\$3.46	\$2.81	
Heifer feed cost/day	\$1.51	\$3.23	\$1.64	\$0.98	

SUMMARY

- A huge range exists for heifer cost of production for both organic and conventional dairies, with feed cost/head having a substantial impact on profitability groups.
- The high profit group heifers for organic and conventional dairies had the greatest ADG for the birth and weaning measuring time points.
- Conventional heifers met their growth benchmarks more consistently than organic heifers; may be due to older weaning ages, not offering starter grain early enough, or other nutritional deficiencies.