

## RESULTS OF A PRODUCTION ANALYSIS SURVEY OF COW HERDS IN KANSAS

*D. Simms, M. Langemeier<sup>1</sup>,  
S. Utter, G. Fike, and C. Bandyk*

### Summary

A survey of production levels and management practices of 205 cow herds representing over 26,000 cows in Kansas was conducted in 1991. These operations were located throughout Kansas except for the Northwest corner. Emphasis was placed on determining levels of production and reproductive parameters. Breeders emphasized calf crop. For example, the average calf crop was 91.6%, with 4.3% open females and 4.4% calf death loss. Cumulative calving percentages by 21-day calving periods were 32, 55, and 68%. Average weaning weights were 550 lb. for steers and 515 lb for heifers. Additionally, information was collected on breeding, nutrition, health, and general management practices.

(Key Words: Cow/Calf, Production, Reproduction, Management, Survey.)

### Introduction

Surveys of production levels and management practices are useful to provide comparison data for producers and to document problem areas for Extension and research personnel. This survey was part of the Kansas Integrated Resource Management (IRM) Program.

### Experimental Procedures

The surveys were conducted in the fall of 1991 and early winter of 1992 and represented the calf crop weaned in 1991. To increase accuracy, all forms were completed during on-farm visits. In tabulating the reproductive parameters, producers accounted for all females originally exposed and all subsequent reproductive losses. Those surveyed were all members of the Kansas Farm Management Associations and expressed an interest in participating. Consequently, the information collected does not represent a random sample; however, it does represent a diverse group of Kansas operations with various calving seasons and production systems.

### Size of Herds

Total Number of Herds	205	
Total Females Exposed	26,015	
Average Herd Size	127	
Herd Size Profile		
Number of Cows	No. of Herds	%
Less than 50	26	13
50 - 100	66	32
101 - 150	58	28
> 150	55	27

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<sup>1</sup>Department of Agricultural Economics.

### Reproductive Efficiency

Item	Avg.	Range
Open Females	4.3%	0.0 - 19.0%
Calf Death Loss	4.4%	0.0 - 16.5%
Calf Crop	91.6%	75.6 - 100%
Calving Distribution (Based on 155 Herds)		Avg.
Born in First 21 Days		32%
Born in First 41 Days		55%
Born in First 63 Days		68%
Heifers Requiring Calving Assistance -- 21.9%		
Heifers Requiring Mechanical Puller -- 14.6%		

### Production

<b>Spring Calving Herds:</b>
Avg. Steer Weaning Weight = 545 lbs
Avg. Heifer Weaning Weight = 512 lbs
<b>Fall Calving Herds:</b>
Avg. Steer Weaning Weight = 611 lbs
Avg. Heifer Weaning Weight = 570 lbs
<b>All 205 Herds:</b>
Avg. Steer Weaning Weight = 550 lbs
Avg. Heifer Weaning Weight = 515 lbs

### Breeding Program

Breed of Bulls Used on Heifers		Breed of Bulls Used on Mature Cows	
Sire	%	Sire	%
Angus	40	Angus	26
Salers	11	Simmental	18
Polled Hereford	8	Horned Hereford	10
Horned Hereford	7	Limousin	9
Limousin	7	Salers	9
Simmental	6	Gelbvieh	8
Longhorn	5	Polled Hereford	7
Gelbvieh	4	Charolais	5
Red Angus	3	Brangus	2
Brangus	2	Red Angus	1
Brahman	2	Shorthorn	1
Other	5	Chianina	1
		Maine Anjou	1
		Other	2

Method of Obtaining Herd Replacements	
Option	%
1) Purchase Yearling Heifers	2
2) Purchase Bred Heifers	5
3) Purchase Mature Cows	10
4) Raise Replacements	83
Herds with Crossbreeding Plan -- 36%	

Source of Bulls	
Source	%
Direct from Breeder	88
Raise Own	16
Test Station	15
Consignment Sale	7
Salebarn	5

### Breeding Program (CONT)

Selection Criteria Used for Heifers:		
Criteria	First Consideration, %	Among Top 5 Criteria, %
Type/Conformation	24	66
Disposition	13	62
Performance of Dam	13	40
Size	10	41
Frame	9	49
Weaning Weight	9	31
Weight-for-Age	7	32
Yearling Weight	3	20

Selection Criteria used for Bulls:		
Criteria	First Consideration, %	Among Top 5 Criteria, %
Type/Conformation	19	55
Birth Wt/Calv. Ease EPD	19	50
Actual Birth Weight	14	45
Wean./Yearling Wt EPD	9	40
Frame	7	34
Breeder Reputation	5	17
Performance of Sire	5	14
Disposition	4	30

### General Management

Management Factors	%
Breed Heifers Prior to Cows	49
Individually ID Calves	72
Cull - Open Heifers	95
- Heifers that Lose a Calf	65
- Open Cows	96
Separate Cows that Have Calved from the Herd	31
Supply Extra Feed for:	
- Heifers	76
- Young Cows	66
- Old Cows	54
Implant Steer Calves Prior to Weaning	84
Implant Heifer Calves Prior to Weaning	57
Creep Feeding:	
No Creep Feed	74
Grain Creep	18
Forage Creep	5
Protein Creep	3
Semen Check:	
Yearling Bulls	69
Mature Bulls	51
Individually Weigh Calves at Weaning	15

### Feeding Program

**NOTE:** In the following sections, many producers listed more than one feedstuff, method of feeding, or supplement, indicating that a variety was typically utilized. This results in over 100% for total responses.

Range Management	%
Have Good Grazing Distribution	87
Practice Rotation Grazing	45

Method of Feeding Forage	%
Fed on Ground	42
Fed in Feeders	57
Forage Ground and Mixed	31

Common Winter Supplements	%
High Protein (all natural)	26
High Protein (with urea)	15
Low Protein	10
Liquid Supplement	4
Grain	44
Legume Hay	64

### Feeding Program (CONT)

Primary Winter Forages	%
Range Grazing	38
Milo Stubble	40
Legume Hay	50
Sorghum Silage	18
Cane Hay	25
Corn Stalks	16
Grass Hay	5
Corn Silage	5

Percentage of Producers Using Specific Mineral Supplements by Season			
Supplement	Summer	Winter	Fall
Salt	92	79	77
TM Salt	69	70	53
High P	79	95	68
High Ca	50	57	41
High P with Mg	15	19	85
Other	12	11	9

Form of Mineral Supplementation	%
Mixed in Ration	7
Blocks	25
Loose, free choice	91

### Health Program

Percentage of Herds Indicating Specific Disease Problems during Past Few Years			
Disease	%	Disease	%
Scours	39	IBR	5
Pinkeye	32	BVD	5
Respiratory*	24	Blackleg	3
Foot Rot	19	Lepto	3
Coccidiosis*	14	Vibriosis	1
Cancer eye	8	Other	7

\*In many cases, this was observed postweaning.  
 Abortions: 14% of herds had 1 or more abortions  
 - calculated avg. abortion rate = .2%, range 0 to 2.9%

Deworming Programs:	%	Type Used	%
Don't Deworm	13	Injectable	57
Cows Annually	9	Paste	8
Calves Annually	23	Drench	11
Cows and Calves	43	Feed	4
Cows Periodically	12	Pour-on	6

Grub and Lice Control	%	Fly Control	%
Don't Treat for Grubs and Lice	10	No Control	14
Treat Cows	4	Ear Tags	53
Treat Cows and Bulls	17	Dust Bags	35
Treat Cows, Bulls, and Calves	69	Back Rubber	20
		Spray	28
		Fly Control	
		Mineral	20

### Vaccination Program

Percentage of Cowherds Vaccinating for Specific Disease				
Disease	Cows	Heifers	Calves	Bulls
Vibriosis	66	68	8	44
Leptospirosis	75	79	12	52
Blackleg	22	44	93	15
Brucellosis	11	54	13	2
IBR	40	52	64	24
BVD	39	50	62	23
PI <sub>3</sub>	34	44	56	21
Scours	23	23	10	2
Haemophilus	13	18	29	8
Pinkeye & Other	14	13	26	11