NUTRITION NOTES
Innovation + Research from Kent Nutrition Group MAY 30, 2014

BUILDING COSTS VS PERFORMANCE AND PAYBACK

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There have probably been more cattle buildings put up in the last five years than in the previous 40. This has been driven by several factors - EPA compliance, cattle profitability, and a drive for more predictable performance to aid in marketing.

Putting up a new slat barn and expecting to pay for it completely with improved performance over a well-managed outside yard with shelter and bedding is probably a mistake. However, the consistency and predictability of the performance in a total confinement slat barn, is a reality. These confinement cattle will also have improved feed conversion by about 10%.

Shown below are tables showing performance for various cattle types and facility types. This data was presented by Dr. Tom Peters at a Summit Livestock Facilities symposium in the spring of 2013. These are summaries of trials at several universities that I have footnoted to give credit where credit is due.

	Yearling		Calf		Dairy Beef	
	Open	Shelter	Open	Shelter	Open	Shelter
In Wt, lb	800	800	625	625	450	450
Out Wt, lb	1323	1371	1324	1388	1267	1343
DMI, lb	23.3	24.4	22.2	23.0	19.1	19.9
ADG, lb	3.49	3.81	3.50	3.82	2.72	2.98
F/G	6.82	6.42	6.36	6.03	7.01	6.70

Self (ISU)

	Yearling		Calf		Dairy Beef	
	Bedbarn	Slat	Bedbarn	Slats	Bedbarn	Slats
In Wt, lb	800	800	625	625	450	450
Out Wt, lb	1398	1323	1423	1324	1392	1267
DMI, lb	25.98	23.79	24.5	22.2	21.4	19.1
ADG, lb	3.99	3.49	3.99	3.50	3.14	2.72
F/G	6.51	6.88	6.15	6.36	6.81	7.01

Windels (U of Mn)

	Yearling		Calf		Dairy Beef	
	Slat	Rubber	Slat	Rubber	Slat	Rubber
In Wt, lb	800	800	625	625	450	450
Out Wt, lb	1300	1335	1286	1333	1294	1356
DMI, lb	22.9	23.6	21.1	21.8	19.7	20.5
ADG, lb	3.33	3.57	3.30	3.54	2.81	3.02
F/G	6.88	6.60	6.39	6.16	7.02	6.79

Euken (ISU)

continued

The first set of data indicates that simply having a shelter and bedding makes a big improvement in performance. The second set of data shows that a well-managed bedding facility can outperform slats on a day-to-day basis. However, if we have 100 days of extended bad, wet winter or wet spring weather, the outside facility can suffer 0.5 lb/day ADG drops. That's 50 lb at a market value of $140/cwt or $70/head in less than a half year. If that happens several times in the life of the building, we have gone a long way towards paying for a new facility.

The third set of data shows that if you are going to put up a slat barn, you absolutely should spend the extra money for the rubber coating. ADG improves .25 lb/day. On an annual basis, that's $127/head space. So in two years, you have paid for the difference between slats and rubber coated slats.

Some average building costs for several facilities are shown below:

	Bedding Barn	Slats	Rubber Coated Slats
Cost/hd space	$750-950	$950-1150	$1050-1250
Cost/hd/day 10 yrs	$0.290	$0.36	$0.394
Cost/hd/day 15 yrs	$0.194	$0.24	$0.265

This is a small bank of data out of a myriad of data, but I think the relative differences shown between facilities are pretty representative. Hopefully this provides at least some type of expectations for performance, building costs and potential payback. There are a lot of considerations when deciding to build or not to build, as well as what type of facility to build, not the least of which is manure management and cost for fuel, bedding and labor for managing a bedding barn.

Final advice... when making a million-dollar decision, don't try to save $100,000 by skimping. Do it right the first time!!!!