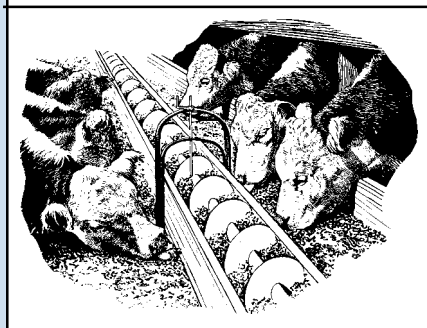
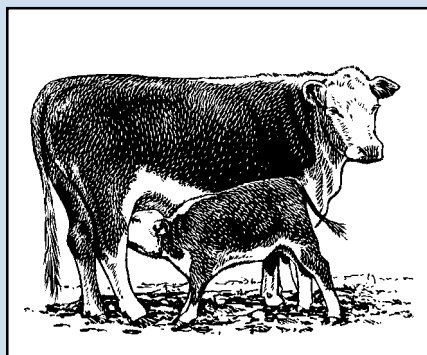


# Marketing Practices of Arkansas Beef Cattle Producers

Michael P. Popp  
and Lucas D. Parsch



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ARKANSAS AGRICULTURAL EXPERIMENT STATION

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# **Marketing Practices of Arkansas Beef Cattle Producers**

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## **ABSTRACT**

This report contains information from a 1996 survey on marketing practices of Arkansas beef cattle producers. While several studies have been completed on the profitability of retained ownership of beef cattle, few data are available on what marketing techniques and decision criteria cow-calf and stocker operations use to market their cattle. This report shows that there are some differences in opinions on marketing issues such as pooled cattle sales and retained ownership across cow-calf and stocker operations. Further, these operations use different sources of information to make marketing decisions. The results of this study can be particularly helpful in providing the needed data for studying the potential economic impact of feeding weaned calves to heavier weights in Arkansas as a value-added marketing alternative to selling calves at weaning.

Key words: retained ownership, pooled cattle sales, direct marketing, opinion survey.

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# **MARKETING PRACTICES OF ARKANSAS BEEF CATTLE PRODUCERS**

**Michael P. Popp and Lucas D. Parsch**

## **INTRODUCTION**

A survey was conducted in 1996 in order to obtain information regarding livestock production and marketing practices of Arkansas cattle producers. This report highlights current marketing practices. Three types of operations were surveyed: 1) cow/calf operations that sell calves at weaning; 2) cow/calf operations that feed weaned calves to a heavier weight; and 3) stocker or backgrounding operations that prepare weaned calves for feedlot placement. These enterprises operate at different processing stages of the beef cattle marketing channel and exhibit different degrees of specialization in production. Operations that have a single business focus, either cow/calf or stockering, are more specialized than cow/calf operations that also feed weaned calves. Because of more diversified production methods, the latter operation type may have more marketing options with additional freedom over the timing of sales. For example, weaned calves can be sold immediately or fed to heavier weights. The questionnaire was designed to address what similarities or differences exist across these different operations.

In particular, information regarding producers' attitudes about benefits and problems associated with retained ownership, pooling of cattle sales and value-added feeding alternatives was collected. The survey also assessed what information producers use to make marketing decisions and which marketing methods they used.

There are a number of studies that compare returns to selling calves at weaning versus returns obtained from continuing to feed weaned calves to

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heavier weights either on farm or on a custom basis (Watt et al., 1987; Johnson et al., 1989; Gage, 1993 and 1994; Feuz and Wagner, 1996). Results usually support the feeding of calves to heavier weights as a profitable alternative to selling calves at weaning. These studies often make various assumptions about the timing of sales and what marketing techniques were used. To provide further insight on these latter issues, this study was conducted to show the extent of retained ownership programs such as stockering or custom feeding in Arkansas in 1996 and the marketing techniques and decision criteria that were used.

This information is valuable because 1) it updates statistics on livestock marketing practices in Arkansas; 2) it can be used to show how producers' attitudes on marketing issues differ at various stages in the beef cattle marketing channel; 3) it shows that producers at different levels in the marketing channel seek alternative types of information and; 4) it provides the background for further study.

### SAMPLING PROCEDURE AND SURVEY DESIGN

A mail survey (Salant and Dillman, 1994) was chosen in order to allow respondents to consult records and to respond to a lengthy and difficult set of questions. The questionnaire (see Appendix A) was mailed to mid- and large-sized beef cattle operations in Arkansas because these operations would be large enough and sufficiently specialized to answer questions of interest. In addition, these operations handle a majority of the cattle in Arkansas (see Table 1). Table 1 describes the size distribution of beef cattle operations in Arkansas

**Table 1. Number of beef cattle operations by size group, 1996.**

Size Group <sup>1</sup>	Number of Farms	% of All Beef Cattle Farms	Est. No. of Cattle <sup>2</sup>	% of Est. Total No. of Cattle
1 - 9	1,441	8.0	7,205	0.5
10 - 19	2,600	14.4	37,700	2.7
20 - 49	6,776	37.4	233,772	16.5
50 - 99	3,887	21.5	289,582	20.4
100 - 199	2,120	11.7	316,940	22.4
200 - 499	1,060	5.9	370,470	26.1
500 - 999	172	1.0	128,914	9.1
1000 - 1499	26	0.1	32,487	2.3
1500 - 9999	20	0.1	n/a <sup>3</sup>	n/a <sup>3</sup>
Total Farms	18,102	100.0	1,417,070	100.0

Notes: Percentages may not add due to rounding. (Source: James Ewing of Arkansas Agricultural Statistics Service who coordinated the mail survey and sampling procedure. Arkansas Agricultural Statistics Service, 1996)

<sup>1</sup> Cattle includes cows, heifers that have calved and animals over 500 lb.

<sup>2</sup> The estimated number of cattle per size group is the product of the number of farms and the mid-point or average number of cattle per farm per size group. For example, the estimated number of cattle in the '1-9' head size group is 1,441 farms \* [(1+9)/2] average head of cattle / farm with 1 - 9 head = 7,205 head of cattle.

<sup>3</sup> Not included as the average or mid-point because this category might be misleading.

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for 1996. The subsample of mid- to large-sized beef producers with more than 50 and less than 1,000 cattle contained 7,239 producers or approximately 40% of the total number of beef cattle operations in Arkansas. Further, this subsample of producers represents nearly 80% of beef cattle in Arkansas. The first mailing was sent out 6 May 1996 with 2,500 addresses across the entire state of Arkansas picked at random by Arkansas Agricultural Statistics Service. On 20 May, two weeks after the initial mailing, a follow-up survey was sent out. In all, 1,094 surveys were returned with 1,057 usable observations, which amounts to a 42.3% mail return rate.

The survey was organized to ask specific questions of producers by their type of operation. The three types of operations were classified into the following categories:

- 1) Cow/calf - operations that sell calves at weaning except for replacement heifers. The sample contained 851 (80.5%) observations in this category;
- 2) Feeder - operations that are involved in either purchasing weaned calves and feeding to heavier weights or custom feeding them to get weaned calves ready for feedlot placement. These operations may graze animals (stockering) and/or feed them in a drylot environment (backgrounding). The sample contained 34 (3.2%) observations in this category;
- 3) Mixed - operations that have a cow/calf *and* a feeding component in their business. The sample involved 172 (16.3%) observations in this category.

The results of the survey are presented to summarize responses and to differentiate among the above three types of operations. One section deals with results to questions specific to 'Cow/calf' operations that sell weaned calves and 'Mixed' cow/calf operations that also feed their calves. In this section, the focus of the questions was on attitudes concerning retained ownership and feeding to heavier feeder cattle weights. The remainder of the report analyzes responses from all three types of operations. The emphasis was on tools used for forecasting prices, on opinions regarding pooled cattle sales, how sell vs. hold and feed decisions are made, what marketing methods are employed, how frequently prices are compared on cattle characteristics and which sources of information were most important.

### **OPERATOR OPINIONS ON FEEDING WEANED CALVES TO HEAVIER WEIGHTS**

Regardless of their experience with feeding weaned calves, opinions regarding problems and benefits of on-farm feeding and custom feeding of weaned calves were ascertained from 'Cow/calf' and 'Mixed' operations (see Appendix A, Question 8). 'Feeder' operations were not asked to answer these questions because a large majority of the problems and benefits did not apply to them.

The questions were formatted so that a respondent could register one of five levels of agreement with each statement (strongly agree, agree, neutral, disagree or strongly disagree).

The first set of questions was designed to determine whether 1) price risk; 2) lack of facilities; 3) cost of financing; or 4) lack of profitability were perceived to be problems affecting the on-farm feeding of calves.

A subsequent set of questions was posed to establish whether 5) availability of custom feeders (location); 6) lack of trust; 7) difficulty in establishing trust; or 8) knowledge of custom feeding as an option were perceived to be problems related to the custom feeding of calves. Because the large majority (90%) of the respondents had never been involved with custom feeding (Popp and Parsch, 1997), responses to these questions should be interpreted primarily as opinions grounded in minimal experience.

A final set of questions attempted to evaluate how the use of animal performance data was perceived to be beneficial for both on-farm and custom feeding of weaned calves. Responses to these questions are summarized in Tables 2 through 4. Each table presents the percentage breakdown of answers for 'Cow/calf' and 'Mixed' operations on each statement.

### **Opinions on Problems of On-farm Feeding of Weaned Calves**

Table 2 shows the breakdown of responses to problems 'Cow/calf' and 'Mixed' operations may experience with on-farm feeding of weaned calves. For example, answers to the statement 'The problem with feeding calves on my farm is that, prices of feeder cattle change too much (too risky)' are reported in the first row of the table. Numbers of respondents are included in the second-to-last column. Finally, the null hypothesis, that there is no difference in the distribution of answers across operation type, is tested with the  $\chi^2$ -statistic and associated probability<sup>1</sup>. High  $\chi^2$ - values and probabilities below 0.05, shown in the last column, indicate that the distribution of answers is different across operation type with 95% confidence. For the above example, the  $\chi^2$ - value and probability mean that 'Cow/calf' and 'Mixed' operations had different perceptions on whether feeder cattle price risk is problematic for feeding weaned calves. This is illustrated in Fig. 1 graphically. The distribution of answers for 'Cow/calf' operations is more heavily skewed in favor of the statement that feeder cattle price risk is a problem with on-farm feeding of weaned calves. In other words, 'Cow/calf' operations that do not feed weaned calves viewed the grazing or feeding of weaned calves as more risky than 'Mixed' operations.

Nearly 60% of the 'Cow/calf' operations indicated that facilities to feed weaned calves were a problem on their farm while only 20% didn't think that

<sup>1</sup>All statistical tests were run using Windows version 6.12 of SAS. To test for statistically significant differences in the distribution of answers across operation type,  $\chi^2$  tests were used (Huntsberger and Billingsley, 1987).



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**Table 2. Responses of 'Cow/calf' and 'Mixed' operations to questions regarding problems with on farm feeding of weaned calves.**

The problem with feeding calves on my farm is that,	Operation Type	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		No. of Respondents	$\chi^2$ -statistic (Probability)
		-----%											
Prices of feeder cattle change too much (too risky)	Cow/calf	24.3		36.0		31.1		8.1		0.5		742	90.196
	Mixed	6.6		23.5		37.4		28.3		4.2		166	(0.001)
	All	21.0		33.7		32.3		11.8		1.2		908 <sup>1</sup>	
I don't have the facilities to feed weaned calves	Cow/calf	19.4		39.0		20.8		16.5		4.4		754	150.942
	Mixed	3.1		13.6		15.4		50.6		17.3		162	(0.001)
	All	16.5		34.5		19.9		22.5		6.7		916 <sup>1</sup>	
Borrowing money to finance the feeding is too costly	Cow/calf	38.8		35.3		20.7		4.8		1.0		729	76.925
	Mixed	13.8		32.7		29.6		20.1		3.8		159	(0.001)
	All	34.3		34.8		21.9		7.6		1.5		888 <sup>1</sup>	
Feeding is not profitable	Cow/calf	24.4		30.0		31.2		12.3		2.1		757	129.468
	Mixed	5.5		16.4		25.5		41.8		10.9		165	(0.001)
	All	21.0		27.6		30.2		17.6		3.7		922 <sup>1</sup>	

<sup>1</sup> Response rates varied from 86.8% to 90.1% which translate to 135 to 101 missing observations, respectively.

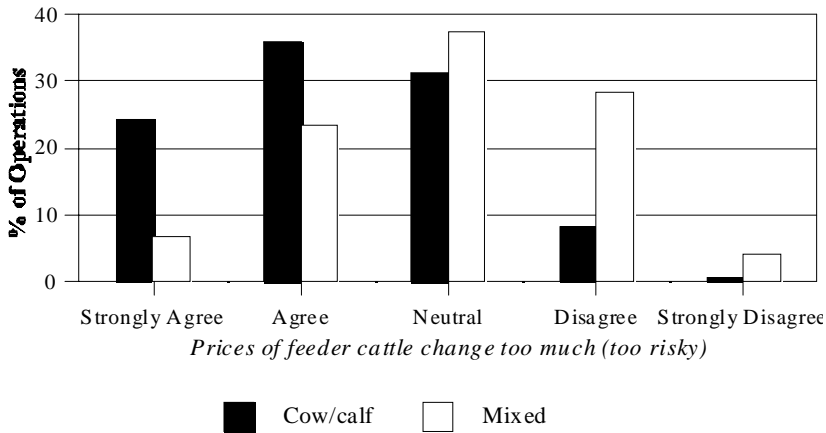


Fig. 1. Opinion regarding feeder cattle price risk, cow/calf vs. mixed operations.

facilities were a problem. While the question doesn't really apply to 'Mixed' operations, as they feed weaned calves with their facilities, one-sixth of these operations still had problems with facilities.

Both types of operations expressed concerns with the cost of financing the feeding of weaned calves. Results showed that 'Mixed' operations that had experience with feeding weaned calves perceived financing as less of a problem than operations that did not feed calves. It may be that 'Mixed' operations have better ties to financial institutions given their experience and thus receive lower interest rates, which would lead to a lessened perception of financing as a problem.

Finally, the lack of profitability was perceived as a problem by more than half of the 'Cow/calf' operations but only by approximately one-fifth of the 'Mixed' operations. This problem was also rephrased as a benefit in a later section (see Table 4). Results were consistent across both statements. These results indicate that there may be a need to educate 'Cow/calf' operations regarding the profitability of feeding weaned calves to heavier weights.

### Opinions on Problems of Having Weaned Calves Custom Fed

Table 3 summarizes the responses of 'Cow/calf' and 'Mixed' operations on problems associated with having their weaned calves custom fed. The first row in the table summarizes the location problem. Since there were very few operations that custom fed weaned calves for cow/calf operations, it may be that transportation cost or location of custom feeders was perceived as a problem<sup>1</sup>.

<sup>1</sup>Popp and Parsch (1997) showed that only 1.6% of the cattle fed by 'Feeder' and 'Mixed' enterprises is done on a custom basis for 'Cow/calf' operations.

Table 3. Responses of 'Cow/calf' and 'Mixed' operations to questions regarding problems with having weaned calves custom fed.												
The problem with having calves fed with a custom feeder is that,	Operation Type	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	No. of Respondents	$\chi^2$ -statistic (Probability)
		------%-----										
No custom feeders are nearby	Cow/calf	31.9	42.2	21.7	3.2	1.1					728	29.886
	Mixed	<u>21.9</u>	<u>51.9</u>	<u>13.8</u>	<u>11.3</u>	<u>1.3</u>					<u>160</u>	(0.001)
	All	30.1	43.9	20.3	4.6	1.1					888 <sup>1</sup>	
I don't trust custom feeders	Cow/calf	10.5	17.6	61.8	8.5	1.7					698	19.583
	Mixed	<u>5.8</u>	<u>20.5</u>	<u>51.9</u>	<u>18.0</u>	<u>3.9</u>					<u>156</u>	(0.001)
	All	9.6	18.2	60.0	10.2	2.1					854 <sup>1</sup>	
It is too hard to establish trust with custom feeders	Cow/calf	10.5	18.4	61.6	7.9	1.7					697	25.468
	Mixed	<u>5.7</u>	<u>25.5</u>	<u>47.8</u>	<u>18.5</u>	<u>2.6</u>					<u>157</u>	(0.001)
	All	9.6	19.7	59.0	9.8	1.9					854 <sup>1</sup>	
I have not considered this option	Cow/calf	23.5	34.2	31.3	9.9	1.0					766	49.009
	Mixed	<u>15.3</u>	<u>22.9</u>	<u>33.1</u>	<u>21.0</u>	<u>7.6</u>					<u>157</u>	(0.001)
	All	22.1	32.3	31.6	11.8	2.2					923 <sup>1</sup>	

<sup>1</sup> Response rates varied from 83.5% to 90.2% which translate to 169 to 100 missing observations, respectively.

Table 4. Responses of 'Cow/calf' and 'Mixed' operations to questions regarding benefits of on-farm and custom feeding of weaned calves.

The benefit of feeding calves (own or custom) is that,	Operation Type	%				Strongly Disagree	Disagree	No. of Respondents	$\chi^2$ -statistic (Probability)
		Strongly Agree	Agree	Neutral	Disagree				
I know how well animals perform	Cow/calf	13.3	41.9	39.5	4.6	0.7		721	37.651
	Mixed	17.2	63.8	17.2	1.8	0.0		163	(0.001)
	All	14.0	45.9	35.4	4.1	0.6		884 <sup>1</sup>	
I can adjust my breeding program better, because I know how well animals perform	Cow/calf	12.3	43.1	39.4	4.4	0.7		720	19.840
	Mixed	15.5	57.8	26.1	0.6	0.0		161	(0.001)
	All	12.9	45.7	37.0	3.8	0.6		881 <sup>1</sup>	
On average it is more profitable than selling weaned calves	Cow/calf	8.9	19.8	51.4	15.9	4.0		731	98.879
	Mixed	20.9	47.9	29.5	1.2	0.6		163	(0.001)
	All	11.1	24.9	47.4	13.2	3.4		894 <sup>1</sup>	

<sup>1</sup> Response rates varied from 86.1% to 87.4% which translate to 142 to 129 missing observations, respectively.

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'Cow/calf' operations expressed stronger concern about custom feeding than operations that feed calves. This seems rational because operations that feed calves themselves would be less dependent on transportation costs to custom feeders than operations that do not have this option.

There were two statements on the level and establishment of trust with custom feeders. The first was stronger in the sense that the respondents were asked directly whether they trusted custom feeders. The second question asked about the difficulty of establishing trust with a custom feeder. The results were nearly identical for the two statements. In general, both types of operations agreed that trust or the difficulty in establishing trust was of concern. 'Cow/calf' operations were more neutral on this question than 'Mixed' operations.

The final statement attempted to ascertain the level of knowledge about the availability of custom feeding. Nearly 60% of 'Cow/calf' operations had not considered having their calves custom fed. This compares to only 38.2% of 'Mixed' operations. On the basis of these results, it appears that custom feeders are not actively pursuing 'Cow/calf' operations as customers in this area of business. It may be that larger quantities of cattle are required for custom feeders to pursue a client. This topic is also discussed below.

### **Opinions on Benefits of On-farm and Custom Feeding of Weaned Calves**

Table 4 summarizes the benefits of on-farm feeding and custom feeding of weaned calves. There were two statements that related to the benefits of knowledge and use of animal performance data. The first statement asked whether knowledge of animal performance data was a benefit. The second statement went further and asked whether this knowledge of animal performance helped with breeding decisions and was therefore regarded as a benefit of feeding weaned calves. Responses to both statements were similar and indicated that 'Mixed' operations viewed access to animal performance data as a more important benefit than did 'Cow/calf' operations.

### **Ranking of Opinions on Problems and Benefits of Feeding Weaned Calves**

The previous sections on problems and benefits of feeding weaned calves can be summarized by ranking the importance of the different issues. Rankings were assigned on the basis of the combined percentage of respondents that either 'strongly agreed' or 'agreed' with a statement. The statement with the highest percentage was given the highest ranking, indicating that most respondents in the grouping agreed with the statement identifying the problem or benefit.

Table 5 shows the percentages of respondents and rankings by operation type as well as overall percentages and rankings. The rankings were very similar across operation types. The cost of financing was perceived as the number-one

**Table 5. Rankings of problems and benefits of feeding weaned calves by 'Cow/calf' vs. 'Mixed' vs. 'Cow/calf & Mixed'.**

Statement	Cow/calf		Mixed		Cow/calf & Mixed	
	% of responses <sup>1</sup>	Rank	% of responses <sup>1</sup>	Rank	% of responses <sup>1</sup>	Rank
Problems with on-farm feeding:						
Price risk	60.3	2	30.1	2	54.7	2
Availability of feeding facilities	58.4	3	16.7	4	51.0	3
Financing charges	74.1	1	46.5	1	69.1	1
Lack of profitability	54.4	4	21.9	3	48.6	4
Problems with custom feeding:						
Location	74.1	1	73.8	1	74.0	1
Trust	28.1	4	26.3	4	27.8	4
Establish trust	28.9	3	31.2	3	29.3	3
Knowledge of custom feeding	57.7	2	38.2	2	54.4	2
Benefits of own or custom feeding:						
Know animal performance data	55.2	2	81.0	1	59.9	1
Adjust breeding because of data	55.4	1	73.3	2	58.6	2
Profitability	28.7	3	68.8	3	36.0	3

<sup>1</sup>The combined percentage of respondents that strongly agreed or agreed with the statement outlined in the left most column.

on-farm problem not only by the operations that fed cattle ('Mixed') but also by operations that did not ('Cow/calf').

An example of typical interest costs demonstrates how important financing charges can be. For example, assuming a 40% equity position in the cattle, total interest charges could range from \$5.16 to \$18.07/head using annual interest rates of 4% to 14%, respectively (see Table 6, row ( F )). These are significant changes in cost given the expected average returns to feeding calves shown in Row ( G ) of Table 6.

Price risk was identified as the number-two issue (Table 5), indicating that improved price risk management is a strong priority for producers. The availability of feeding facilities ranked third in importance by 'Cow/calf' operations. The lack of profitability was of least concern to 'Cow/calf' producers, most likely due to the fact that they were not feeding calves. The combination of high interest cost and a perception of high price risk appears to be the reason for a reluctance to invest in feeding facilities by 'Cow/calf' operations.

Problems with custom feeding (Table 5) were mostly associated with a lack of availability of custom feeders and knowledge of this option. Another interesting result was that the difficulty in establishing trust with custom feeders was ranked as more of a problem than trusting custom feeders outright. Again, this may be related to the lack of availability of this feeding option in Arkansas.

Finally, the major advantage or benefit to feeding calves was knowing animal performance. The primary reason for 'Cow/calf' operations to rank this benefit highly may have been that they can adjust their breeding program

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**Table 6. Typical interest cost on feeder cattle and feed using different interest rates.**

( A )	Value of #450 steer calf @ \$65.00/cwt:					\$292.50
( B )	Cost of gain -- 300 lb @ \$40.00/cwt:					\$120.00
( C )	Amount financed -- 60% of (A) + 50% of (B):					\$243.00
( D )	Number of days financed -- 300 lb @ 1.5 ADG					200
( E )	Sale Value of #750 steer calf @ \$60.00/cwt:					\$450.00
<hr/>						
Annual Interest Rate:	4%	6%	8%	10%	12%	14%
<hr/>						
Interest cost in \$/head:						
Interest on 60% of calf	3.85	5.77	7.69	9.62	11.54	13.46
Interest on 50% of feed	1.32	1.97	2.63	3.29	3.95	4.60
Total Interest cost ( F )	5.16	7.74	10.32	12.90	15.48	18.07
<hr/>						
Returns per head ( G )	32.34	29.76	27.18	24.60	22.02	19.43

Notes: Returns per head ( G ) are calculated as ( E ) - ( A ) - ( B ) - ( F ). This information is provided simply as an example of returns for 1996. Cost of gain includes vet & drug charges, feed, death loss and marketing costs and excludes returns to land, labor and capital. (Pardue et al., 1997).

better. For 'Mixed' operations, which also purchase weaned calves for feeding, knowing animal performance data affected not only their breeding decisions but also their purchasing decisions. That may be the reason why they did not rank the answers to this question in the same manner as the 'Cow/calf' respondents. Profitability was again ranked lowest.

Overall these rankings suggest that feeding weaned calves or having weaned calves custom fed is not very common in Arkansas. The primary reason for this appears to be an aversion to price risk and/or a lack of low-cost financing. The primary motivation for feeding weaned calves was not profitability but instead access to information regarding animal performance.

### TOOLS USED FOR FORECASTING

Respondents in all three categories of operations ('Cow/calf', 'Mixed' and 'Feeder') were asked about the source of information or tools they used for forecasting or predicting sale prices at the end of a feeding period (Appendix A, Question 16). The responses to this query are summarized in Table 7 and show rankings according to the highest percentage of respondents who reported that they had used a specified tool or information source. A  $\chi^2$  - statistic was calculated to see if the distribution of reported usage of the different information sources was different across the three operation types. Associated probability values below 0.05 again indicate that the distribution of information usage was statistically significantly different across operation type.

Auction barn prices were ranked number one by 'Cow/calf' and 'Mixed' operations and number two by 'Feeder' operations. In all cases, over three-quarters of the respondents used auction barn data to forecast prices. In addition, reported use of auction prices was not significantly different across type of operation. However, reported use of other tools and sources of information in Table 7 differed by operation type at the 0.05 significance level.

Table 7. Proportion of operators reporting on the types of information used to forecast or predict sale prices at the end of a feeding period by operation type.

Type of Information or Tool Used	Cow/calf		Mixed		Feeder		All		$\chi^2$ -statistic	Probability
	% <sup>1</sup>	Rank <sup>2</sup>	%	Rank	%	Rank	%	Rank		
Auction barn prices	81.6	1	85.2	1	75.0	2	82.0	1	2.334	0.311
Livestock reports	67.6	2	79.3	2	78.1	1	69.9	2	10.099	0.006
Market trends	37.4	3	58.0	3	68.8	3	41.9	3	34.116	0.001
Feeder cattle futures	30.8	4	56.8	4	75.0	2	36.6	4	61.646	0.001
Contracted Price	6.4	5	14.2	5	34.4	4	8.6	5	38.832	0.001
Other	6.0	6	9.5	6	15.6	5	6.9	6	6.569	0.037

Notes: Response rates varied from 92.5% to 98.3% across operation type. Non-response to this question was defined as no check marks to the entire question.

<sup>1</sup>% is the percentage of respondents who indicated that they use this information or tool for making price forecasts.

<sup>2</sup>Rank is assigned on the basis of the highest percentage of use of the information or tool.



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'Feeder' operations used livestock reports as their number-one source for information followed closely by auction barn prices, feeder cattle futures prices and market trends. Contractual arrangements and other information sources were used the least by all respondents. Information from market trends, feeder cattle futures markets and contractual arrangements were used the least by 'Cow/calf' operations by a considerable margin. This suggests that 'Cow/calf' operations largely used livestock reports and auction barn prices as sources of information.

Written comments were solicited in the 'Other' category, shown as the last item in the list of sources consulted. Respondents included other producers and professionals in the livestock industry in this category.

### **DECISION CRITERIA FOR SELL VS. HOLD AND FEED DECISION**

Respondents were asked how frequently they used different decision criteria when deciding whether to sell or to continue feeding (Appendix A, Question 17). The following four choices were available:

- 1) Marginal Analysis - comparison of calculated feed costs with sale prices of animals. This choice entails the calculation of expected profits by looking at the difference in added revenue versus added feed cost;
- 2) High/Low Price - sell when prices are high and hold when prices are low;
- 3) Age/Weight - sell regardless of price when the cattle are a certain age or weight;
- 4) Pasture Condition - feeding restricted to pasture availability;

Table 8 summarizes the breakdown of responses on the frequency of use of the above decision criteria by the different types of operations.

The first section of Table 8 shows the frequency of use of the marginal cost vs. marginal revenue decision rule. 'Feeder' operations tended to use this method the most, and 'Cow/calf' operations reported that they used this method the least. The reason for this difference might simply be that 'Cow/calf' operations tended to hold and feed cattle intended for sale for shorter periods of time than 'Mixed' and 'Feeder' operations. For this reason, marginal analysis may not be as important to them. 'Feeder' operations may also be more flexible with respect to the timing of purchase and sale decisions as they don't face breeding, culling and weaning decisions.

The frequency of using the decision rule of selling when prices are high and feeding or holding cattle when prices are low is shown in the second section of Table 8. All types of operations appeared to use this decision rule in a similar manner as the distribution of answers was not statistically significantly different across operation types. 90% of all operations reported using this method at least sometimes.

**Table 8. Frequency of use of four alternative decision criteria to sell vs. hold and feed calves by operation type.**

Decision Criteria	Operation Type	Always	Sometimes	Rarely	No. of respondents	$\chi^2$ -statistic (Probability)
		-----%-----				
Marginal Analysis	Cow/calf	27.1	40.7	32.3	669	18.522 (0.001)
	Feeder	50.0	42.9	7.1	28	
	Mixed	37.2	41.9	21.0	148	
	All	29.6	41.0	29.5	845 <sup>1</sup>	
High/Low Price	Cow/calf	24.9	65.0	10.1	722	2.288 (0.683)
	Feeder	17.9	71.4	10.7	28	
	Mixed	28.0	64.7	7.3	150	
	All	25.2	65.1	9.7	900 <sup>1</sup>	
Age/Weight	Cow/calf	26.3	54.8	18.9	741	24.918 (0.001)
	Feeder	29.0	41.9	29.0	31	
	Mixed	15.9	48.4	35.7	157	
	All	24.7	53.3	22.1	929 <sup>1</sup>	
Pasture Condition	Cow/calf	22.6	61.9	15.5	704	1.369 (0.850)
	Feeder	19.2	61.5	19.2	26	
	Mixed	20.8	60.4	18.8	154	
	All	22.2	61.7	16.2	884 <sup>1</sup>	

<sup>1</sup> Response rates varied from 79.9% to 87.9% which translate to 212 to 128 missing observations, respectively.

The decision rule according to which operators would sell their calves at a certain age and weight showed a significantly different distribution of answers across operation types. 'Feeder' and 'Mixed' operations were the least likely to use the age-weight criterion often. 'Mixed' operations showed the most aversion to this method of deciding on when to sell vs. keep feeding. It may be that 'Mixed' operations are feeding weaned calves in order to gain flexibility in their marketing approach—a rigid decision rule, such as selling at a certain weight or age would be the direct opposite.

Finally, the sale decision based on pasture condition was not different across operation type. Approximately one-fifth of the operations used it rarely, suggesting that these operations make greater use of the other decision rules, that pasture availability is calculated conservatively at the beginning of the feeding period or that supplemental feed is used to prevent feed shortage.

Table 9 summarizes the above discussion on the decision criteria used by the different operation types. 'Feeder' operations were most likely to calculate profits on lots of cattle they processed at the margin as they had the highest average response of 2.43 in the first row. 'Mixed' operations were least likely to feed calves according to age and weight but concentrated instead on more flexible criteria. 'Cow/calf' operations differed the least across decision rules they used, as shown in the narrow range of average ratings. This may be due to

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**Table 9. Decision criteria used for sell vs. hold and feed decision by operation type.**

Type of Information or Tool Used	Cow/calf		Mixed		Feeder		All Operations	
	Avg. <sup>1</sup>	Rank <sup>2</sup>	Avg.	Rank	Avg.	Rank	Avg.	Rank
Marginal Analysis	1.95	3	2.16	2	2.43	1	2.00	4
High/Low Price	2.15	1	2.21	1	2.07	2	2.16	1
Age/Weight	2.07	2	1.80	4	2.00	3	2.03	3
Pasture Condition	2.07	2	2.02	3	2.00	3	2.06	2

<sup>1</sup> Avg. is the average response of respondents. 1 = Rarely, 2 = Sometimes, 3 = Always.

<sup>2</sup> Rank is assigned on the basis of the highest average response for the decision criteria category.

breeding, culling and weaning constraints that these operations face more so than operations that also feed calves or operations that are solely in the business of feeding calves.

### USE OF MARKETING METHODS

Respondents were asked to identify the marketing methods they used to buy or sell cattle in 1995 by choosing one or more items from a list of eight marketing alternatives (Appendix A, Question 18). In addition to indicating whether or not they had used each method, respondents also noted how frequently they had used it and the number of cattle they had sold/purchased via each marketing alternative. The list of marketing alternatives appears below.

- 1) Cash - I sold/bought at a sale barn or auction market;
- 2) Direct - stocker - I sold directly to a stocker or backgrounder;
- 3) Direct - feedlot - I sold directly to a feedlot;
- 4) Video - I sold/bought through video auction;
- 5) Futures - I used cattle futures and options;
- 6) Contract - I sold/bought cattle on contract;
- 7) Pooled - I sold cattle together with another producer(s);
- 8) Other - I sold/bought using other methods.

### Marketing Methods Used

Table 10 presents rankings of the eight marketing alternatives by operation type based on the proportion of respondents who used the technique in 1995. The reported  $\chi^2$ -statistic and associated probability indicate whether use of a marketing alternative was significantly different across operation type. A high  $\chi^2$ -value and a probability below 0.05 indicate that answers were different across operation type with 95% confidence.

Cash sales were the most common marketing method. Over 90% of all of the respondents used sale barns or auction markets to sell or buy cattle in 1995. Because this information records only the proportion of operators who used each method, this does not mean that over 90% of cattle traded moved through auction markets.

Table 10. Proportion of operators reporting use of eight alternative marketing methods by operation type.

Type of Marketing Method Used	Cow/calf		Mixed		Feeder		All		$\chi^2$ -statistic	Probability
	% <sup>1</sup>	Rank <sup>2</sup>	%	Rank	%	Rank	%	Rank		
Cash	93.8	1	93.9	1	87.9	1	93.7	1	1.914	0.384
Direct - stocker	8.0	2	8.5	3	15.2	4	8.3	2	2.114	0.347
Direct - feedlot	0.6	6	7.3	4	27.3	2	2.6	4	106.951	0.001
Video	0.6	6	3.0	7	12.1	5	1.4	7	34.520	0.001
Futures	1.2	5	4.2	5	9.1	6	2.0	5	15.237	0.001
Contract	0.6	6	4.2	5	15.2	4	1.7	6	48.171	0.001
Pooled	2.5	4	3.6	6	0.0	7	2.6	4	1.647	0.439
Other <sup>3</sup>	4.7	3	9.7	2	18.2	3	6.0	3	15.250	0.001
Average	14.0	-	16.8	-	23.1	-	14.8	-	-	-

Notes: Response rates varied from 95.2% to 97.1% across operation type. Non-response to this question was defined as no check marks to the entire question. <sup>1</sup>% is the percentage of respondents that reported using this marketing method. Note that a producer can sell or buy using more than one marketing method. The percentages presented for each operation type across all marketing methods therefore do not add to 100%. <sup>2</sup>Rank is assigned on the basis of the highest percentage of use of the marketing method.

<sup>3</sup>Other includes retained ownership until slaughter, direct sale of purebred cattle, sale of replacement heifers via private treaty, order buyer purchases with unknown destination, calf sales to rodeos and miscellaneous other marketing methods.

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The second-most-common marketing method was direct sales to stocker operations, feedlots or other producers. As expected, a very common marketing method for 'Feeder' operations was direct sales to feedlots.

Selling cattle together with other producers, i.e., pooling, was most common among 'Cow/calf' operations and was not used at all by 'Feeder' operations. Volume considerations that make pooling attractive are likely not a concern for 'Feeder' operations. Video sales were used least frequently by 'Cow/calf' and 'Mixed' operations but were more common among 'Feeder' operations. Futures and options hedging and other contractual arrangements were not very common for any operation type.

In the final row of Table 10, average use of all the different marketing methods was the highest for 'Feeder' operations and the lowest for 'Cow/calf' operations. This suggests that operations that feed weaned calves may pay more attention to an array of potential marketing methods.

### **Volume of Trade Reported for Each Marketing Method**

Table 11 summarizes statistics on the volume of cattle traded for each of the different marketing alternatives. The second column reports the total volume per category, and the third column provides the percentage breakdown among all marketing alternatives. The fifth column indicates the number of non-zero responses in each category—i.e. the number of respondents that actually traded cattle in each category. Columns six through nine report several statistics on the number of cattle traded per respondent. Unfortunately, it was not possible to calculate statistics on 'cattle traded per transaction' due to a low response rate to the relevant question (last column of Question 18 in Appendix A).

The bottom row in Table 11 shows the total volume of trade across all marketing methods. This total was calculated as a separate statistic for each respondent and summarizes cattle trade for all the respondents across all categories. Futures and options trade was not included in this total. In addition, adjustments noted in the footnote to the table were made to avoid double counting.

Cash sales were the dominant marketing category with slightly over 80% of the total volume of cattle traded. As a separate group, direct sales to stockers, feedlots and other producers, as well as contractual sales that may be part of the above direct sales, were of secondary importance. Finally, video sales and pooled sales arrangements were least common. Futures and options were not commonly used.

A factor that may explain some of the differences in the volume of trade for the different categories is the reported average, minimum and maximum volume of trade per respondent numbers. Review of the last four columns in Table 11 suggests that certain types of marketing methods were associated with higher numbers of cattle traded. The implication may be that some of these marketing

Table 11. Volume of cattle traded in 1995 using eight alternative marketing methods.

Type of Marketing Method Used	Total No. of Cattle Traded	Percentage of Total Trade	Rank <sup>1</sup>	No. of respondents <sup>2</sup>	Cattle Traded per Respondent		
					Avg.	Std. Dev.	Min. Max.
Cash	69,007	81.3	1	809	85	136.5	1 2,500
Direct -- stocker	4,862	5.7	3	65	75	74.5	3 375
Direct -- feedlot	5,340	6.3	2	17	314	609.0	15 2,500
Video	1,069	1.3	7	8	134	238.1	2 700
Futures <sup>3</sup>	1,636	1.9	6	3	545	826.8	66 1,500
Contract	4,075	4.8	4	12	340	693.9	15 2,500
Pooled	825	1.0	8	17	49	51.5	3 200
Other <sup>4</sup>	3,071	3.6	5	40	77	99.9	1 500
Total <sup>5</sup>	84,904	100.0	-	843	101	221.8	1 5,000

<sup>1</sup>Rank is assigned on the basis of the highest volume of cattle trade reported.

<sup>2</sup>The number of respondents that reported greater than zero trade in a category.

<sup>3</sup>The numbers on this entry should be regarded as cattle hedged using futures and options rather than traded. In addition this, category is not included in the total figures in the bottom row.

<sup>4</sup>Of the 40 responses in this category, 12 respondents indicated that they retained ownership on the cattle until slaughter, 10 sold purebred cattle, seven sold replacement heifers via private treaty, three had an order buyer buy cattle with unknown destination, and one sold calves for rodeos. The remainder did not indicate a marketing method.

<sup>5</sup>The total figure does not include reported numbers in the futures and options category as these are hedging transactions that do not involve physical delivery in most cases. In addition, some of the categories are not mutually exclusive. Responses of respondents that showed the same trade volume in contractual sales as in either of the direct sales categories or video sales were treated as one response when totaling cattle trade per respondent. This was done to avoid double counting.

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methods are not available to smaller producers. The reported minimum numbers suggest that some smaller producers were using some or all of the marketing methods with the exception of futures and options trading and direct sales to feedlots. Futures and options hedging transactions, as well as direct marketing to feedlots through contractual arrangements or otherwise, showed the largest average trade volume figures per respondent.

Differences in the 1995 average trade volume per respondent across operation types are shown in Table 12. To test whether average trade volume per respondent was different across operation type, t-statistics were calculated<sup>1</sup>. A t-statistic ( $>2.0$ ) with an associated probability less than 0.05 indicates that the average trade volume per respondent was different across operation type with 95% confidence. Since these tests can be applied to only two operation types at a time, the table is broken into comparisons of differences between 'Cow/calf' vs. 'Mixed', 'Feeder' vs. 'Mixed' and 'Cow/calf' vs. 'Feeder' operations in the bottom half of the table. Statistically significant differences are highlighted with asterisks in the table. Corresponding average trade volumes and sample sizes for each operation are reported in the top portion of the table.

While there were a number of statistically significant results, the number of observations for the marketing alternatives other than 'Cash' and 'Other' were too small for testing differences. In the 'Cash' marketing category, 'Cow/calf' operations had the lowest number of cattle traded per respondent followed by 'Mixed' operations. Finally, the 'Feeder' operations reported the largest average volume per respondent in the 'Cash' category.

Direct marketings to stockers had nearly the same volume for 'Cow/calf' and 'Mixed' operations and showed an average trade volume per respondent close to that required for a semi-truck trailer load of cattle. 'Feeder' operations again had the largest average volume per respondent in this category.

The results in the 'Other' category show that 'Feeder' operations tended to have the largest average volume of trade per respondent in this category. Sale of purebred cattle and replacement heifers noted in the footnote to Table 11 may explain why average trade volume for 'Cow/calf' operations was higher than that for 'Mixed' operations, although the difference in average trade was only marginally significant. Retained ownership of cattle and purchases of order buyers likely explain the difference between 'Feeder' vs. 'Mixed' and 'Feeder' vs. 'Cow/calf' results.

Overall, the statistics in Table 12 support the conclusions of Tables 10 and 11 in the sense that 'Feeder' operations tend to be more involved in marketing alternatives to cash markets. An interesting result was the lack of pooling ar-

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<sup>1</sup>These tests were performed using the UNIVARIATE procedure in SAS. Based on the results of an F-test on equal or unequal variances across the samples, differences in means across samples were tested with the appropriate t-statistic (Huntsberger and Billingsley, 1987).

Table 12. Differences in average trade volume per respondent by operation type.

Description	Operation Type	Direct-			Direct-			Video	Futures	Contract	Pooled	Other
		Cash	Stocker	Feedlot	Cash	Stocker	Feedlot					
Average Number of Cattle Traded per Respondent	Cow/calf	69	63	47	11	n/a <sup>1</sup>	77	36	71			
	Feeder	322	200	597	259	n/a	942	n/a	262			
	Mixed	117	82	255	130	n/a	217	89	42			
Number of Respondents that Traded Cattle	Cow/calf	644	48	5	3	n/a	5	13	25			
	Feeder	27	4	6	3	1	3	n/a	3			
	Mixed	138	13	6	2	2	4	4	12			
Description	Operation Type	Direct-			Direct-			Video	Futures	Contract	Pooled	Other
		Cash	Stocker	Feedlot	Cash	Stocker	Feedlot					
Cow/calf vs. Mixed	T-statistic	-2.706*** <sup>2</sup>	-1.199	-1.376	-1.700	n/a	-1.447	-1.228	1.353			
	Probability	0.008	0.240	0.227	0.337	n/a	0.191	0.301	0.186			
Feeder vs. Mixed	T-statistic	2.269**	2.502*	0.832	0.444	n/a	0.921	n/a	3.492*			
	Probability	0.031	0.078	0.435	0.687	n/a	0.452	n/a	0.071			
Cow/calf vs. Feeder	T-statistic	-2.861***	-3.660***	-1.437	-1.121	n/a	-1.106	n/a	-3.106***			
	Probability	0.008	0.001	0.210	0.379	n/a	0.384	n/a	0.005			

<sup>1</sup>There were not enough responses to report averages or to perform a t-test.  
<sup>2</sup>\*\*\*, \*\*, and \* indicate 0.01, 0.05, and 0.10 significance levels, respectively.



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rangements among stocker operations. Apparently their average trade volume per respondent was large enough to eliminate consideration of pooling as an alternative marketing method.

### **FREQUENCY OF CONSULTING PRICES INFORMATION**

Respondents were asked to indicate whether or not they consulted prices on specified cattle characteristics to help in making marketing decisions. Those who consulted prices were also asked to note how frequently they did so (Appendix A, Question 19). The three specified cattle attributes—weight, type, and breed—are defined as follows:

- 1) Weight - comparing prices across different weight categories, such as prices for #4-500 calves, #6-700 calves, finished cattle, carcass prices, cut out prices, retail prices;
- 2) Type - comparing prices across different types of cattle, such as steers, heifers, bulls, replacements and cull cows;
- 3) Breed - Comparing prices across different cattle breeds, such Hereford, Angus, etc.

In addition, producers were also queried about what sources of information they used and if they used a source of information, how often they consulted each of the following categories of information:

- 1) Own Sales - examining own sales records;
- 2) Auction Sales - analyzing sales prices at different auctions and markets;
- 3) Other - looking at information in trade magazines, other market news reports, TV, radio and other sources.

The results were differentiated by operations that fed weaned calves ('Mixed & Feeder') and those that did not ('Cow/calf'), i.e., responses from 'Mixed' and 'Feeder' operations were grouped into one category and responses of 'Cow/calf' operations made up the other category. This was done on the basis of the results obtained earlier regarding the benefits of knowing animal performance and adjusting breeding programs on the basis of that information (Table 4). 'Cow/calf' operations were more interested in the breeding information than the 'Mixed' operations. A similar breakdown on information sources and cattle attributes is expected here.

The importance of different cattle attributes was ranked by assigning a number to the frequency choices of each individual, i.e., No = 0, Yes = 1, Yearly = 2, At Saletime = 3, Monthly = 4, Weekly = 5, Daily = 6. Using this method, a high value implies frequent comparison of prices. Averaging responses across observations can then lead to an 'ordinal' measure of importance for each of the cattle attributes, where a high value represents frequent use of information and a low value represents infrequent use of information.

However, the average values in themselves convey no meaning—i.e. an average of 3.5 does not indicate a frequency between ‘Monthly’ and ‘At Saletime’.

In order to test the null hypothesis that there is no difference in the distribution of answers between ‘Cow/calf’ and ‘Mixed & Feeder’ operations,  $\chi^2$ -statistics were calculated and reported together with probabilities. High  $\chi^2$ -values and probabilities below 0.05 indicate that statistically significant differences exist across operation type with 95% confidence.

Table 13 shows that all operations have the same ranking for the different cattle price attributes and that ‘Mixed & Feeder’ operations tended to examine the price information more frequently than ‘Cow/calf’ operations. The most important attribute used for price comparison was the type of cattle. Comparing prices across weight categories was a close second. There was also a larger difference between the ‘Type’ and ‘Weight’ category rankings for the ‘Cow/calf’ operations than for the ‘Mixed & Feeder’ operations. This supports the earlier contention that ‘Cow/calf’ operations are less concerned with looking at price differentials associated with feeding cattle to heavier weights than operations that feed calves.

The results concerning the frequency of price comparisons across breeds were opposite to expectations. ‘Cow/calf’ operations paid the least attention to price differences across breeds but had considered animal performance data to adjust breeding programs to be a more significant benefit to feeding calves than ‘Mixed’ operations (Table 4). Either prices do not appropriately reflect the quality attributes of different breeds or ‘Cow/calf’ operations are more interested in non-price attributes in breeds. The authors hypothesize the latter to be a more accurate description of Arkansas cow/calf operators.

For the ‘Auction Sales’ and ‘Other’ information sources, the frequency of use was higher for the ‘Mixed & Feeder’ operations than the frequency ratings for the ‘Cow/calf’ operations. The opposite was true for the ‘Own Sales’ category. One of the differences between the sources of information may be the validity and ease of access associated with external versus internal information. ‘Own Sales’ records are an internal source of information that is easily accessed and known to be valid. As an alternative, external sources of information such as prices at various auction markets, information in trade magazines and other market news reports may not be as easy to obtain or reliable for ‘Cow/calf’ operators and are, therefore, consulted less often.

Finally, ‘Mixed & Feeder’ operations used the ‘Other’ category the most often with an average rating between weekly and monthly. Some producers commented on the use of other information. Quoted most frequently as ‘Other’ sources of information were electronic news media such as satellite uplink services provided by the “Data Transmission Network, DTN” and “FarmBureau” information pages on computer terminals located throughout the state.

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Table 13. Ranking of price attributes and information sources by operation type.

Attribute or Source	Operation Type	Frequency (% of respondents in each category)							Avg. <sup>1</sup>	Rank <sup>2</sup>	No. of respondents	χ <sup>2</sup> -statistic (Probability)
		No. (0)	Yes (1)	(2)	(3)	Monthly (4)	Weekly (5)	Daily (6)				
Type	Cow/calf	11.6	6.4	3.6	21.3	15.5	36.1	5.7	3.5	1	673	32.232
	Mixed & Feeder	9.5	2.8	1.7	10.1	11.7	53.6	10.6	4.2	1	179	(0.001)
	All	11.2	5.6	3.2	18.9	14.7	39.8	6.7	3.7	1	852 <sup>3</sup>	
Weight	Cow/calf	21.6	5.0	2.0	19.5	13.8	33.2	5.0	3.2	2	662	45.034
	Mixed & Feeder	11.7	1.7	0.0	11.1	10.6	54.4	10.6	4.1	2	180	(0.001)
	All	19.5	4.3	1.5	17.7	13.1	37.8	6.2	3.4	2	842 <sup>3</sup>	
Breed	Cow/calf	40.0	5.3	8.7	11.8	13.2	17.9	3.0	2.2	3	642	18.753
	Mixed & Feeder	34.8	3.1	7.3	9.2	9.8	32.9	3.1	2.7	3	164	(0.005)
	All	39.0	4.8	8.4	11.3	12.5	21.0	3.0	2.3	3	806 <sup>3</sup>	
Auction Sales	Cow/calf	10.0	8.8	1.7	25.7	14.0	35.2	4.7	3.5	1	752	41.713
	Mixed & Feeder	6.4	3.2	0.0	14.4	11.2	56.4	8.5	4.2	2	188	(0.001)
	All	9.3	7.7	1.4	23.4	13.4	39.5	5.4	3.6	1	940 <sup>3</sup>	
Other	Cow/calf	22.4	5.7	1.8	10.1	23.0	26.2	10.9	3.3	2	673	55.721
	Mixed & Feeder	7.5	1.2	0.0	5.8	22.0	38.2	25.4	4.5	1	173	(0.001)
	All	19.4	4.7	1.4	9.2	22.8	28.6	13.8	3.5	2	846 <sup>3</sup>	
Own Sales	Cow/calf	29.2	3.8	7.8	25.3	13.6	15.8	4.5	2.6	3	664	18.959
	Mixed & Feeder	33.3	1.1	14.1	18.6	7.3	18.6	6.8	2.5	3	177	(0.004)
	All	30.1	3.2	9.2	23.9	12.3	16.4	5.0	2.5	3	841 <sup>3</sup>	

<sup>1</sup>Avg. is the weighted average response of respondents. It is calculated as the sum of the product of the percentages and their weights, i.e. No = 0, Yes = 1, etc., for each category. A high average response implies frequent comparison of prices for cattle attributes or frequent use of a certain source of information, while a low average response implies the opposite or infrequent comparison or use.

<sup>2</sup>Rank is assigned on the basis of the highest average response for the category.

<sup>3</sup>Response rates varied from 76.3% to 88.9%, which translate to 251 to 117 missing observations, respectively.

## OPERATOR OPINIONS ON POOLING CATTLE FOR SALE

Respondents were asked to provide their opinions on pooling cattle for sale (Appendix A, Question 20). For purposes of comparison, two groups of respondents were defined—'Cow/calf' operations and 'Mixed' and 'Feeder' operations that fed weaned calves. Pooling cattle for sale was defined as 'combining your cattle to be sold with cattle of other producers rather than just selling your cattle as an individual producer'.

Regardless of their experience with pooling cattle, respondents were asked to indicate their opinion regarding two groups of statements about pooling cattle. The first group of statements targeted the following positive aspects: 1) the availability of price premiums; 2) transportation cost savings; and 3) the ease of pooling with video auctions. The second group of statements emphasized the following potentially negative aspects: 4) average pricing; 5) lack of knowledge of pooling as an option; and 6) the lack of flexibility in the timing of a sale. The questions were formatted so that a respondent could either strongly agree, agree, be neutral, disagree or strongly disagree with the statement.

For all operations, 2.6% and 1.4% of respondents had reported some experience with pooled sales and video auctions, respectively (Table 10). For 1995, the combined volume of trade for both categories was 1,894 head traded or 2.2% of the total volume of trade (Table 11). The results to this query on pooling cattle, therefore, need to be interpreted as opinions grounded in minimal experience.

The responses were tested for statistically significant differences across operation type using a  $\chi^2$ -test on the distribution of answers provided. High  $\chi^2$ -values and probabilities below 0.05 indicate that 'Cow/calf' operators have different opinions on the various statements than 'Mixed & Feeder' operations with 95% confidence.

### Opinions on Benefits of Pooling Cattle for Sale

Table 14 summarizes the level of agreement of producers to the statements provided in the first column of the table. Columns three through seven show the breakdown of responses by operation type. The remaining columns list the number of responses for each operation type and the  $\chi^2$ -values and probabilities.

Responses to the statement, 'Larger, more uniform lots of cattle sell at a higher price' are recorded in the first row (Table 14). Both types of operations felt strongly that price premiums are available for larger, more uniform lots of cattle. Over 95% of the 'Mixed & Feeder' operations strongly agreed or agreed with this statement. While answers to this statement reflect opinions, the strength of the responses in favor of price premiums suggests that they are, in fact, available.

Responses to the statement, 'Pooling saves on transportation cost' appear to indicate that both types of operations agreed that there would be transporta-

Table 14. Responses of 'Cow/calf' and 'Mixed & Feeder' operations to statement on benefits of pooling cattle for sale.

Statements about pooling cattle for sale	Operation Type	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		No. of Respondents	$\chi^2$ -statistic (Probability)
		-----%											
Larger, more uniform lots of cattle sell at a higher price	Cow/calf	31.2	51.0	14.7	2.1	1.0						781	27.038
	Mixed & Feeder	43.4	52.6	4.1	0.0	0.0						196	(0.001)
	All	33.7	51.3	12.6	1.6	0.8						977 <sup>1</sup>	
Pooling saves on transportation cost	Cow/calf	16.2	49.7	27.4	5.4	1.3						755	7.896
	Mixed	21.6	52.1	23.2	3.2	0.0						190	(0.096)
	All	17.3	50.2	26.6	5.0	1.1						945 <sup>1</sup>	
Video auction markets make pooling easier	Cow/calf	7.1	26.1	61.9	3.4	1.5						732	4.467
	Mixed	9.0	32.3	55.0	2.7	1.1						189	(0.346)
	All	7.5	27.4	60.5	3.3	1.4						921 <sup>1</sup>	

<sup>1</sup>Response rates varied from 87.1% to 92.4% which translate to 136 to 80 missing observations, respectively.

tion cost savings from pooling cattle. Current Arkansas cattle budgets show estimated marketing and hauling costs at \$4.00/head. (Pardue et al., 1997). Therefore, any cost savings due to volume considerations may be relatively minor. A more interesting question would be whether investment in cattle hauling equipment could be reduced as a result of pooling, especially for smaller producers.

Both types of operations were mostly neutral on the statement about video auctions. Presumably, using video auction markets is not very established in Arkansas.

### **Opinions on Concerns About Pooling Cattle for Sale**

Table 15 reports producers' opinions on the perceived drawbacks of pooling. Analysis of the results is structured in a form similar to the above section on benefits of pooling.

Answers to the statement, 'I don't like to sell my cattle at the average pen price' are reported in the first row of Table 15. This statement attempts to capture the common complaint by cattle ranchers that cattle sold at an average price cannot provide a price signal on the quality of the individual animal. There was consensus among operations that this was of concern to producers.

One reason to disagree with this statement, other than having below-average-quality cattle for sale, may rest with inconsistent cattle quality. A person would *not* have a problem with selling at an average price, if the average quality of all animals in a pen of cattle was a good reflection of the quality of each individual animal. Since more respondents agreed than disagreed with this statement, this may also be interpreted as producers perceiving a problem with cattle quality consistency. In other words, since producers agreed that they did not like selling at average prices, they also indicated that variability in cattle quality was a problem.

Pricing at the average may contribute to the problem of cattle quality because pricing at the average does not allow for below-average quality cattle to be discounted. In addition, it does not allow for premiums for above-average cattle. Without this premium and discount price structure, individuals do not get the desired price signal on quality attributes of their cattle. This may be even more significant with pooled sales as cattle are mixed across operations.

It appears that 'Cow/calf' operations have given even less consideration to pooling cattle than 'Mixed & Feeder' operations. This may show that 'Cow/calf' respondents were more independent than operations that feed weaned calves. In addition, results reported previously in Table 10 suggest that 'Mixed' operations had done more pooling (3.6%) than 'Cow/calf' operations (2.5%).

Responses to the statement 'I don't like it (pooling) because I can't sell when I want to' indicated that most operations were neutral or agreed. 'Cow/calf' operations considered the restrictions on the flexibility of sale times as more of a problem than 'Mixed & Feeder' operations.

Table 15. Responses of 'Cow/calf' and 'Mixed & Feeder' operations to statements on perceived drawbacks of pooling cattle for sale.

Statements about pooling cattle for sale	Operation Type	Strongly Agree			Neutral			Disagree			No. of Respondents	$\chi^2$ -statistic (Probability)
		Strongly Agree	Agree	%	Agree	Neutral	%	Disagree	Strongly Disagree	Disagree		
I don't like to sell my cattle at the average pen price	Cow/calf	9.7	30.1	48.2	10.4	1.5	7.772				740	
	Mixed	8.4	26.3	45.8	17.4	2.1	(0.100)				190	
	All	9.5	29.4	47.7	11.8	1.6	930 <sup>1</sup>					
I have not thought about pooling cattle	Cow/calf	11.8	35.4	32.9	17.6	2.4	20.686				763	
	Mixed	7.3	26.0	27.0	22.4	7.3	(0.001)				192	
	All	10.9	33.5	33.7	18.5	3.4	955 <sup>1</sup>					
I don't like it because I can't sell when I want to	Cow/calf	11.8	33.2	43.1	10.3	1.7	12.234				757	
	Mixed	6.3	27.6	49.0	13.0	4.2	(0.016)				192	
	All	10.6	32.0	44.3	10.9	2.2	949 <sup>1</sup>					

<sup>1</sup> Response rates varied from 88.0% to 90.4% which translate to 127 to 102 missing observations, respectively.

## Ranking of Opinions on Benefits of and Concerns about Pooling Cattle Sales

This section ranks the perceived benefits and concerns about pooling cattle sales on the basis of the combined percentage of respondents that either strongly agreed or agreed to a statement. The statement with the highest percentage would be considered the most important. Table 16 shows the proportions of respondents and rankings as they differ across operation type.

Clearly, the most important benefit to pooling was the availability of price premiums. Respondents ranked it as the number one perceived benefit by a considerable margin. A secondary benefit was transportation cost savings. The rather weak ranking of video auctions as a tool to pool cattle sales showed that respondents were either unclear about the statement or did not identify video auction markets as a tool for pooling cattle. The rankings on perceived drawbacks about pooling were much less decisive. For 'Cow/calf' operations, the most important drawback was a lack of knowledge about pooling followed by a perceived lack of flexibility regarding the timing of sales. Selling at average prices was of least concern. By contrast, 'Mixed & Feeder' operations ranked selling at average prices as the most important concern. These operations are most concerned about overall quality and consistency in quality as explained in the previous section on selling at average prices. The rankings in this column differed only marginally, however.

**Table 16. Ranking of benefits and concerns about pooling cattle sales by operation type.**

Statement	Cow/calf		Mixed & Feeder		All	
	% of responses <sup>1</sup>	Rank	% of responses <sup>1</sup>	Rank	% of responses <sup>1</sup>	Rank
<b>Benefits of Pooling:</b>						
Price premiums	82.2	1	96.0	1	85.0	1
Transportation cost savings	65.9	2	73.7	2	67.5	2
Video Auctions	33.2	3	41.3	3	34.9	3
<b>Concerns about Pooling:</b>						
Selling at average price	39.8	3	34.7	1	38.9	3
Knowledge about pooling	47.2	1	33.3	3	44.4	1
Flexibility in the timing of sales	45.0	2	33.9	2	42.6	2

<sup>1</sup> The combined percentage of respondents that strongly agreed or agreed with the statement outlined in the left-most column.



### SUMMARY AND CONCLUDING COMMENTS

This report summarized information regarding marketing practices of cattle producers in Arkansas. The sample of respondents included 851 'Cow/calf' operations that sell calves at weaning, 172 'Mixed' operations that are cow/calf operations that also feed weaned calves and 34 'Feeder' operations that are solely in the business of feeding weaned calves. The sample was representative of 14.6% of cattle producers in Arkansas that have more than 50 but less than 1,000 cows and replacement heifers. A brief summary of the key findings on each of the production issues follows in point form:

#### *Operator opinions on feeding weaned calves to heavier weights:*

- Both 'Cow/calf' and 'Mixed' operations ranked finance charges as the main problem with feeding weaned calves on their farm. Price risk was the second-most-important concern. These problems may be related. A relatively clear implication of this is that farm lending institutions and producers alike need to evaluate and improve their risk-management practices in order to lower the price risk (perceived or real) associated with financing feeder cattle.
- Custom feeding weaned calves is not a common practice in Arkansas. It may be an opportunity for some producers if economies of size from potentially reduced financing charges and from price premiums for larger, more-uniform lots of cattle can exceed transactions costs associated with building trustworthy relationships between custom feeders and beef cattle producers. It is interesting to note that only 1.6% of the respondents had had cattle custom fed in Arkansas. Another 8.4% of respondents had cattle custom fed in adjoining states, mostly through retained-ownership programs.
- Knowledge of animal performance data assists cattle producers in two different ways: 1) it helps 'Cow/calf' producers make breeding decisions; and 2) it aids 'Mixed' operations when making purchasing decisions.
- Profits from feeding weaned calves were more of a consideration for producers that fed calves than for producers that did not. The implication is that more producers need to be educated about this value-added production alternative.

#### *Source of information and tools used for price forecasts:*

- The top two sources for price information are livestock auction prices and livestock reports. Operations that fed weaned calves used these sources and 'Other' information more than 'Cow/calf' operations. Among these 'Other' sources or tools, contractual arrangements were quoted least often. Feeder cattle futures and options prices were the second-most-important method used by 'Feeder' operations.

*Decision criteria used for sell vs. hold and feed decisions:*

- 'Feeder' operations were most likely to calculate profits for each lot of cattle they processed. 'Mixed' operations were least likely to feed calves according to rigid age and weight criteria but concentrated instead on more flexible criteria. A 'Cow/calf' operation's selling decisions may be more affected by non-price issues such as breeding, culling and weaning constraints that impact these operations more than 'Mixed' or 'Feeder' operations.

*Use of different marketing methods:*

- Auction barns were the most common marketing method used by all three types of operations. Slightly over 80% of all cattle traded moved through sale barns. The second-most-common method, in terms of cattle traded, was direct sales to stocker or backgrounder operations, feedlots and contractual sales. Video auction sales and selling cattle together with other producers was least common. 'Cow/calf' and 'Mixed' operations pooled cattle the most, as benefits from larger lot sizes are likely a more important factor for smaller operations. By contrast, 'Feeder' operations did not use this marketing method at all.
- Minimum cattle transaction numbers per respondent were smaller than expected for many of the marketing options. This indicates that smaller producers were able to pursue marketing alternatives other than selling at the sale barn. Among the largest minimum numbers per respondent were direct sales to feedlots and contractual sales with a minimum of 15 head/respondent. These latter categories may not be readily available to small producers.
- Differences in average trade volume per respondent across operation type for the eight marketing alternatives showed that 'Feeder' operation had the largest average cattle trade per respondent, followed by 'Mixed' and 'Cow/calf' operations in the 'Cash' marketing category.

*Frequency of consulting price information by cattle characteristics and source:*

- 'Cow/calf' operations compared prices across weight categories less often than operations that feed weaned calves. This was likely a function of their lack of interest in feeding calves.
- Operations that feed weaned calves focus more on external sources of price information than 'Cow/calf' operations. In general, 'Cow/calf' operations compared prices less often than operations that feed weaned calves.

*Opinions regarding pooled sales:*

- Clearly the most important benefit to pooling was the availability of price premiums for larger, more uniform lots of cattle. Respondents ranked it as their number one benefit by a considerable margin. A secondary benefit was transportation cost savings.

## MARKETING PRACTICES OF ARKANSAS BEEF CATTLE PRODUCERS

- 'Cow/calf' operations appeared less familiar with this marketing option than 'Mixed & Feeder' operations. A secondary concern was the perceived lack of flexibility regarding the timing of sales. Selling at average prices was of least concern. By contrast, 'Mixed & Feeder' operations ranked selling at average prices as the most important concern.

Overall, the data suggested that the producers were more in agreement about the rankings of benefits than those of concerns about pooling cattle.

In summary, it appears that 'Cow/calf' operations pay least attention to marketing and that there may be some profitable opportunities to value-added marketing alternatives in-state, if risk-management and financing concerns are addressed. The major benefits to a more marketing-oriented 'Cow/calf' producer may lie in focusing on pooling cattle to take advantage of price premiums that appear to be available for larger, more-uniform lots of cattle. The data also revealed that access to and explanation about external sources of information may be a key to informing producers about these marketing opportunities.

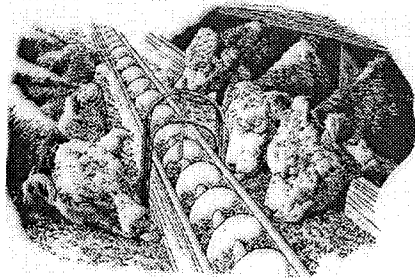
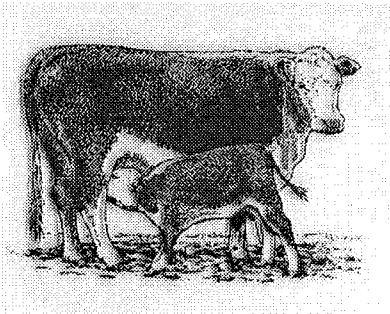
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**APPENDIX A: SURVEY INSTRUMENT**

**ARKANSAS BEEF MARKETING SURVEY**

*For beef cow/calf, stocker and backgrounding operations*



What type of operation do you have? (*Check only one*)

- ☐ <sub>1</sub> Cow/calf only.....  
(Cow/calf operations sell calves at weaning  
except for replacement heifers)
- ☐ <sub>2</sub> Stocker/Backgrounder only.....  
(Stocker or backgrounding operations are  
involved in purchasing weaned calves or  
custom feeding them for feedlot placement)
- ☐ <sub>3</sub> Cow/calf & Stocker/Backgrounder.....

**Instructions:**

**Complete Sections A & C**

**Complete Sections B & C**

**Answer all Sections A, B & C**

# MARKETING PRACTICES OF ARKANSAS BEEF CATTLE PRODUCERS

## SECTION A. COW/CALF OPERATION QUESTIONS

1. What is your current herd inventory in terms of cows (bred or with calf), replacement heifers (open & bred) and herd sires? *(Check one for each of the categories)*

Cows:     <sub>1</sub>☐ 24 or less     <sub>2</sub>☐ 25 - 49     <sub>3</sub>☐ 50- 99     <sub>4</sub>☐ 100 - 149     <sub>5</sub>☐ 150 - 199     <sub>6</sub>☐ 200+

Heifers:   <sub>1</sub>☐ 5 or less     <sub>2</sub>☐ 5 - 9     <sub>3</sub>☐ 10 - 19     <sub>4</sub>☐ 20 - 29     <sub>5</sub>☐ 30 - 49     <sub>6</sub>☐ 50+

Bulls:     <sub>1</sub>☐ None     <sub>2</sub>☐ 1     <sub>3</sub>☐ 2     <sub>4</sub>☐ 3 - 4     <sub>5</sub>☐ 5 - 7     <sub>6</sub>☐ 8+

2. Which of the following best describes your current operation? *(Check only one)*

<sub>1</sub>☐ Commercial only     <sub>2</sub>☐ Purebreeder only     <sub>3</sub>☐ Commercial and purebreeder

3. How old are your mother cows? \_\_\_\_\_ Average age in years     \_\_\_\_\_ Oldest

4. How old are your replacement heifers when they calve for the first time? \_\_\_\_\_ Average age in months

5. When is/are your calving season(s)? *(Check all that apply)*

☐ Year-round     ☐ Winter     ☐ Spring     ☐ Summer     ☐ Fall

6. What is your experience with feeding or grazing *weaned* calves?

<i>Check the most appropriate answer for each row</i>	Never	Not yet	No longer	Sometimes	Always
Do you feed and care for your own calves	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>
Do you feed your own plus purchased calves	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>
Do you have a stocker/backgrounder feed for you	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>
Do you rent pasture to feed your calves	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>

7. Other than using your pasture for grazing cattle, in what ways might you use your pasture land?  
*(Check all that apply)*

☐ Hay     ☐ Rent out     ☐ Other livestock     ☐ No other use  
☐ Crops     ☐ Tree farm     ☐ Other \_\_\_\_\_

*(over)*

8. Regardless of your experience with *feeding/grazing weaned calves*, what is your *opinion* on the following?

<i>The problem with feeding calves on my farm is that, (Check only one for each statement)</i>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Prices of feeder cattle change too much (too risky)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't have the facilities to feed weaned calves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrowing money to finance the feeding is too costly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeding is not profitable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>The problem with having calves fed with a custom feeder is that, (Check only one for each statement)</i>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
No custom feeders are nearby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't trust custom feeders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is too hard to establish trust with custom feeders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have not considered this option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>The benefit of feeding calves (own or custom) is that, (Check only one for each statement)</i>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I know how well animals perform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can adjust my breeding program better, because I know how well animals perform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On average it is more profitable than selling weaned calves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**!!! Skip to Section C if you do not feed weaned calves !!!**

## SECTION B. STOCKER/BACKGROUNDING OPERATIONS QUESTIONS

9. **Stocker** programs place weaned calves on pasture and graze them until marketed as feeders.

Do you run a stocker operation? ☐ Yes ☐ No ... *Skip to question 10*

How many days do you typically graze each lot of calves before selling? \_\_\_\_\_ Days

At what **average** weight do you generally sell? \_\_\_\_\_ Steers \_\_\_\_\_ Heifers

10. **Backgrounding** weaned calves implies placing the cattle in dry lots and feeding hay and concentrates until the animals are marketed. Do you background calves? ☐ Yes ☐ No ... *Skip to question 11*

How many days do you usually have each lot of calves in the feedlot? \_\_\_\_\_ Days

At what **average** weight do you generally sell? \_\_\_\_\_ Steers \_\_\_\_\_ Heifers

## MARKETING PRACTICES OF ARKANSAS BEEF CATTLE PRODUCERS

11. Over the last three years, including this year, what has been the typical mix of your stocker or backgrounding business? Please indicate the **number of head** per category. These numbers do not have to be exact, but please provide your best estimate (*Please indicate an average, not a range*).

<b>Beef</b>	1994	1995	1996	<b>Dairy</b>	1994	1995	1996
Bull calves	_____	_____	_____	Bull Calves	_____	_____	_____
Steer calves	_____	_____	_____	Steer Calves	_____	_____	_____
Heifer calves	_____	_____	_____	Heifer Calves	_____	_____	_____

12. Over the same period ('94 - '96), please indicate the average number of weaned calves you fed , that you..

### Average

Owned yourself (outright or financed)	_____ head
Custom fed for cow-calf operations	_____ head
Custom fed for feedlots	_____ head
Custom fed for other investors	_____ head
<b>Total</b>	_____ head

13. How many head *could* you feed/graze with the facilities/pasture you have.....

a) at one point in time? \_\_\_\_\_ Head      b) during 1996? \_\_\_\_\_ Head

14. Do you currently keep records on animal performance? ☐ Yes ☐ No... *Skip to question 15*

What kind of records do you keep? (*Check all that apply*)

☐ Pen or lot averages on average daily gain (ADG)      ☐ Cost of gain      ☐ Other \_\_\_\_\_

15. Do you currently custom feed cattle for customers? ☐ Yes ☐ No... *Skip to question 16*

What services do you provide for your customers? (*Check all that apply*)

☐ Contract pricing      ☐ Brokerage service using futures & options  
☐ Video Sales      ☐ Other \_\_\_\_\_

## SECTION C. GENERAL QUESTIONS

16. To forecast or predict sale prices for the end of a feeding period I look at .. (*Check all that apply*):

☐ Feeder cattle futures price      ☐ Market trends  
☐ Prices paid at auction barns      ☐ Contracted price  
☐ Livestock reports      ☐ Other \_\_\_\_\_

17. Whenever I make the decision on whether to sell or keep feeding ... (Check one for each category)

	Always	Sometimes	Rarely
I compare calculated feed costs with sale prices of animals to make that decision.....	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>
I sell when I see relatively high prices and hold back when prices are low.....	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>
I sell, regardless of price, when the cattle are a certain age or weight	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>
I continue to feed if I have enough pasture, otherwise I sell .....	<sub>1</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>

18. The following questions ask you about the marketing methods you used to sell/buy cattle for the year 1995.

*Please indicate which marketing methods you used. Also, please provide the total number of head per category and how often, during 1995, you sold / bought in the categories that apply to you.*

	Yes	No	How many head?	How many times?
I sold/bought at a sale barn or auction market	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
I sold directly to a stocker or backgrounder	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
I sold directly to a feedlot	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
I sold/bought through video auction	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
I used cattle futures and options	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
I sold/bought cattle on contract	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
I sold cattle together with another producer(s)	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		
Other	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>		

19. Please indicate how often you compare cattle prices to help make marketing decisions.

*For information you use, check the most appropriate answer for how often you consult...*

	Yes	No	Around time of sale only	Daily	Weekly	Monthly	Yearly
Your own sale records	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>	<sub>6</sub> <input type="checkbox"/>
Sale prices at different auctions & markets	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>	<sub>6</sub> <input type="checkbox"/>
Prices across different weight categories (calves, feeders, live, carcass, retail)	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>	<sub>6</sub> <input type="checkbox"/>
Prices for different cattle types (steers, heifers, cows, replacements)	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>	<sub>6</sub> <input type="checkbox"/>
Prices for different cattle breeds	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>	<sub>6</sub> <input type="checkbox"/>
Information in trade magazines and other market news reports, TV, radio, etc.	<sub>1</sub> <input type="checkbox"/>	<sub>0</sub> <input type="checkbox"/>	<sub>2</sub> <input type="checkbox"/>	<sub>3</sub> <input type="checkbox"/>	<sub>4</sub> <input type="checkbox"/>	<sub>5</sub> <input type="checkbox"/>	<sub>6</sub> <input type="checkbox"/>



## MARKETING PRACTICES OF ARKANSAS BEEF CATTLE PRODUCERS

**Pooling** cattle for sale means combining your cattle to be sold with cattle of other producers rather than just selling your cattle as an individual producer. This way cattle can be sorted according to similar characteristics and sold in larger, more uniform lots.

20. Even if you don't pool cattle, please indicate your opinion about the following statements on pooling.

<i>Please indicate your opinion on pooling cattle, (Check only one for each statement)</i>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Larger, more uniform lots of cattle sell at a higher price	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pooling saves on transportation cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video auction markets make pooling easier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't like to sell my cattle at the average pen price	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have not thought about pooling cattle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't like it because I can't sell when I want to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. What other livestock do you currently raise commercially? *(Check all that apply)*

- ☐ Poultry
 ☐ Dairy
 ☐ None  
☐ Horses
 ☐ Swine
 ☐ Other \_\_\_\_\_

22. For this year, how many acres are you using just for your cattle? Acres: \_\_\_\_\_ rented \_\_\_\_\_ own

23. How much do you generally pay to rent pasture? \_\_\_\_\_ per acre \_\_\_\_\_ per head

24. What is your current average percentage of farm sales derived from cattle? \_\_\_\_\_%

25. What is your age? *(Check only one)*

- ☐ 20 or younger
 ☐ 21 - 30
 ☐ 31 - 40
 ☐ 41 - 50
 ☐ 51 - 60
 ☐ 61 or older

26. What is your educational background? *(Check all the institutions you have attended)*

- ☐ High-school
 ☐ Special Training Courses  
☐ Community College
 ☐ University

27. Comments: \_\_\_\_\_

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Thank you for your time in filling out this questionnaire. Your answers are completely confidential. Please return the questionnaire in the enclosed postage paid envelope. Thanks again.