


10th Mid-Atlantic Dairy Grazing Conference


Economics of Pasture-Based Dairying in the Southeast

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Let's talk about economics

- Classical economic theory states that producers allocate scarce **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	Utility/wants
<ul style="list-style-type: none">• Land• Labor• Capital• Management	<ul style="list-style-type: none">• 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



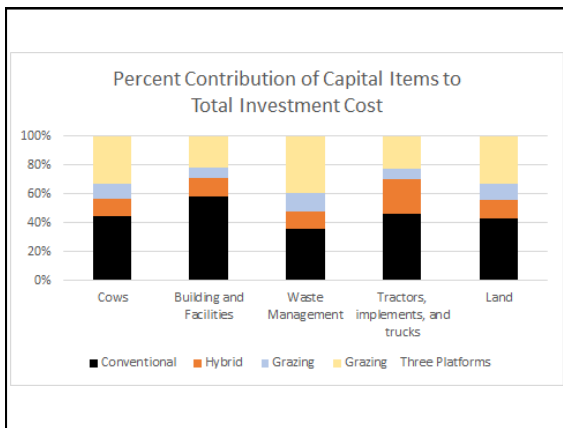
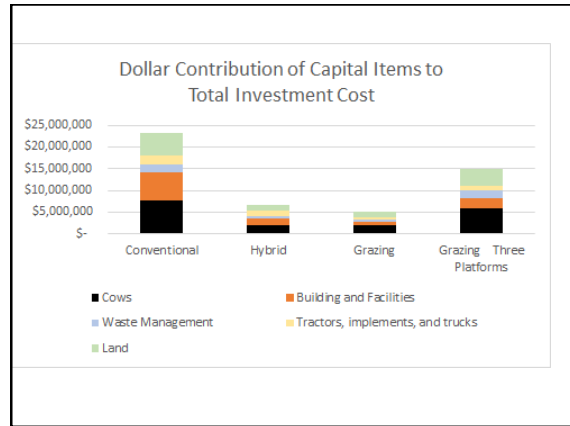
- Three systems
 - Conventional
 - Grazing (NZ System)
 - Hybrid
- Based on past and working dairy budgets.
- Feeding regimens and management practices provided by Dr. John Bernard, UGA.
- Interviews with dairy producers regarding production, facilities, equipment, etc.
- Dairy and feed prices from 2008-2012.

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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



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	\$ 2,259.59	\$ 2,187.22
Total Fixed Costs (millions)	\$ 1.58	\$ 0.58	\$ 0.46	\$ 1.34
TFC (\$/Cow)	\$ 631.29	\$ 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



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%

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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