

SURVEY OF CATTLE FEEDERS: FEEDER CATTLE SPECIFICATIONS FOR THE TWENTY-FIRST CENTURY

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Story in Brief

Cattle feeding companies were asked to complete a four-page questionnaire regarding feeder cattle specifications. Nineteen companies comprised of 47 feedlots responded either in written form or by phone interview. Companies with a feeding capacity of less than 35,000 head (n = 10) were categorized as “small” while those with the capability of feeding more than 35,000 head (n = 9) were classified as “large”. The survey included questions regarding the importance of various feeder cattle traits for their companies today and in the future. Traits were rated by respondents on a 1 to 10 scale, 1 = not important to 10 = extremely important. Results were summarized across all yards, by capacity and according to method utilized in marketing cattle. Cattle feeding enterprises responded that important feeder cattle traits included feed efficiency, health, misfits, price, biological type and muscling. In order to predict high quality grading cattle, feedyard managers placed more emphasis on breed type and age than supplier, origin or coat color of cattle. Feedyards perceived that quality grade, yield grade, muscling, food safety and uniformity would be of even greater importance in the future. Enterprises selling cattle in the cash determined dressing percentage to be of greater importance in the future than yards selling cattle on a carcass basis. The top three considerations for future feeder cattle purposes included carcass merit, cattle health and genetic uniformity.

(Key Words: Beef Cattle, Feedlot, Carcass.)

Introduction

Cow-calf producers are challenged to develop the right kind of cattle for long-term improvement of the beef industry. Feeder cattle specifications are necessary to target profitable feedlot efficiency and carcass merit. Value of the live calf is influenced by feed efficiency, rate of gain, death loss, number of chronics and medical costs. Feed efficiency and cost of gain have a great impact on feedlot profitability. Proper health management with consideration to injection type, timing and location is imperative for added value, quality

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assurance and food safety. Feeder cattle specifications are needed for appropriate biological type, functional genetics for growth and efficiency as well as progressive management practices to achieve optimal carcass merit for future industry focus. Therefore, the purpose of the present survey was to 1) characterize current feeder cattle specifications used by cattle feeding companies and 2) identify primary considerations of feeder cattle in the 21st century.

Materials and Methods

Cattle feeding companies were asked to complete a four-page questionnaire regarding twenty-first century feeder cattle specifications. Nineteen companies comprised of 47 feedlots responded either in written form or by phone interview. The at-one-time capacity represented 1,825,000 head or over 4.1 million head of cattle on an annual basis (assuming a 2.25 turns per feedlot per year). Table 1 presents the companies, number of feedyards owned by respective companies and total one-time feeding capacity.

Companies were categorized as “small” with less than 35,000 head capacity (n = 10) or “large” operations (n = 9). Feeders were also classified based on method of marketing slaughter cattle. Companies classified as “cash” included those marketing over 50% of the cattle on a live basis (n=15); remaining yards were labeled “carcass basis” marketing (n=4).

The survey included questions for respondents to score pertaining to the importance of various feeder cattle traits for their companies today and in the future. Traits were rated on a 1 to 10 scale, 1 = not important to 10 = extremely important. Results were summarized across all yards and by size categories. In addition, managers were asked to give their top five considerations for feeder cattle purchases in the twenty-first century.

Results and Discussion

Marketing Methods. Cattle feeding companies had direct control for 40% of their feeder cattle purchases, 31% and 50% for small and large lots, respectively. The remaining 60% of the companies reflect the custom feeding service for their clientele. Responses to the questionnaire were highly dependent on the marketing methods utilized by the feeding companies. When asked what percentage of their cattle were sold on a cash or carcass basis, 67% of respondents sold on a live(cash) basis (72% for small and 62% for large feedyards). Carcass basis sales were divided into formula, grade-yield, contract and pricing grid. Table 2 summarizes these marketing methods stratified by feeding company size.

Sorting Cattle on Feed. Opinions were mixed among respondents relative to the sorting of cattle during the feeding period. Sixty-eight percent of the feedlot managers believed in sorting cattle already on feed; 72% responded that this technique would become more popular in the twenty-first century. Small companies believed in sorting more strongly than large operations (80% vs 56%), with similar response for its popularity in the future (78% for small vs 67% for large).

Individual Animal Identification. Feedyards were asked if they envisioned the use of individual animal identification for payment and feedback systems in the future. Two-thirds of the participants favored the use of individual identification (60% for small and 75% for large feedyard companies). Currently some 32% of their customers request feedback information on carcass merit, although responses from the 19 companies ranged from .01 to 99.9%. Responses were similar by feedyard size, 23% and 22% for small and large operations, respectively. Sixty-three percent of the respondents had select suppliers of feeder cattle. Large companies tended to have a greater percentage of select suppliers (78%) than small feedlots (50%).

Importance of Feeder Cattle Traits. Table 3 presents the average ratings relative to the importance of various feeder cattle traits. Overall, feed efficiency, health, “misfit cattle” and price received the highest scores for importance. Regardless of company size, the health, feed efficiency and incidence of misfit cattle were categorized as very important. Also, small feedyard representatives gave higher scores to cattle biological type when compared with large companies.

Table 4 summarizes the importance of various traits used to identify feeder cattle with the potential to have a high USDA quality grade. Among all respondents, breed/biological type was of most importance, regardless of company size. Breed type was followed by age, supplier, origin of the cattle and coat color.

Table 5 presents the importance of various feeder cattle quality factors to participants in the future. All feedyards gave high rankings to USDA quality and yield grade along with muscling. Cattle health and food safety issues were important, particularly in responses from the small companies. Dressing percentage received the lowest score; however, the scores ranged from 1 to 10. Feedyards selling in the cash determined dressing percentage to be of greater importance in the future than yards selling cattle on a carcass basis (7.8 vs 4.8, respectively).

Future Considerations. Table 6 summarized the primary considerations for feeder cattle specifications in the future. The majority of the feedyards contacted placed carcass merit (USDA yield and quality grade, muscling, red

meat yield), health and cattle uniformity via genetics as their primary interests. Responses were similar by feedyard size as well as for yards classified according to method of marketing. Small yards listed frame size and breed type in the top three; whereas, large operations listed cattle health, predictability of gain and feed conversion as their top three considerations. Feedyards selling cattle on a live basis (cash) considered carcass merit, health and preconditioning along with genetic uniformity to be important in the future, while enterprises selling cattle “in the beef” placed primary emphasis on carcass characteristics, health and preconditioning, genetic uniformity, frame size and age of cattle.

Implications

The trend for the future will be "consistency" achieved with progressive and properly managed genetics or sorting systems designed to package variable biological types into uniform groups. Advances in consistency are necessary because discounts for non-conformers greatly outweigh premiums awarded for superior merit.

Table 1. Participants, number of feedyards and one-time capacity

<u>Cattle Feeding Company</u>	<u>No. Feedyards</u>	<u>Capacity</u>
Continental Grain Cattle Feeding Div.	7	375,000
Cactus Feeders, Inc.	6	300,000
Caprock Industries	6	273,000
Hitch Enterprises Inc.	3	158,000
Matador Cattle Co.	5	145,000
Irisk and Doll	5	136,000
Brookover Companies	3	110,000
Supreme Feeders Co.	1	70,000
Cattle Empire Feedyard	1	60,000
Kearny County Feeders	1	30,000
HRC Feedyard	1	30,000
Wheeler Bros.	1	25,000
Ranger Feeders	1	25,000
S Bar	1	25,000
Whitham Farm Feedyard	1	19,000
Warner Feedyard	1	18,000
Neill Cattle Co.	1	11,000
Circle Feeders	1	10,000
C.Y. Cattle Co.	1	10,000
TOTAL	47	1,825,000

^a

Source: National Cattlemen Directions 1995 and personal communication.

Table 2. Marketing methods stratified by feedyard size.

Trait	Overall	Size of feedlot ^a	
		Small	Large
Live(Cash)	67.1	71.8	61.8
Formula	16.8	23.5	25.9
Contract	5.8	1.5	6.7
Grade & yield	6.2	1.2	2.8
Pricing grid	4.1	2.0	2.8

^aSmall = less than 35,000 head one-time capacity; Large = one-time capacity of 35,000 head or more.

Table 3. Importance of feeder cattle traits by size of feedlot.

Trait	Overall	Size of feedlot ^a	
		Small	Large
Feed efficiency	9.4 ^b	9.2	9.6
Health	9.4	9.5	9.3
Misfits	9.1	9.3	8.9
Price	8.7	8.8	8.7
Biological type	8.4	9.4	7.3
Muscling	8.4	8.8	8.0
ADG	8.2	8.2	8.2
Frame	8.2	8.5	7.8
Age	7.5	8.2	6.8
Weight	6.8	7.1	6.6
Origin	6.5	6.9	6.1
Color	4.5	4.2	4.9
Previous implant history	4.5	5.1	3.8
Horn/polled	3.7	4.0	3.3

^aSmall = less than 35,000 head one-time capacity; Large = one-time capacity of 35,000 head or more.

^bRatings: 1 = not important to 10 = extremely important.

Table 4. Feeder cattle traits used to identify high quality grade cattle by size of feedlot.

Trait	Overall	Size of feedlot ^a	
		Small	Large
Breed type	8.4 ^b	9.4	7.3
Age	7.7	8.4	6.9
Supplier	6.0	7.1	4.8
Origin	5.9	7.0	4.8
Color	5.7	7.1	4.8

^aSmall = less than 35,000 head one-time capacity; Large = one-time capacity of 35,000 head or more.

^bRatings: 1 = not important to 10 = extremely important.

Table 5. Future importance of various feeder cattle traits by size of feedlot.

Trait	Overall	Size of feedlot ^a	
		Small	Large
Quality grade	8.8 ^b	9.0	8.6
Yield grade	8.7	8.7	8.7
Muscling	8.6	8.9	8.2
Residue	8.3	8.8	7.9
Uniformity	8.3	8.6	8.0
Health history	7.4	8.9	5.8
Dressing percentage	7.2	8.3	5.9

^aSmall = less than 35,000 head one-time capacity; Large = one-time capacity of 35,000 head or more.

^bRatings: 1 = not important to 10 = extremely important.

Table 6. Primary considerations for feeder cattle purchases by size of feedlot and method of marketing.

Consideration	Overall	Size of feedlot ^a		Selling Method	
		Small	Large	Cash	Carcass
Carcass merit					
(quality/red meat yield)	16/19 ^b	8/10	8/9	13/15	3/4
Health/preconditioning	14/19	7/10	7/9	12/15	2/4
Uniformity/genetics	13/19	4/10	9/9	11/15	2/4
Predictability					
(ADG/feed efficiency)	10/19	3/10	7/9	8/15	2/4
Size(frame score)	8/19	5/10	3/9	6/15	2/4
Breed type	8/19	5/10	3/9	7/15	1/4
Source/Supplier	5/19	2/10	3/9	4/15	1/4
Price	2/19	1/10	1/9	2/15	0/4
Cattle age	2/19	1/10	1/9	0/15	2/4
Gender	1/19	1/10	0/9	1/15	0/4

^aSmall = less than 35,000 head one-time capacity; Large = one-time capacity of 35,000 head or more.

^bRatings: number identified over number of respondents.