

MANAGEMENT AND MARKETING PRACTICES AND PROBLEMS OF IDAHO BEEF CATTLE PRODUCERS

GERALD MAROUSEK
AGRICULTURAL ECONOMIST

LIBRARY

APR 27 1989

UNIVERSITY OF IDAHO



Agricultural Experiment Station

University of Idaho

College of Agriculture

S
53
E415

Table of Contents

Introduction	3
Resource Base	3
Cattle Numbers 3, Breeds Raised 3, Forage Base 3, Harvested Feed Supply 4	
Cattle Marketings	4
Numbers Sold 4, Market Weights 4, Selling Season 4	
Production and Marketing Practices	5
Performance Records/Testing Programs 5, Marketing Methods 5	
Marketing Information and Market News Sources	6
Organization and Operator Characteristics	7
Organizational Structure 7; Operator Age, Education and Production/Marketing Experience 7	
Labor and Financial Inputs	7
Source and Amount of Labor 7, Investment 7, Debt/Asset Ratios 8	
Aspirations and Problems	8
Operator Goals 8, Operators' Preferences for Achieving Goals 8, Limiting Factors on Operations 9	
Summary and Implications of Results	11
Appendix: Questionnaire	12

Acknowledgment

The author appreciates the contributions to this study by Richard C. Max, Statistician in Charge, Idaho Agricultural Statistics Service, for sampling and questionnaire distribution; by the 356 producers who completed and returned questionnaires; by students William Ong for data coding and Michael Scialfa for entering data into the computer, and by Biing-Hwan Lin, Assistant Agricultural Economist, for performing statistical analyses.



Published and distributed by the
Idaho Agricultural Experiment Station
Gary A. Lee, Director
University of Idaho College of Agriculture
Moscow, Idaho 83843

The University of Idaho offers its programs and facilities to all people
without regard to race, creed, color, sex or national origin.

Management and Marketing Practices and Problems of Idaho Beef Cattle Producers

Gerald Marousek, Agricultural Economist

Introduction

This publication covers a survey of the Idaho range cattle industry: resources employed, production and marketing practices used and operator characteristics, aspirations and problems. The survey is the initial phase of a study on the economics of alternative beef cattle management/marketing systems.

The survey questionnaire was mailed in fall 1986 to the Idaho Agricultural Statistics Service mailing list of beef cattle producers with 100 or more total cattle inventory. About 10 percent of the original mailing list, or 315 questionnaires, were completed and returned. Other questionnaires were returned but they were incomplete, redundant (out of business) or inappropriate (i.e. dairy operations).

Because the representativeness of the survey response sample cannot be verified, it is not possible to draw inferences concerning all Idaho beef producers from the results reported here. The significance of the findings is their indication of the techniques of production and marketing being used, the goals and preferences of beef cattle producers and the problems they face. As with all voluntary information sources, the more alert, motivated and articulate members of the industry can be expected to have responded more often. This survey most likely reflects this inevitable human bias.

Resource Base

Cattle Numbers

The extreme variation among beef cattle operations in Idaho is illustrated by the tabulation of cattle numbers. While the average number of animals per operation (i.e. 200 cows and 11 bulls) would indicate small scale or diversified enterprises, the actual numbers range from herds of 10 or fewer to 5,000 or more head (Table 1).

Frequency distribution of cattle inventory shows 11 percent of respondents reported less than 100 head, even though the mailing list was originally composed of producers with 100 or more animals (Table 2). These oper-

ations are either hobbies, part time or a minor enterprise in a larger agricultural undertaking. By far the largest group, 63 percent of those reporting, had between 100 and 500 beef animals. Another 17 percent had herds of 500 to 1,000 head, and 9 percent reported having 1,000 or more head.

Breeds Raised

The most prevalent breeds of beef cattle reported were Hereford (19 percent), Angus/Hereford cross (20 percent) and British/European crosses (25 percent). British includes Angus, Hereford, Shorthorn and several minor breeds. Charolais, Gelbvieh, Holstein, Limousin, Salers and Simmental are the principal European breeds. Other animals being raised consist of the various individual breeds and other crossbreeds, including Zebu or Brahman crosses (Table 3).

Forage Base

Most of the respondents, 86 percent, reported using owned (deeded) land as an animal-harvested feed source (Table 4). But nearly one-fifth to more than two-fifths grazed animals on leased land or permits, either private

Table 1. Number of beef animals per operation, class.

	No. of operations	Average no. of animals	Variation in no. of animals
Cows	279	201	9 to 2,000
Replacement heifers	251	39	2 to 800
Stockers (1 yr up)	143	145	1 to 3,100
Calves	260	185	1 to 2,000
Bulls	255	11	1 to 105
Feedlot	15	316	1 to 3,300

Table 2. Frequency distribution of total cattle numbers per operation (N = 315).

Size class	Frequency	Percent of operations
(No. of animals)	(No. of operations)	(Each size class)
1 to 99	35	11
100 to 499	198	63
500 to 999	55	17
1,000 and more	27	9
	315	100

or public (BLM, Forest Service, State). The variation here is as great as with animal numbers: The averages blend operations with as few as 2 acres or AUMs to tens of thousands.

Harvested Feed Supply

More than three-fourths of reporting cattlemen produced alfalfa hay. In addition, 37 percent grew grass hay; 23 percent harvested silage and 9 percent produced grain for feed (Table 5). Commercial concentrates, including mineral supplements, were purchased by 30 percent of the operators, and 27 percent bought alfalfa hay. Only a small percentage of beef producers reported buying other feed-stuffs.

Cattle Marketings

Numbers Sold

Table 6 records the classes of beef animals marketed: calves, yearlings, stockers (over one year), warmed-up (initial drylot feeding), finished (slaughter grade) and other (includes dry cows, bulls, culls, etc.). Only 14 percent of the respondents reported selling finished animals; 11 percent sold warmed-up cattle. Other sales were of range-grown beef, with more operations selling younger animals.

Distribution of marketings by size class (number of animals) reveals that 38 percent of the operators sold fewer than 100 total head in the previous year (Table 7). Some sold many fewer, given the low end of the range of sales volume shown in Table 6. The same percentage sold between 100 and 249 head. The remaining 25 percent marketed 250 or more animals, divided nearly evenly between those selling 250 to 499 head and those selling 500 or more.

Table 3. Primary breed of cattle raised (N = 315).

	Percent of operations
British:	
Angus	6
Hereford	19
Other (Shorthorn, Galloway, Devon, Murray, British crosses)	4
European:	
Simmental	4
Other (Charolais, Holstein, Limousin, Salers, Gelbvieh, European crosses)	5
Crossbreeds:	
Angus x Hereford (Black baldy)	20
British x European	25
Zebu or Brahman crosses (Santa Gertrudis, Beefmaster, Brangus, etc.)	3
Other:	
Includes more than one breed and other combinations	7
No information	6

Table 4. Forage base per operation, by source.

	Number of operations	Average units of forage	Variation in forage units	Percent of operations
Deeded land (acres)	272	1,640	2 to 19,000	86
Private lease (acres)	96	1,006	2 to 10,000	30
BLM (AUM)	131	929	7 to 7,224	42
Forest Service (AUM)	74	982	15 to 22,000	23
State lease (AUM)	56	385	2 to 4,000	18

Market Weights

Reported average weights of animals sold were about as expected, although some individual responses may raise doubts as to definition of class of animal or accuracy of estimate or recall. By classes, average market weights were approximately 550 pounds for calves, 750 pounds for yearlings, 800 pounds for stockers and warmed-up animals, 1,100 pounds for finished animals and 1,150 for "other" (Table 8).

Selling Season

Calf sales were highly concentrated in the fall (49 percent of operations) and winter (30 percent) seasons (Table 9). Seasons are defined by calendar quarters (i.e. fall includes October through December; winter is January through March). Older animals were sold more uniform-

Table 5. Harvested feed tonnage per operation, by source and type.

	Number of operations	Average (tons)	Variation (tons)	Percent of operations
Produced:				
Alfalfa hay	247	544	2 to 3,500	78
Grass hay	118	418	3 to 10,000	37
Silage	74	1,278	10 to 10,000	23
Grain	28	344	20 to 3,000	9
Purchased:				
Alfalfa hay	86	202	10 to 1,400	27
Grass hay	21	109	10 to 520	7
Silage	12	554	10 to 2,000	4
Grain	11	77	4 to 275	3
Concentrate	93	24	1 to 640	30

Table 6. Number of cattle marketed, by type of operation.

	Number of operations	Average no. sold	Variation in no. sold	Percent of operations
Cow-calf*	135	142	6 to 1,900	43
Cow-calf-yearling	120	138	8 to 1,000	38
Stocker steers	60	143	5 to 1,000	19
Warmed-up	36	241	5 to 2,100	11
Finished	45	516	3 to 10,000	14
Other	40	64	3 to 500	13

*Class of animal sold is bold.

Table 7. Frequency distribution of total cattle sales per operation (N = 315).

Size class	Frequency	Percent of operations
(No. of animals)	(No. of operations)	(Each size class)
0 to 99	121	38
100 to 249	117	37
250 to 499	40	13
500 and more	37	12
	315	100

Table 8. Weight of cattle marketed, by type of operation.

	Number of operations	Average weight (lb)	Weight variation (lb)
Cow-calf*	127	556	210 to 670
Cow-calf-yearling	117	740	400 to 1,100
Stocker steers	56	781	400 to 1,075
Warmed-up	35	806	600 to 1,200
Finished	43	1,098	850 to 1,150
Other	30	1,141	600 to 1,600

*Class of animal sold is bold.

ly throughout the year, including sales in more than one season by individual operators. Cull animals were most often sold in the fall (45 percent of operations) or in more than one season (28 percent).

Production and Marketing Practices

This section of the survey was designed to get information on beef producers' familiarity, use and interest with respect to production and marketing techniques, practices and information sources. The production aspects pertain to performance testing and record keeping, and to certain advanced technology methods. The marketing areas include sales methods and market information.

Performance Records/Testing Programs

Questionnaire recipients were asked to indicate whether they were not familiar with, knew about but didn't use, used once or sometimes or used regularly each of eight performance records and/or testing programs. They were also asked whether they would like to learn about or try each program.

The programs listed pertain to measuring growth, reproductive efficiency, death loss and carcass quality and to several genetic/physiological programs (progeny testing, lean beef production, embryo transfer, artificial insemination).

Only one of the eight activities was used regularly by a majority of the respondents: 51 percent reported they

kept records on reproductive efficiency (percent calf crop, length of calving season). Forty-six percent recorded death loss or weaning rate. Growth measurements, such as weight gain or feed conversion, were a regular practice by 29 percent of those surveyed. However, 1 in 10 was not familiar with programs for measuring growth; nearly 1 in 4 know about but didn't use them; 1 in 6 would like to learn about or try them.

The practice of carcass grading and evaluation was not used by many producers, but 20 percent indicated that they would like to learn about or try it (Table 10).

Among the programs involving genetic or physiological phenomena, bull progeny testing was most often used with 24 percent of respondents using it and another 24 percent indicating they knew of it but didn't use it. Very few operators were involved in a lean beef production program: 15 percent were unfamiliar with it and 27 percent knew of it but didn't use it. But 31 percent reported an interest in learning about or trying it. A majority of respondents didn't know about or didn't use embryo transfer, but 12 percent would like to learn about or try this technology.

Marketing Methods

Auction and direct sales were by far the most prevalent outlets for beef cattle producers responding to the survey, with 56 percent of operators using each method regularly. Special auction sales (feeder sales, purebred sales, etc.) were used by 17 percent. One-half of cattlemen didn't know about or use electronic auction sales; the other half

Table 9. Selling season by class of animals.

	Winter ¹	Spring ²	Summer ³	Fall ⁴	More than one season	Number of operations
	(Percent of operations)					
Calves	30	9	3	49	8	190
Yearlings and older	14	18	24	24	20	209
Cull animals	9	7	10	45	28	229

¹January through March

²April through June

³July through September

⁴October through December

Table 10. Percentage of operators familiar with, using or interested in selected beef cattle performance records/testing programs (N = 315).

	Not familiar with	Know about; don't use	Used once or sometimes	Use regularly	Would like to learn about or try	No response
Growth (wt. gain; feed conversion)	10	23	11	29	17	26
Reproductive efficiency (% calf crop; length of calving season)	6	11	6	51	13	25
Death loss (weaning rate)	8	11	4	46	9	30
Carcass grading/evaluation	9	34	6	9	20	42
Bull progeny testing	9	24	6	24	11	37
Lean beef production program	15	27	2	7	31	49
Embryo transfer	14	43	2	2	12	39
Other performance test: AI, seed bull evaluation	*	*	1	2	0	96

* = less than 0.5

didn't respond to this item. One in eight indicated an interest in learning about or trying electronic marketing, however (Table 11).

Forward sale contracts, futures market contract hedging and futures market options were seldom used in marketing beef cattle, according to the respondents. About one-half didn't know of them or had never used them. Most of the remainder didn't reply. But a significant minority (17 to 23 percent) wanted to learn about or try one or more of these marketing tools.

Two other marketing arrangements, retained ownership (custom feeding/slaughtering) and group marketing (pools) were similarly unknown, unused or unreported. But 1 in 6 operators reported an interest in each method.

Marketing Information and Market News Sources

Information on which to base production and marketing programs is needed both for deciding what and how much to produce (resource allocation, in economic terminology) and for determining the specific time, place and method of sale. The first type of knowledge is typically

referred to as outlook or market projection information. The second is commonly called market news, market reports, market price quotations or similar terms.

Sources for the second type of information were sought in this survey, although in some cases outlook or projections are reported along with market news. Results are shown in Table 12.

The beef producers responding to this survey are using auction reports (74 percent), newspaper (65 percent) and radio/TV (61 percent) regularly as market news sources. When once or sometimes use is included, these sources were cited by 74 to 84 percent of respondents.

The second most popular types of market news sources included subscription service (Farm Bureau, Cattlefax, etc.), livestock dealers and USDA market news reports, each used regularly by about one-third of those surveyed. Including occasional use, these sources were each listed by about one-half of the producers.

Market news reports from the Cooperative Extension Service were used by few respondents. No program has been established for issuing such reports on a regular system-wide basis, although some individual Cooperative Extension Service staff may provide market news information for their clientele.

Table 11. Percentage of operators familiar with, using or interested in selected beef cattle marketing methods (N = 315).

	Not familiar with	Know about; don't use	Used once or sometimes	Use regularly	Would like to learn about or try	No response
Auction	1	2	20	56	2	21
Special auction sales	5	27	14	17	7	37
Electronic auction sales	13	36	3	1	13	47
Direct (private treaty) sales	2	6	20	56	6	16
Forward contract sales	14	29	8	6	17	43
Futures market (hedging)	15	35	4	3	21	43
Futures market options	16	36	1	*	23	47
Retained ownership (custom feeding/slaughtering)	6	32	13	6	16	43
Group marketing (pools)	18	27	4	1	17	49
Other marketing method: "Maverick marketing systems"	0	0	0	*	1	99

* = less than 0.5

Table 12. Percentage of operators familiar with, using or interested in selected beef cattle marketing information/market news sources (N = 315).

	Not familiar with	Know about; don't use	Used once or sometimes	Use regularly	Would like to learn about or try	No response
Radio/TV	2	6	13	61	1	18
USDA Market News	5	12	23	32	4	28
Extension Service	10	19	16	19	5	35
Auction reports	2	3	10	74	3	11
Newspaper	0	5	16	65	1	15
Dealers	7	8	18	33	3	34
Subscription service (Farm Bureau, Cattlefax, etc.)	7	17	10	38	5	28
Other market information: Personal contact, broker	*	0	0	3	0	97

* = less than 0.5

Organization and Operator Characteristics

Organizational Structure

Two-thirds of the beef cattle operations reported in the survey were self-proprietorships. One in six was a partnership; one in seven, a family corporation. No public corporations were reported (Table 13).

Operator Age, Education and Production/Marketing Experience

Nearly 25 percent of responding beef cattle producers were under 40 years of age. Of the others, 37 percent were 44 to 55 years old and 40 percent were over 55 years of age (Table 14).

Post-high school education was reported by 62 percent of respondents, including 27 percent who had completed college and 8 percent who had post-graduate training. Additionally, 31 percent had completed high school (Table 15).

The survey respondents were an experienced group, with 59 percent citing more than 20 years experience as adults in producing and marketing beef cattle. Another 29 percent had 10 to 20 years experience, and only 7 percent had less than 10 years (Table 16).

Labor and Financial Inputs

Source and Amount of Labor

Full-time family labor was employed on about 80 percent of beef cattle operations, an average of 1.8 persons per unit. The same average level of part-time family labor

Table 13. Organizational structure of beef cattle operations (N = 315).

	Percent
Self-proprietorship	67
Partnership	17
Family corporation	14
Public corporation	0
Not specified	2

Table 14. Age of beef cattle operators (N = 315).

	Percent
Under 40 years	23
40 to 55 years	37
Over 55 years	40

Table 15. Educational level of beef cattle operators (N = 315).

	Percent
Less than high school	4
High school	31
Some college	27
College	27
Post-graduate	8
Not specified	2

was used in one-half of the operations. Thirty-five percent had full-time hired labor and 44 percent hired on a part-time basis, in each case employing an average of about two workers. In keeping with the diversity in size of beef operations, the labor force varied greatly among units: 1 to 6 each full- and part-time family members, 1 to 12 full-time hired workers and 1 to 24 part-time hired hands (Table 17).

Investment

Questionnaire recipients were asked the market or replacement value of their investment in real estate, livestock, and machinery and equipment. The dollar classes are broad enough to allow for alternate definitions (market or replacement value), as well as for the imprecise estimates to be expected in survey data. The results, tabulated in Table 18, give a general picture of the structure of beef cattle operations reported, by investment categories.

Real Estate — One-half of reporting operators had \$100,000 to \$500,000 invested in land and buildings; more than one-third had in excess of one-half million dollars in real estate. Less than 10 percent had less than \$100,000 real estate investment.

Livestock — Investment level in livestock was evenly divided between operations with less than \$100,000 (46 percent) and those with \$100,000 to \$500,000 (45 percent). Only 6 percent reported more than \$500,000 livestock value.

Machinery and Equipment — A majority (57 percent) of operations had less than \$100,000 invested in machinery and equipment, and 37 percent had investments of \$100,000 to \$500,000. Only 4 percent had more than one-half million dollars worth of machinery and equipment.

Table 16. Operator adult experience in beef production/marketing (N = 315).

	Percent
Less than 10 years	7
10 to 20 years	29
More than 20 years	59
Not specified	5

Table 17. Source and amount of labor in beef cattle operations (N = 305).

	Average no. of workers	Variation in no. of workers	No. of operations	Percent of operations
Full time family	1.8	1 to 6	242	79
Part time family	1.7	1 to 6	145	48
Full time hired	1.9	1 to 12	107	35
Part time hired	2.1	1 to 24	133	44

Table 18. Investment in beef cattle operations, by type (N = 315).

Market or replacement value	Real estate	Livestock	Machinery and equipment
(Percent of operations)			
Less than \$100,000	9	46	57
\$100,000 to \$500,000	52	45	37
More than \$500,000	36	6	4
Not specified	3	3	2

Debt/Asset Ratios

Debt/asset ratio measures debt as a percentage of assets. The categories usually assigned for agricultural businesses are less than 40 percent, 40 to 70 percent and more than 70 percent. The first category is generally considered a healthy financial situation, the last an exposed or risky circumstance. Respondents were in the less than 40 percent debt/asset range in 7 of 10 cases. One-fourth of operators reported 40 to 70 percent debt/asset ratio. Only 5 percent listed their operation as having more than 70 percent debt/asset ratio (Table 19).

Aspirations and Problems

The section of the questionnaire covering beef cattle producer goals, preferences and limitations was open-ended. That is, the questions required a narrative statement by the respondent, rather than recording a number or checking from a choice of answers. The expected and realized result was that not all respondents completed this part of the questionnaire. From 96 to 220 of the 315 questionnaires had answers to the various questions. The number of responses (N) is shown in the tables.

Operator Goals

The question posed was "What are your goals as a beef producer for (a) the coming year, (b) the next 5 years, (c) the remainder of your career?" The answers are listed in Table 20 and summarized below:

- a. **The Coming Year** — For the coming year (1987), 35 percent of producers listed a goal summarized as "improve efficiency; lower costs; improve management or knowledge." Next most common goals, listed by 17

and 15 percent, respectively, were "expand size" and "no change in operation."

- b. **Next 5 Years** — Over a 5-year period, the two most frequently stated goals were again improvement of management and efficiency (24 percent) and size expansion (22 percent). Other 5-year goals, mentioned by 10 percent or more of respondents, were "pay off debt; financial independence; build equity" (13 percent), "change type of operation; diversify" (12 percent) and "no change in operation" (10 percent).
- c. **Remainder of Career** — "Improve efficiency" and "improve quality" were each mentioned by 20 percent of operators as long term goals. Other goals most mentioned: 17 percent planned to "liquidate; sell out; retire; transfer to younger generation;" 13 percent had no changes in mind, and 11 percent hoped to reduce or pay off debt.

For all time frames, no more than 1 percent of producers listed "reduce size" as a goal. "Improve marketing" was cited by only 6 percent as a next year goal, and by only 2 percent and 1 percent as 5-year and career goals, respectively. And "improve quality" was listed by only 5 to 10 percent of operators as a goal for next year or the next 5 years.

Production efficiency and expansion appear to dominate the goal structure for Idaho beef producers. Conversely, few aspire to improve the marketing or quality (except in the long term) of their product.

Operators' Preferences For Achieving Goals

The producers were next asked: "Given a choice, how would you achieve your goals, that is, what is your preferred (a) beef production system (example: cow-calf), (b) beef marketing system (example: auction), (c) beef financing system (example: full equity)?" The example term was included to indicate the distinction among the three parts of the question. We recognized that citing examples might also suggest answers, and this may have happened. However, the distribution of answers corresponds quite closely with the present operations of respondents. Details, by sub-questions, are shown in Tables 21, 22 and 23, and are summarized here:

- a. **Production System** — The cow-calf system was preferred by 69 percent of those answering the question, and 14 percent named the cow-calf-yearling setup. No other production system was cited by more than 6 percent of the operators.
- b. **Marketing System** — As with their actual operations, producers stated a preference for direct, private treaty or contract sale of their animals (51 percent) and sale by auction (31 percent). Six percent listed custom feeding or retained ownership. No other system was named by more than 3 percent of the operators.
- c. **Financing System** — This group of cattlemen was nearly unanimous: 83 percent preferred to finance their operation through a "full equity, full ownership, self-

Table 19. Debt/asset ratios in beef cattle operations (N = 315).

Debt as a percentage of assets	Percent of operations
Less than 40 percent	69
40 to 70 percent	24
More than 70 percent	5
Not specified	2

Table 20. Beef cattle operators' goals, by time frame.

	Next year (N = 181) percent	Next 5 years (N = 188) percent	Remainder of career (N = 144) percent
No change in operation	15	10	13
Expand size	17	22	9
Reduce size	1	1	0
Change type of operation; diversify	8	12	8
Improve quality	5	9	20
Improve marketing	6	2	1
Improve efficiency; lower costs; improve manage- ment or knowledge	35	24	20
Pay off debt; financial inde- pendence; build equity	8	13	11
Liquidate; sell out; retire; transfer to younger generation	6	6	17

financed or debt-free" system. This strong option for full ownership of resources may be more idealistic than realistic. It also may have been suggested by the example in the question. But it is not grossly inconsistent with the debt/asset ratios reported by the survey respondents, i.e. 69 percent with less than 40 percent debt/asset ratio (this includes those reporting no debt). Of the remaining 17 percent of answerers, 10 percent expressed a preference for a "new credit line or outside capital" and 6 percent for "greater equity."

Limiting Factors on Operations

The final item on the questionnaire was a request to "Indicate any limitations on your operation, regarding land, family labor (age, health, etc.), hired labor, production problems, marketing problems, credit/financing problems." The responses were summarized by grouping into common concerns for each problem area. This

Table 21. Production system preferred by beef cattle operators (N = 220).

	Percent
Cow-calf	69
Cow-calf-yearling	14
Calf-yearling	3
Stocker-feeder	6
Cow-calf-feedlot-slaughter	4
Purebred; registered; breeding stock	4

Table 22. Marketing system preferred by beef cattle operators (N = 188).

	Percent
Auction	31
Direct; private treaty; contract	51
Custom feeding; retained ownership	6
Forward contract	3
Video; electronic marketing	1
Hedging; futures	1
Sell on rail; grade and yield	2
Cooperative; group marketing	3
Private sale; special sale	2

Table 23. Financing system preferred by beef cattle operators (N = 135).

	Percent
Full equity; full ownership; self financed; debt free	83
Greater equity; 80 percent equity	6
New credit line; outside capital	10
Leased cows; leasing	1

Table 24. Land limitations for beef cattle operators (N = 127).

	Percent
Amount of range; pasture; grazing	48
Productivity of land	7
Rent; grazing rates; debt	7
Water; irrigation	10
Lack of hay	3
Land development; non-agricultural competition	2
Fencing; facilities; calving area	2
No problem	21

resulted in from four to eight items in each area, which were then recorded as a percentage of total responses for the problem area.

Land — The amount of range, pasture or grazing land was named as a limitation for nearly one-half of the operators who responded to this item. The only other limitation cited by as many as 10 percent was water or irrigation. Twenty-one percent reported no land limitations (Table 24).

Family Labor — Age was listed by half of those answering. Lack of children or none available or interested in the operation was a problem for 15 percent; health was cited by 11 percent. Twenty-two percent stated they had no family labor problem (Table 25).

Hired Labor — The primary limitation was economic, i.e. cost or wage rate, reported by 45 percent of those answering. Another 17 percent gave quality or attitude as the major problem. Hired labor was ruled out as a limiting factor by 36 percent of operators (Table 26).

Production Problems — While one-fourth of the respondents specified that they had no production problems, the total number of items cited (eight) was greater than for any other area. Cost or interest rate was reported by 17 percent. Disease and weather or climate were each named by 15 percent. Ten percent listed reproductive efficiency. Other items, each reported by 1 to 8 percent of answerers, included calving problems, predators, winter feed supply and forage supply (Table 27).

Table 25. Family labor limitations for beef cattle operators (N = 114).

	Percent
Age	49
Health	11
No children or none available; alone	15
Lack of interest or skills	3
No problem	22

Table 26. Hired labor limitations for beef cattle operators (N = 96).

	Percent
Cost; wage rate; can't afford; expensive	45
Quality; skill; attitude	17
Not available or can't retain	2
No problem	36

Table 27. Production problem limitations for beef cattle operators (N = 105).

	Percent
Cost; interest rate	17
Disease; death loss	15
Weather; climate	15
Reproductive efficiency; calving percentage; weaning rate	10
Calving problems	5
Predators	1
Winter feed supply; hay	4
Grazing; forage supply	8
No problem	25

Marketing Problems — The most often mentioned marketing problem was the lack of alternatives or competition (29 percent of respondents). Level or instability of price or demand was listed by 22 percent. Other marketing limitations were lack of knowledge, information or time, politics and government policy and distance from market. Twenty-two percent noted they had no problems (Table 28).

Credit/Financing Problems — While 44 percent reported no problems in this area, 26 percent cited cost or interest rate level and 18 percent indicated credit was not available. Level of debt affected 9 percent, and 2 percent had a cash flow problem (Table 29).

Table 28. Marketing problem limitations for beef cattle operators (N = 111).

	Percent
Distance from market	6
Lack of knowledge; information or time	13
Lack of alternatives or competition	29
Politics; government policy	8
Low price; low demand; instability	22
No problem	22

Table 29. Credit, financing problem limitations for beef cattle operators (N = 117).

	Percent
Cost; interest rate	26
Unavailable	18
Too much debt; too little equity	9
Cash flow problem	2
No problem	44

Summary and Implications of Results

This report records the results of a survey of Idaho beef cattle producers. The purpose was to document the management and marketing practices and problems of the industry, and to identify structural characteristics of operations and operators.

The results give insights for research and education needs and desires, within the limits of the information received. These limits, common to all surveys, include the ability of the respondents to represent all beef cattle producers in Idaho and the accuracy of the information provided. Indications that the respondents included a broad cross-section of the beef cattle industry are evident in the range of type and size of operations, as well as in the characteristics of the operators. Thus the results can be judged a valid portrayal of the Idaho beef cattle industry, without verifying statistical significance.

The major findings and their implications are discussed under seven headings: (1) structure and organization, (2) production performance, (3) marketing, (4) operator characteristics, (5) financial aspects, (6) aspirations and (7) problems. Each is addressed in that order.

Structure and Organization — Few, if any, agricultural commodity sectors have the size diversity found in beef cattle. Herds vary literally from one animal to thousands of head. The beef cattle enterprise may be a hobby, part time, diversified activity or specialized operation. In Idaho, most are self proprietorships, but partnerships and family corporations are quite common. No single research or extension program will be of interest or value to more than a fraction of the total industry.

Production Performance — Several proven production performance programs are unknown or unused by many Idaho beef producers. Statistical analysis (t-test) revealed that cattlemen with larger operations and more formal education were more likely to be monitoring growth rate in their herds, and to use bull progeny testing and carcass grade evaluation. In contrast, older operators were less likely to be measuring reproductive efficiency and death loss or using progeny testing and carcass evaluation. Older and more experienced operators were less interested in learning about or trying such technology as growth performance records, bull testing and the lean beef program. The implication is that research and extension

programs need to be designed for specific segments of the industry.

Marketing — While most producers reported selling either direct or through auctions, significant numbers expressed an interest in various types of forward or futures pricing arrangements and in custom feeding and group marketing activities. Market news came from a variety of sources, and little interest was expressed in learning about or trying others. Exploration of alternative pricing and/or marketing provisions appears to merit consideration.

Operator Characteristics — While age of the responding cattlemen was diverse, levels of both education and experience are quite high. To the extent these are representative of all Idaho beef producers, the inference for research and extension programs is mixed: educational level is usually positively related to adaptability to change; age and experience are less likely to be.

Financial Aspects — Investment is related to size of operation and is another measure of the diversity of beef cattle operations. The debt load of survey respondents was quite favorable, indicating that the financial status of Idaho cattlemen may not be as precarious as that of agricultural producers in other commodities and regions.

Aspirations — Goals cited were to become larger and more efficient in production. Little interest was expressed in improving either quality, except over a long term period, or marketing. Means for achieving goals were closely related to current operating methods. Although a mail questionnaire is not the ideal means for stimulating thoughts on goals and preferences, the results nevertheless present a challenge to those who seek to improve the well-being of the Idaho beef cattle industry: How to bring about change when the tendency is to continue present activities.

Problems — Among the problems cited, several are not amenable to corrective activity, at least on a state or local level. These include problems associated with land and labor availability and cost, weather, interest rates, and the level and stability of cattle prices. Other stated problems are potentially solvable: animal diseases, market alternatives and competition and credit availability. Specifics of the latter category of problems should be explored and considered for study.

Appendix: Questionnaire

CONFIDENTIAL

BEEF CATTLE MANAGEMENT/MARKETING STUDY
UNIVERSITY OF IDAHO DEPARTMENT OF AGRICULTURAL ECONOMICS

1. What are your typical cattle numbers for this time of year? cows _____; replacement heifers _____; stocker heifers & steers (yearlings & older) _____; calves (under 1 year) _____; bulls _____; other _____.
2. What is your acreage (A) and AUMs of forage? deeded land _____ A; private lease _____ A/AUM; BLM _____ AUM; Forest Service _____ AUM; State _____ AUM; other _____.
3. What is your annual tonnage (T) of home-produced and purchased feeds?
 (a) Produced: alfalfa hay _____ T; grass hay _____ T; silage _____ T; other _____.
 (b) Purchased: alfalfa hay _____ T; grass hay _____ T; silage _____ T; concentrate (blocks, meal, liquid supplement, etc.) _____ T; other _____.
4. What breed(s) of cattle do you raise (if crossbreds, what crosses)? _____

5. What type of production system (operation) do you have, and what is the annual marketed production?

	No.	Sold	_____	Ave. Market	Wt.	_____	lb.
cow-calf	"	"	_____	"	"	"	"
cow-calf-yearling	"	"	_____	"	"	"	"
stocker steers	"	"	_____	"	"	"	"
warm-up (self or custom)	"	"	_____	"	"	"	"
finishing (self or custom)	"	"	_____	"	"	"	"
other: _____	"	"	_____	"	"	"	"

6. What beef cattle performance records/testing programs are you familiar with, using or interested in? (check appropriate boxes)

	not familiar with	know about; don't use	used once or sometimes	use regularly	would like to learn about or try
growth (wt. gain, feed conversion)					
reproductive efficiency (% calf crop, length of calving season)					
death loss (weaning rate)					
carcass grading/evaluation					
bull progeny testing					
lean beef production program					
embryo transfer					
other performance test: _____					

7. What beef cattle marketing methods do you use or are interested in? (check appropriate boxes)

	not familiar with	know about; don't use	used once or sometimes	use regularly	would like to learn about or try
auction					
special auction sales					
electronic auction sales					
direct (private treaty) sales					
forward contract sales					
futures market (hedging)					
futures market options					
retained ownership (custom feeding/slaughtering)					
group marketing (pools)					
other marketing method: _____					

8. What beef cattle marketing information and market news sources do you use or are interested in? (check appropriate boxes)

	not familiar with	know about; don't use	used once or sometimes	use regularly	would like to learn about or try
radio/TV					
USDA Mkt News					
Extension Service					
auction reports					
newspaper					
dealers					
subscription service (Farm Bureau, Cattlefax, etc.)					
other market information: _____					

9. What month (or months) do you typically sell your calves _____; yearlings and older _____; cull animals _____?

10. Is your operation a self-proprietorship _____; partnership _____; family corporation _____; public corporation _____; other _____?

11. What is your age, education and experience?

(a) age level: under 40 _____; 40-55 _____; over 55 _____?

(b) educational level: less than high school _____; high school _____; some college _____; college _____; post-graduate _____?

(c) beef production/marketing experience (adult, or since age 18): less than 10 years _____; 10-20 years _____; more than 20 years _____?

12. How many people are employed in your operation?
 (a) family: number full time _____; number part time _____
 (b) hired: number full time _____; number part time _____
13. What is your investment (market or replacement value) in:
 (a) real estate: less than \$100,000 _____; \$100-\$500,000 _____; more than \$500,000 _____?
 (b) livestock: less than \$100,000 _____; \$100-\$500,000 _____; more than \$500,000 _____?
 (c) machinery and equipment: less than \$100,000 _____; \$100-\$500,000 _____; more than \$500,000 _____?
14. What is your debt/asset ratio (debts as a percentage of assets):
 less than 40% _____; 40-70% _____; more than 70% _____?
15. What are your goals as a beef producer for
 (a) the coming year (1987)? _____

 (b) the next five years? _____

 (c) the remainder of your career? _____

16. Given a choice, how would you achieve your goals, that is, what is your preferred
 (a) beef production system? (example: cow-calf) _____

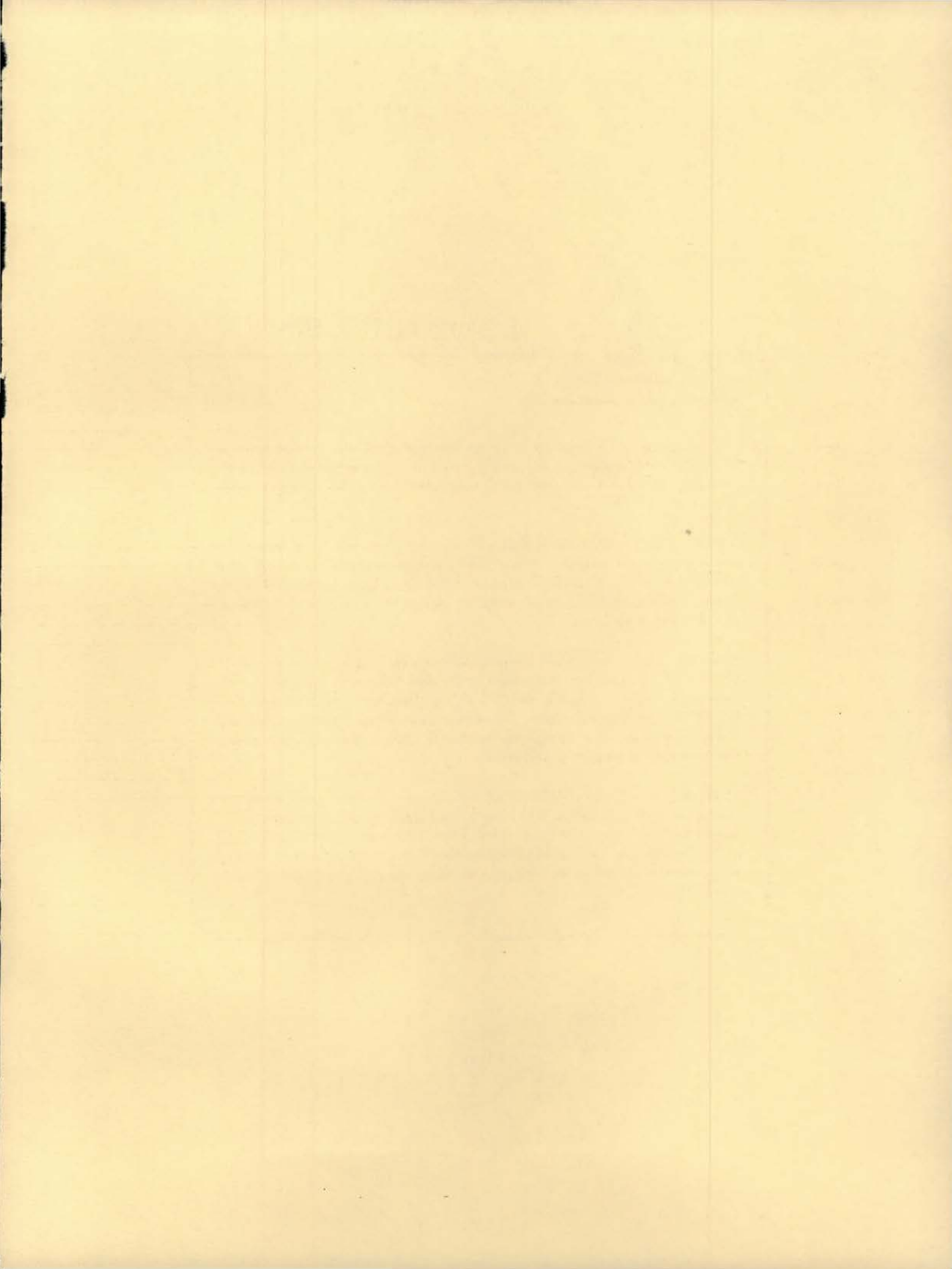
 (b) beef marketing system? (example: auction) _____

 (c) beef financing system? (example: full equity) _____

17. Indicate any limitations on your operation, regarding
 land: _____
 family labor (age, health, etc.): _____
 hired labor: _____
 production problems: _____
 marketing problems: _____
 credit/financing problems: _____

Thanks for taking the time and thought to complete this questionnaire: If you would like to be considered for further involvement in this study give us your

Name: _____
 Address: _____
 Phone number: _____





SERVING THE STATE

Teaching . . . Research . . . Service . . . this is the three-fold charge of the College of Agriculture at your state Land-Grant institution, the University of Idaho. To fulfill this charge, the College extends its faculty and resources to all parts of the state.

Service . . . The Cooperative Extension Service has offices in 42 of Idaho's 44 counties under the leadership of men and women specially trained to work with agriculture, home economics and youth. The educational programs of these College of Agriculture faculty members are supported cooperatively by county, state and federal funding.

Research . . . Agricultural Research scientists are located at the campus in Moscow, at Research and Extension Centers near Aberdeen, Caldwell, Parma, Tetonian and Twin Falls and at the U. S. Sheep Experiment Station, Dubois and the USDA/ARS Soil and Water Laboratory at Kimberly. Their work includes research on every major agricultural program in Idaho and on economic activities that apply to the state as a whole.

Teaching . . . Centers of College of Agriculture teaching are the University classrooms and laboratories where agriculture students can earn bachelor of science degrees in any of 20 major fields, or work for master's and Ph.D. degrees in their specialties. And beyond these are the variety of workshops and training sessions developed throughout the state for adults and youth by College of Agriculture faculty.