10th Mid-Atlantic Dairy Grazing Conference

Economics of Pasture-Based Dairying in the Southeast

Economics of Pasture-Based Dairying in the Southeast

Dr. Curt Lacy
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Let's talk about economics

- Classical economic theory states that producers allocate scare **resources** among competing alternatives to maximize their **utility**.
- In English – People use what they have to try to get what they want.

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Resources and Goals

Resources
- Land
- Labor
- Capital
- Management

Utility/wants
- Profits (more money)
- More time
- Satisfaction
- Things that are important to you/make you happy

Economics is not all about making the most money

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ECONOMIC COMPARISON OF ALTERNATIVE PRODUCTION SYSTEMS

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Comparison of Three Systems

- Three systems
  - Conventional
  - Grazing (NZ System)
  - Hybrid
- Based on past and working dairy budgets.
- Feeding regimens and management practices provided by Dr. John Bernard, UGA.
- Interviews with dairy producers regarding production, facilities, equipment, etc.
- Dairy and feed prices from 2008-2012.

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Assumptions

	System			
	Conventional	Hybrid	Grazing	Grazing Three Platforms
Number of Cows	2,500	600	600	1,800
Rolling herd average/cow	24,000	19,500	15,000	15,000
Total Annual Milk Production (million lbs.)	60.0	11.7	9.0	27.0
Total Investment ($ million)	$ 23.12	$ 6.77	$ 6.11	$ 18.13
Investment ($/cow)	$ 9,249.57	$ 11,277.12	$ 10,180.83	$ 10,072.08

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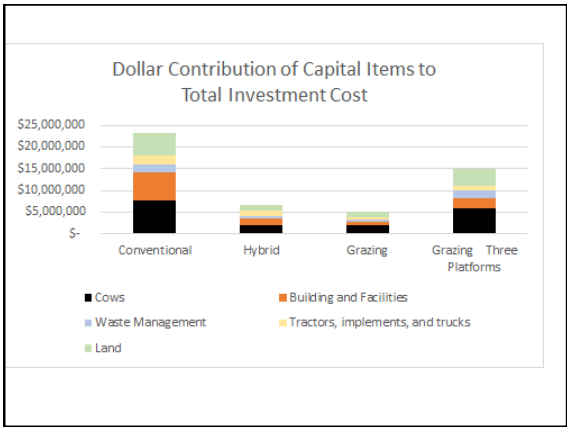

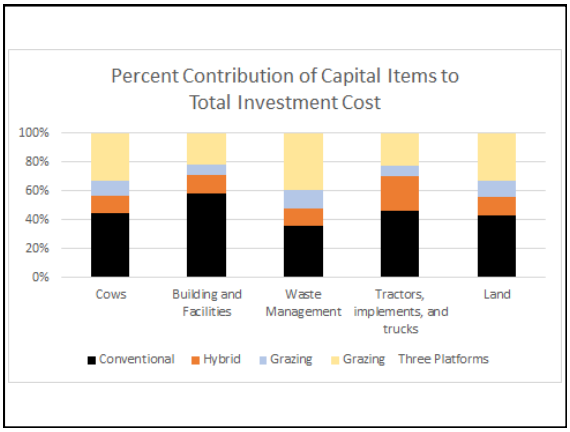

Economic Results

	System			
	Conventional	Hybrid	Grazing	Grazing Three Platforms
Total Revenue (millions)	$ 12.52	$ 2.66	$ 2.05	$ 6.14
$/cow	$ 5,007.54	$ 4,433.75	$ 3,413.40	$ 3,413.40
Total IOFC (millions)	$ 6.92	$ 1.61	$ 1.11	$ 3.33
IOFC ($/cow)	$ 2,766.87	$ 2,686.91	$ 1,847.25	$ 1,847.25
Total Variable Costs (millions)	$ 7.75	$ 1.63	$ 1.35	$ 3.91
TVC ($/cow)	$ 3,098.43	$ 2,717.45	$2,659.59	$2,583.68
Total Fixed Costs (millions)	$ 1.58	$ 0.58	$ 0.46	$ 1.34
TFC ($/Cow)	$ 631.39	$ 960.00	$ 762.19	$ 745.49
Total Profit (millions)	$ 2.23	$ 0.15	$ (0.01)	$ 0.15
Profit ($/cow)	$ 892.45	$ 251.80	$ (8.38)	$ 84.23

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Risk Analysis

	System			
	Conventional	Hybrid	Grazing	Grazing Three Platforms
Maximum Profit (millions)	$ 9.12	$ 1.49	$ 0.85	$ 2.66
Minimum Profit (millions)	$ (5.11)	$ (0.82)	$ (0.90)	$ (2.22)
Percent chance of covering VC	97.10%	99.00%	93.00%	95.00%
Percent chance of covering TC	86.60%	64.20%	51.00%	56.60%

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Break-evens ($/Cwt.)

	System			
	Conventional	Hybrid	Grazing	Grazing Three Platforms
Feed costs	$ 9.34	$ 8.96	$ 10.44	$ 10.44
Total Variable Costs	$ 12.91	$ 13.94	$ 14.97	$ 14.47
Fixed Costs	$ 2.63	$ 4.92	$ 5.08	$ 4.97
Total Costs	$ 15.54	$ 18.86	$ 20.06	$ 19.44

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Major Profit Factors

- Milk-feed margin
- Milk production
- Cow cost
- Land cost

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So which system is "best"

- What is important to you?
- What are your resources?
- How much can/are you willing to borrow?
- How much does it cost you to live?
- Where can you find land and how much is it?

It Depends on You!

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