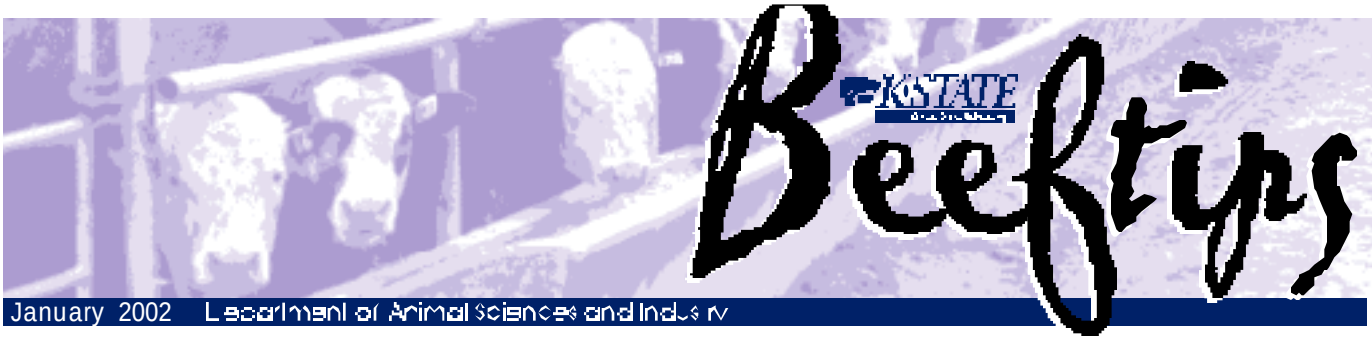

January 2002 Department of Animal Sciences and Industry

Upcoming Events

KOMA Conference
Jan. 14, Bartlesville, OK
Jan. 15, Joplin, MO
Frank Brazle
620-431-1530

4-State Beef Conferences
Jan. 16, Tecumseh, NE
Jan. 16, Lewis, IA
Jan. 17, St. Joseph, MO
Jan. 17, Clay Center, KS

Cattlemen's Seedstock Showcase Conference
http://www.oznet.ksu.edu/Phillips/
Feb. 4 Phillipsburg, KS
Bob Broweleit
785-543-6845

Cattlemen's Day
March 1
www.oznet.ksu.edu/ansi/cattleday.htm

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What are we learning from the Kansas SPA data?

Lisa Stryker, Ag Economics graduate student, Sandy Johnson, livestock specialist, and Rodney Jones, production livestock economist

Now's the time to reflect on the past year's management choices and consider changes for the future. One way of gathering information for your management decisions is by completing a Standardized Performance Analysis (SPA) on your cow-calf enterprise. Such an enterprise analysis can help you gauge your current herd performance relative to other producers in Kansas and across the United States. The SPA is an invaluable tool in developing a plan to help make decisions for the future.

But what is a SPA? In 1992 the National Cattleman's Beef Association, along with the National Integrated Resource Management Coordinating committee (IRM), developed a set of standardized guidelines and tools for producers to use to measure beef production performance, and provide constructive feedback to assist in making both short- and long-term management decisions. Managers are able to compare production performance across production years and between producers anonymously, through the compilation of financial, production, and resource use data.

Kansas has begun compiling a SPA database that contains 26 individual herd observations from 1997-2000. Interest in the program is growing, and we hope to have even more participation in the future. Any producer not participating in the Kansas SPA program is encouraged to discover how their cost and production numbers rank against these data benchmarks. History has shown that this is the first step in implementing profitable management changes.

A summary of the data provides valuable insight and is contained in Tables 1 and 2. Input cost data is presented in both a dollar per head measure and a dollar per pound calf weaned per exposed female. Both cost figures illustrate the wide range in total costs whether on a per-head or per-pound output basis. Differences are particularly pronounced in certain cost categories. For example, the range in feed cost per cow is $66 to $264 per head, nearly a $200 difference. A producer who learns that feed costs

See SPA, page 3

DeRouchey joins K-State as NE Area Livestock Specialist

We would like to welcome Joel DeRouchey, Ph.D., as the new Northeast Area Livestock Production and Management Specialist. He received his BS in Animal Science from South Dakota State University and both his MS and Ph.D. from Kansas State University.

Joel DeRouchey

Joel was raised on a diversified livestock operation in south central South Dakota. He plans on using his practical production experience with his graduate training in nutrition and livestock waste management to help producers in Kansas reach their production and profitability goals. Joel says he is excited to be a part of K-State Research and Extension and looks forward to contributing to the livestock team.

4-State Beef Conferences

Topics and speakers for this year's conference include:

Benefits of Preconditioning, Dr. Doug Ensley, DVM, Department of Veterinary Diagnostic and Production Animal Medicine, Iowa State University;

Grazing Management, Dr. Bruce Anderson, Forage Specialist, University of Nebraska;

Cost Effective Mineral Programs for Beef Cows, Dr. K.C. Olson, Beef Nutrition and Management Specialist, University of Missouri;

Developing a Marketing Plan, Dr. Larry Corah, Certified Angus Beef, LLC.

The Kansas program begins at 3:30 p.m. at the Catholic Parish Center in Clay Center, KS. Please register in advance by calling the Clay County Extension Office at (785-632-5335).

Benefits from AI sired calves

• Shorter heifer calving period (less labor cost), possibly as short as 14 days from some programs using early pregnancy detection and grouping heifers bred in a 3- to 5-day window.

• Shorter calving period as first calf heifers may allow a shorter breeding season as mature cows and thus a more uniform calf crop.

• Excellent calf growth rates and easy calving can be achieved from selected AI sires.

Raising vs Buying Replacement Heifers Have you done a thorough analysis?

Sandy Johnson, livestock specialist

The discussion has been around for some time on whether one should buy or raise replacement heifers. As more people specialize in heifer development, there are more options available to those considering buying replacements. So producers who have traditionally raised their own heifers may want to re-evaluate the current options to see if that is still the best option. This may be particularly true for smaller producers. Let's look at some potential benefits of buying replacement heifers.

Reduce inefficient bull usage

For a herd of 100 cows, an average producer would save 15 replacement heifers. A cost of $39 per pregnancy is estimated assuming a different bull is used on heifers than cows, a bull-to-heifer ratio of 1:15, a $1,500 purchase price, and four years of use. The cost is reduced to $20 per pregnancy if the bull is used on 30 heifers. Since a mature bull could easily service 30 or more heifers, cost/pregnancy is rather high for smaller producers in this type of situation.

The bulls that you do maintain can all represent one genetic plan or target. Changing the bulls could change the marketing target without having an impact on replacements. This may provide improved marketing opportunities for the calf crop. The option now exists to keep a herd bull for more than four breeding seasons since father/daughter matings are not an issue.

Consider Management Issues

Buying replacement animals as heavy springers reduces the amount of time you have an additional management group of first-calf heifers. Producers may have more flexibility to alter proportions of grazing resources allocated toward cows or stockers based on market conditions, if replacement heifers are purchased as heavy springers. Depending on your ability to manage first calf heifers and reach target weights, reproductive performance of young cows may improve.

Purchasing replacement heifers meeting certain genetic and management requirements may allow you to participate in certain alliances or marketing groups. During the grazing season you should be able to carry more mature cows (7-10 more pairs for a 100-head herd needing 15 replacements).

If you are purchasing replacement heifers the knowledge and integrity of the developer will be critical to your success. Make sure to have a complete understanding of the entire development program, don't just assume they have what you need. Get details on the genetic, nutrition, health and biosecurity programs and selection and culling practices for traits such as mature size, pelvic area and temperament. Talk to others who have used this source of replacements.

Knowing your own costs of production and considering some of these other management factors are key to making the best management decision on a source of replacements for your operation. To help estimate costs associated with your own operation, here are two sources of partial budget spreadsheets that look at the costs of raising verses buying replacement heifers. They are available on the Web:

1) Analyzing the Economics of Raising Versus Buying Beef Replacement Heifers (MS Excel file), Jack Whittier, at: *http://www.colostate.edu/Depts/AnimSci/*, under Software and Interactive Programs.
2) Heifer Replacement Partial Budget (MS Excel file), Vern Pierce, at: *http://www.feedstuffs.com/insider.htm*.

Some of the issues addressed in this article are covered in these spreadsheets, but not all. For more information or help obtaining these spreadsheets, contact your local county Extension office.

continued from page 1

per cow in his operation are closer to $264 than $66 may have found a tremendous opportunity to improve profitability. Since feeding costs typically make-up around 50 percent of total costs, it is extremely important to manage and control the overall feeding program. Clearly some producers have figured out efficient ways to do so.

Weaning weights also appear to have a fairly wide distribution (348 to 660 lbs). Several herds in the current data set were affected by drought, and operators weaned calves earlier and lighter than normal. For these herds, examination of the cost per head estimate may be more meaningful since weaning weights were considerably lighter than normal in some cases. If examining the cost per pound of calf weaned remember the dollar per hundredweight received for a 400-pound calf is significantly higher than a 600-pound calf.

The "other" cost category is large, encompassing all costs of production that are not captured by winter feed, grazing, veterinary, and the net book value (gain or loss) resulting from replacement strategies, death loss, or culling practices (the non-calf revenue adjustment). Major contributors to this cost category include interest, either actually paid or opportunity costs, and ownership costs of capital equipment used by the cow-calf enterprise. Given the wide range in "other" costs revealed in the SPA data, it is clear that some producers are doing a better job of managing these cost items than others. The "other" cost category is consistently important in various analyses of economic efficiency.

We are learning that individual producers need to look at the whole picture. Financial cost information must be combined with physical production data in order to gain an appreciation for the relative efficiency of any one operation. For too long, we have been focused on production, without regard for what the cost is to achieve that level of production. Today's industry demands that producers find a balance between cost of production and level of production.

While research can identify relationships that "on average" exist between particular cost categories or particular physical performance measures and efficiency or profitability, every operation is endowed with a unique set of resources and faces a unique set of challenges. General recommendations regarding specific strategies and practices that will improve profitability are difficult to find. The exception is the blanket recommendation that an improved understanding of the production and financial characteristics of a particular cow-calf enterprise will result in more informed and more intense management decisions that will lead to improved efficiency and profitability. The best way we know to accomplish this goal is by taking advantage of the opportunity to participate in the Kansas SPA program. Contact your local county extension office for more information.

Table 1. Standardized Performance Analysis of the Economic Costs of 26 Kansas Herds from 1997-2000 [a]

Economic Input Cost	Mean	Min	Max	Std. Dev
	$/lb calf weaned per exposed female			
Total Cost	1.02	0.55	1.79	.33
Grazing Cost	0.28	0.13	0.62	.10
Feed Cost	0.29	0.14	0.72	.13
Vet Cost	0.06	0.01	0.21	.05
Other Cost	0.38	0.03	0.92	.21
Non-calf revenue adjustment[b]	0.01	-0.23	0.20	.09
	$/head			
Total Cost	444	272	719	108
Grazing Cost	125	62	232	39
Feed Cost	127	66	264	54
Vet Cost	28	4	82	19
Other Cost	168	56	299	64
Non-calf revenue adjustment[b]	-4.5	-82	93	40

[a]All values converted to year 2000 costs. [b] Book value gain (+) or loss (-) on replacement growth, cull sales and breeding livestock deaths

Table 2. SPA Production Data from 26 Kansas Herds in 1997 – 2000.

Production Data	Mean	Min	Max	Std. Dev
Pregnancy %	93	74	99	5.5
Calving %	95	84	122	8.0
% Calf Crop	87	80	105	6.1
Rplcmt Rate (%)	14	.63	34	9.6
Steer WW (lbs)	528	362	652	83
Heifer WW (lbs)	506	334	683	92
Avg. WW (lbs)	522	348	660	85

COOPERATIVE EXTENSION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
KANSAS STATE UNIVERSITY
MANHATTAN, KS 66506-3403

Kansas Feedlot Performance and Feed Cost Summary*

Gerry Kuhl, Feedlot Specialist, Kansas State University

October 2001 Closeout Information**

Sex/No.	Final Weight	Avg. Days on Feed	Avg. Daily Gain	Feed/Gain (Dry Basis)	% Death Loss	Avg. Cost of Gain/Cwt.	Projected Cost of Nov.-Placed Cattle
Steers/15,777	1,292	151 (133-194)	3.49 (3.11-3.89)	5.89 (5.29-6.39)	1.32	$47.78 (42.04-52.75)	$47.50 (46.00-48.00)
Heifers/21,899	1,181	165 (138-261)	3.10 (2.49-3.30)	6.21 (5.82-6.80)	1.51	$50.58 (48.21-54.32)	$49.75 (48.00-52.00)

Current Feed Inventory Costs: Mid September Avg. Prices		Range	No. Yards
Corn	$ 2.32/bu	$ 2.07-2.45	7
Ground Alfalfa Hay	$104.24/ton	$95.00-120.80	7

*Appreciation is expressed to these Kansas feedyards: Brookover Ranch Feed Yard, Decatur County Feed Yard, Fairleigh Feed Yard, Hy-Plains Feed Yard, Kearny County Feeders, Pawnee Valley Feeders, and Supreme Cattle Feeders.

**Closeout figures are the means of individual feed yard monthly averages and include feed, yardage, processing, medication, death loss and usually sold FOB the feedlot with a 4% pencil shrink. Interest charges normally are not included.

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