

by Cristina Mansfield



The Alumni Spotlight focuses on an MAB alum, and is written by Cristina Mansfield, a 2004 graduate.

# Can small-scale farmer-feedlots be competitive with large commercial operations?

Reading, Kansas

The cattle feeding industry has undergone dramatic structural changes over the past 40 years: whereas in the 1950s most cattle used to be finished on the ranch, today about 80% of cattle are sent to large commercial feedlots (LCFs) with more than 10,000 head of cattle for the last 150 days of finishing. So when Rich

I have a 'win/win or no play' business philosophy. In my opinion over half of success in business is about knowing how to interact effectively with buyers, sellers, employees and managers and helping them become more efficient. I sold cattle to a packer for three years before I realized that it was more efficient for the buyer and hauler if I could deliver the cattle early Monday morning. This helped the buyer avoid the cost of keeping them overnight to start the Monday harvesting. Perhaps they thought it was an imposition to ask me to deliver first thing on Monday morning because for some reason they never did. I discovered that a simple change that cost me nothing would greatly benefit the other parties. I wonder how many other increased efficiencies are staring me in the face, but I just don't see them. Any time I can increase the other party's efficiency they will usually treat me better.

Porter made the unusual decision 15 years ago to stop sending his cattle to finishing lots and finish them on the ranch instead, the decision raised more than a few eyebrows. Word got around that Rich was going into the buggy whip business.

Porter owns a cattle ranch with 8.000 cattle on 12.000 acres in Eastern Kansas. An engineer and lawyer by preparation, he managed the ranch for 18 years when he decided it was time to take a business class or two and enrolled in the M.A.B. "I am self employed, so getting a diploma was no guarantee of a raise." Instead of a raise, the program gave him enhanced computer proficiency along with the skills to evaluate data sets to "shake out information one is trying to determine." He left the program with a much better tool kit for analyzing the management of the ranch,

having developed close friendships with many classmates and instructors. In his words, his classmates were real "race horses," motivated to work hard for a degree that would improve their career. The instructors were part of a world class AgEcon Department and thus were fantastic. It was a thrill for him to meet instructors that are often quoted the farm magazines.

Porter's thesis focused on economies of scale in finishing cattle. In other words, can a smaller scale farmer-feeder be competitive in today's industry? Few studies specifically examine the impact of size on cost structure in cattle feeding, so Porter and Professor of Agricultural Economics Rodney Jones set out to find the answer. Surprisingly, their findings show that a well-managed small-scale outfit can still compete in today's market.

"One of the more valuable lessons from the MAB program for many students like Rich is that sometimes a detailed analysis of an economic problem reveals results that go against conventional wisdom, and go against your own pre-conceived notions. Therein is where the real business opportunities can lie," Jones said. "Students develop skills that not only help them evaluate economic problems and opportunities, but then use that information to improve business management decisions and make money."

The study compares operating costs for smaller farmer-feeder operations with similar information obtained from large commercial feedlots and then attempts to determine the factors that drive cost differences between the two types of operations. The authors used information from the Kansas Farm Management Association (KFMA) to find data for 35 farmer-feeders who finished 100-1,900 head per year and compared this to a data set of 55 large commercial feedlots (LCF) averaging 78,251 head per year. Both data sets covered the years 1997, 1998, and 1999. Because the two classes of feedlots are dramatically different in size, all comparisons are made on a cost-per-pound-of-gain basis.

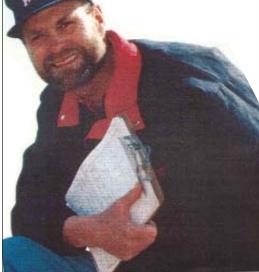
## Summary Statistics for Cost (\$ per Pound of Gain)

		KFMA		LCF	
Cost Category	100 head	1900 head	Average		
Total Cost	\$0.62	\$0.50	\$0.56	\$0.52	
Feed Only Cost	\$0.46	\$0.42	\$0.44	\$0.45	
Non-Feed Cost	\$0.16	\$0.08	\$0.12	\$0.07	

The table shows that feedlots finishing 100 head per year are less competitive than LCFs although the average for all KFMA feeders is more competitive. Larger KFMA farmer-feeders (finishing 1900 head per year) are the most competitive with LCFs, from both the feed-only and the total-cost perspectives. In the non-feed cost category they are very close to the LCF average. The larger KFMA feedlots and the LCFs have similar

feed-only costs. The authors suggest that feeding inefficiencies in the KFMA feedlots may be offset by lesser costs from not having a steam flaker and from On the other hand, large commercial feedlots buy grain at higher costs that include transaction costs. Another possible explanation is that farmers feed their own cattle.





Rich Porter has proved a small-scale outfit can compete in today's market.

and the cattle may not have to adapt to a new feedlot, avoiding costs that are associated with "adaptation."

Strikingly, the KMFA feedlots have non-feed costs that are on average 60% higher than those of the LCFs. Although it is

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# In the news

**John Borchers**, alum, will be transferring to Joice, Iowa, to work in the merchandising program for the new DeBruce Grain market in Joice.

**Chris Carey**, class of 2007, will be transferring to Cargill Animal Nutrition as a Plant Manager in Seguin, Texas.

**Tyson Chick**, class of 2006, is now the Grain Department Manager for Agri Coop in Holdrege, Nebraska.

Wendell Hockens, alum, will begin working for JP Morgan Chase Commercial Credit Card Group as an Implementation Manager in Wilmington, Delaware.

**Sandra Alton,** class of 2006, has accepted a position at AgLine/Ti Communications as an Account Coordinator in Cambridge, Ontario.

**Sarah Velasquez,** class of 2007, has begun working for AIB as a Nutrition Labeling Trainee in Manhattan, Kansas.

**Katy Venard,** class of 2007, and her husband Nathan, announce the birth of their son, Jason James Venard. Jason was born on Tuesday, August 23 and weighed 7 pounds, 13 ounces.

**Ryan Dunn**, class of 2007, is engaged to Elaine Pomajba. The couple got engaged during the Kentucky Derby.

**Clint Imel,** class of 2004, and his wife Cheryl, are expecting their first child in October.

**Jeff Loyd,** class of 2006, and his wife, announce the birth of their son Alexander Clark. Alexander was born on Sunday, June 19 and weighed 6 pounds, 6 ounces.

Casey Niemann, class of 2000, and his wife Tammy, announce the birth of their daughter, Taylor Grace. Taylor was born on June 16 and weighed 6 pounds, 1 ounce. Casey was also promoted to Corporate Enterprise Accounts in Iowa for Microsoft.

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possible to view a breakdown of non-feed costs, decisions as to how costs are allocated into non-feed categories by members of KFMA are unclear. As a result there is more confidence in the aggregate non-feed cost figures than in the individual category amounts. Nevertheless, a review of the categories indicates that labor costs for KFMA are 78% of those for LCFs. Several explanations are possible:

- smaller feedlots may not account for all unpaid farm labor
- they are not subject to workmen's compensation costs
- they have simpler feeding systems that require less labor. A number of other costs are higher for KFMA than LCFs. Insurance costs are 22% higher for KFMA lots. Interest costs for KFMA are 3.72 times that of LCF lots, probably because smaller feedlots have higher investment costs per head, but another explanation may be that the authors were not able to separate out interest on cattle from interest on facilities and equipment. Utilities are 21% more for KFMA than for LCF, possibly because it is harder for farmer-feeders to allocate costs to appropriate enterprises. Depreciation, maintenance and machine hire costs for KFMA are almost 3 times as high as LCF, possibly due to lack of economies of scale. Similarly, marketing and professional organization costs are more than 3 times higher for the KFMA.

The study concludes that modest-sized farmer-feeders can be cost competitive with larger feedlots. Feed-only costs appear to be the easiest to "keep in line." It may be much more difficult and

require more good management and attention to detail to achieve competitiveness in the non-feed cost categories. Explanations for the economies of scope captured by smaller feedlots include:

- using the same feeding equipment for larger number of cattle;
- using a given pen a higher fraction of the time;
- lowering costs attributed to 'adaptation';
- lowering trucking costs associated with keeping cattle on the ranch;
- using feeder equipment and labor more efficiently throughout the year;
- farming operation sells feed to feedlot with minimum transport and transaction costs.

Porter indicates that the findings were not what he expected. He assumed from the start that feed costs would be less competitive, but his research suggested the opposite is true. The exercise taught him to question long-held assumptions and to reflect on economies of scale versus economies of scope: "Just as there can be economies of scale, so there can be diseconomies of scale." Some operations can be managed more efficiently on a smaller scale and the challenge is to identify one's competitive advantage. Porter continues, "There are many things in life beyond our control, but one thing we do have is a choice over economies of scope. Once you have the tools, you can decide whether to manage an activity yourself or get someone else to do it."

For a copy of the paper, email Rich Porter at **porterri@kanza.net** 

### **Master of Agribusiness**

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