EXT 763

A → Z Retained Ownership Company

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College of Agriculture

University of Idaho Cooperative Extension System

A to Z Retained Ownership Company

Description and Results of an Educational Program

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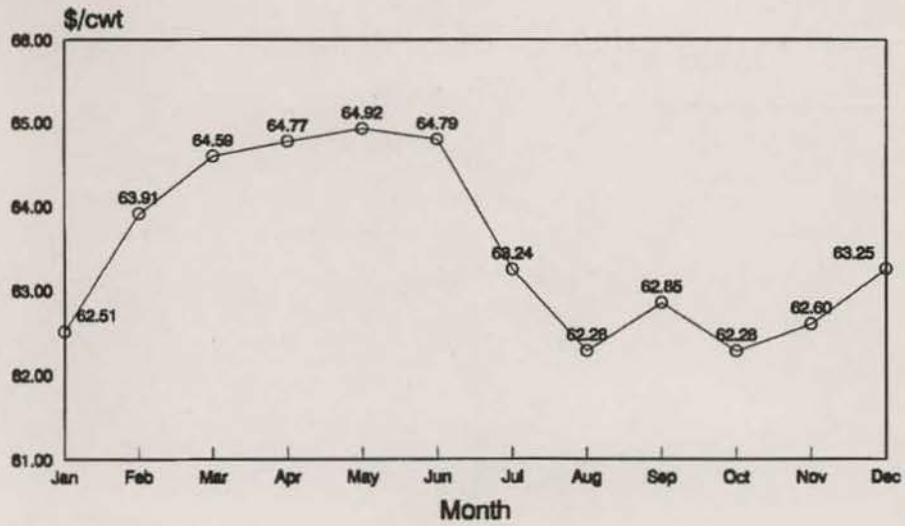
Cattle production in the Intermountain West is dominated by ranches producing weaned calves, which generally are sold to other parties for further steps in the beef production process. The forage base and environmental conditions of the area usually dictate a management system of spring calving, summer breeding, and fall weaning and sale of calves. Many cow-calf producers have no idea of cattle quality as the animals move through the feeding and slaughter stages of the beef production process.

Marketing alternatives for cow-calf producers are fairly limited given the restrictions of the production cycle. Supply and demand determine market prices and obviously affect profit levels for individual ranchers. Calf prices in the spring are usually relatively high, while fall prices are usually at the low point of the year (Fig. 1). The annual production cycle of cattle ranches means a lack of calves in the spring coupled with a demand for grass calves and an abundance of weaned calves in the fall destined for feedlots, backgrounding operations, and other markets.



Source: Livestock Market Information Center.

Fig. 1. Average monthly steer price, 500 to 60(

Many cow-calf producers have explored and used backgrounding to produce yearling cattle or other management strategies to enhance profitability. Few ranchers have examined the possibility of retaining cattle ownership through the feedlot and slaughter phases of beef production. With new methods available for estimating potential return and risk on retained ownership programs (Marousek et al. 1992), ranchers can evaluate alternative management and marketing methods in order to make informed decisions.

This publication should interest ranchers considering retained ownership as a means of enhancing profitability. University faculty may find the bulletin helpful in designing educational marketing programs for cattle producers.

Objectives

In an effort to provide southwestern Idaho ranchers with information concerning retained ownership, marketing alternatives, and individual animal performance, University of Idaho faculty started an educational program during fall 1992.

Specific project objectives were to provide cattle producers with:

1. A process for selecting a custom feedlot,
2. A process for selecting a financial institution to finance feeding,
3. Feedlot performance information for their cattle,
4. Individual animal carcass information at slaughter,
5. Marketing alternatives available during the feeding program,

6. Economic evaluation of retained ownership for individual operators and the pen of cattle.

Program Formation

Initiation

The idea of a retained ownership program was broached with the District II Beef Advisory Committee and county agents during spring 1992. University of Idaho faculty conducted a review of other retained ownership programs (Sims et al. 1991; Wagner et al. 1992). A small group of producers was asked to form a steering committee to set up the basic ground rules for the program and to make initial decisions in devising the program.

Feedlot Selection

Preliminary work involved surveys of five feedlots on their management, feeding, and billing programs. UI faculty conducted this survey, based upon information requested by the steering committee. Survey information was summarized and presented to the committee. After reviewing the information, the steering committee selected Bruneau Cattle Company of Bruneau, Idaho, as the custom feedlot for the retained ownership trial.

Financing

A similar approach was followed to secure financing for the feeding program. UI faculty surveyed three lending institutions regarding terms and conditions of a feeding program loan. Several banks required additional steps in order for the A to Z cooperative to secure financing, including the necessity of having a producer/lender-signed form specifying that the cattle were lien-free, the necessity of an additional lien to the prospective lender, creating a nonprofit corporation, and others. After much discussion by the steering committee, members selected the Idaho State Bank in Cambridge.

Program Design

The feeding program was ready to begin once the feedlot was selected and financing secured. In October 1992, the steering committee met once to lay out the specific guidelines for the program and once with the feedlot operator to coordinate transfer of the cattle into the feedlot. At the second meeting, the feedlot's consulting veterinarian designed a preconditioning program. The feeding phase involved 31 producers (primarily from southwestern Idaho), placing 200 preconditioned steers in the trial. Allied Industry representatives provided technical and financial support for the preweaning/receiving program.

A mid-year meeting with the producers was held February 2, 1993, to provide them with animal performance summary data and explore market situation, outlook, and alternatives. Bruneau Cattle Company finished the cattle and sold them to Iowa Beef Processors (IBP) of Boise. UI faculty gathered carcass data for individual animals through the USDA grading system. Feedlot performance information, carcass data, and costs and returns were gathered throughout the program and summarized for each owner and the pen of cattle, as a whole.

This data formed the basis for the final educational program, conducted June 10, 1993, in Fruitland, Idaho. Twenty-nine of the 31 producers, guests, and others attended the meeting. Producers received animal performance (feedlot and carcass) data, as well as the proceeds from the sale of their cattle. All of the information was explained and evaluated during the educational session. In addition, a questionnaire was distributed to the participants to allow them to evaluate the program and make suggestions for future programs.

Data gathered during the project was tabulated in computerized format and analyzed using the SAS statistical package. Objectives of the analysis were to determine factors, such as carcass performance, market prices, and others, which influence retained ownership profitability.

Procedures

Thirty-one ranchers consigned 200 steers in increments of five head to the "A to Z Retained Ownership Company" program in October and November 1992. Steers selected were to weigh between 550 and 750 pounds upon arrival at the feedlot. Calves were dehorned, castrated, weaned by November 10, 1992 (at least 21 days prior to feedlot delivery), and acclimated to feed bunks, waterers, and trace mineral salt.

Calves received their first set of vaccinations at the ranch 13 or 14 days (November 19 or 20, 1992) prior to receiving their booster shots at the feedlot. Initial vaccinations included Lepto-5 (bacterin),

IBR, BVD (killed vaccine), PI_3 (heat sensitive), and BRSV (modified live vaccine) (Cattle Master 4+L5, Smith Kline Beecham) and 7-way blackleg and *H. somnus* (Ultrabac 7/Somubac, Smith Kline Beecham). Steers received USDA eartags at the ranch. Owners provided breed-of-sire and calving date information. Live animal shrunk weights were determined, on an individual owner basis, at central collection points prior to being delivered to the feedlot.

Calves arrived and were weighed on a truckload basis at the feedlot December 1 and 2, 1992. Overall transit shrink from the central collection points to the feedlot was calculated to be 3.68 percent. On December 4, 1992, calves were administered boosters to both vaccines, treated for internal and external parasites including liver flukes (Ivomec-F, Merck Ag Vet), tagged with a duplicate eartag for individual identification, measured for hip height, and implanted with a growth promotant (Ralgro, Pitman-Moore). A coccidiostat (DECCOX, RHONE-POULENC) was used in the receiving and start-up ration for 25 days.

Initial steer values were determined using an $85 per hundredweight (cwt) price for a 700-pound steer with a $4 per cwt slide (i.e., a 600-pound steer would have a $89 per cwt initial value, a 750-pound steer would have an initial value of $83 per cwt). This value was taken from an electronic marketing service report for feeder steer prices for December 5, 1992.

All owners shared death loss and health treatment costs with charges assessed on a per head basis. Costs associated with a steer loss were determined by summing the initial value of the steer and feedlot costs encumbered by that steer. The owner was reimbursed for the initial value of the particular steer lost.

Steers were individually weighed January 13, 1993, and placed on a finishing ration January 18, 1993. Dry matter intakes were determined on an individual owner basis for the receiving and start-up rations, and on an individual steer basis for the finishing ration. Feed intakes were adjusted for average live weight and average daily gain during each period using the net energy for maintenance (NEm) and net energy for gain (Neg) equations of Owens et al. (1984).

Table 1. Carcass prices ($ per lb) received by quality grade and marketing date.

Marketing date	Choice	Select
April 23	1.32	1.28
May 7	1.32	1.26
May 15	1.34	1.23
May 22 and 28	1.33	1.24

Bruneau Cattle Company personnel determined the outdate for finished steers using days on feed and visual observation as indicators of cattle reaching the choice quality grade. Steers were slaughtered at Iowa Beef Processors (IBP, Boise) on April 23, 1993 (41 head), May 7, 1993 (42 head), May 15, 1993 (48 head), May 22, 1993 (66 head), and May 28, 1993 (one head).

Carcass value was determined by the grade and yield method. Prices received are reported in Table 1. Market prices received in relation to seasonal live prices for fed cattle in 1992 through 1993 are reported in Fig. 2. Carcass data collection and grading were accomplished the first work day after each kill date, following a weekend carcass chill. Calculations for final yield grade and percent cutability were taken from Beef Improvement Federation proceedings (BIF 1990). The equation for calculating steer frame scores was an average of the frame score equations for bulls and heifers (BIF 1990).

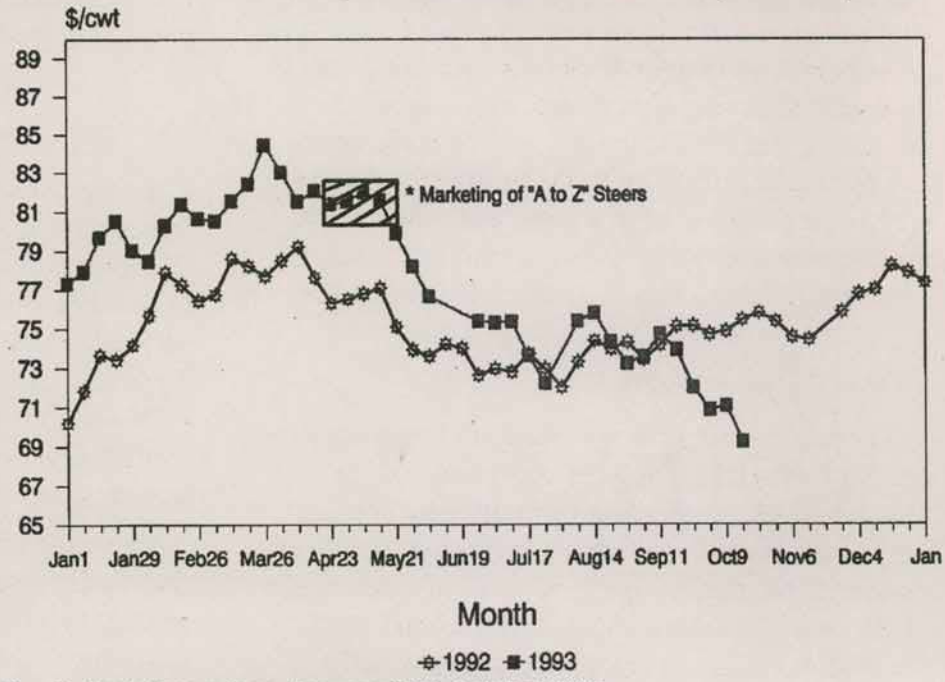


Fig. 2. Fed steer prices, January 1992-October 1993.

Steer profitability on an individual owner basis was determined by subtracting feedlot costs (feed, yardage, processing, medicine, and interest), initial steer value, and opportunity costs on the initial value (6 percent interest on initial value for the duration of the feeding period) from the total carcass value of the steer (less transportation, brand inspection, and checkoff).

Results and Discussion

Animal Performance

Table 2 reports initial information on the pen of cattle. Fifteen different sire breeds were represented, with six breeds having at least 10 steers in the program (Fig. 3). Of the 15 breeds-of-sire, 39.8 percent of the steers would be of the more moderate British breed-type, and 60.2 percent would be considered larger framed continental breed-type. Average age of the steer calves entering the feedlot was 277 days (equaling a March 1, 1992, average calving date), with an initial weight of 653 pounds.

Table 2. Initial animal performance, receiving 12/1/92.

	No. of steers	Mean	Minimum	Maximum	Std dev
Weight, lb	200	653.00	450.00	992.00	101.00
Hip height, in	200	47.00	43.30	51.50	1.90
Frame score	200	5.60	3.30	8.10	1.00
Age, days	200	277.00	180.00	367.00	27.00
Initial value, $/head[a]	200	563.34	427.28	727.26	59.94

[a]Initial value of the steers was determined using the value of $85 per cwt for a 700-pound steer with a $4 per cwt slide (i.e., a 600-lb steer would have an $89 per cwt initial value, a 750-lb steer = an $83 value).

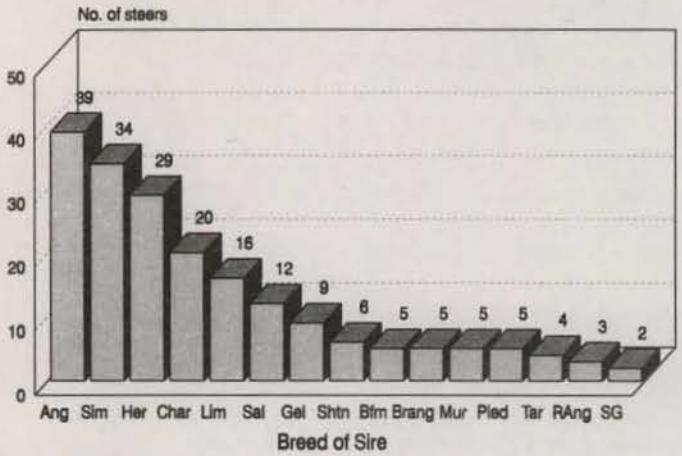


Fig. 3. A to Z retained ownership, breed-of-sire.

Steer performance for the start-up period, which lasted 42 days, is reported in Table 3. Steers averaged 773 pounds at the first weigh period (January 13, 1993). Performance averaged 2.86 pounds of gain per day, with feed efficiency of 7.28 pounds of feed (Dry Matter, DM, basis) per pound of gain. Average dry matter intake was 20.7 pounds per day.

No steers died from delivery through the end of the start-up rations. Medical treatments during this period included 10 steers for respiratory complications and six steers for foot problems. Average energy values for the receiving and start-up rations were 73.88 Mcal per cwt for NEm and 47.88 Mcal per cwt for NEg. With an average weight of 713 pounds during the start-up period, steers were consuming 2.9 percent of their body weight in dry matter.

Steer performance for the finishing period is listed in Table 4. Average finish weight of the 198 steers was 1,164 pounds, with steers consuming 22.6 pounds DM per day and gaining 3.31 pounds per day. Feed efficiency was 6.86 pounds of DM feed per pound of gain over the 119-day finish period. Death loss was 1 percent, as two steers died of respiratory complications during the finishing phase. Medical treatments during this period included seven steers for respiratory complications, two steers for polio, one castration, and two miscellaneous treatments.

Average energy values for the finishing ration were 94.92 Mcal per cwt for NEm and 62.80 Mcal per cwt for NEg, which were very close to the values reported by the feedlot (NEm = 93.9 Mcal

Table 3. Animal performance, receiving through start-up period (12/1/92 to 1/13/93).

	No. of steers	Mean	Minimum	Maximum	Std dev
Weight, lb 1/13/93	200	773.00	515.00	1,059.00	102.00
Average daily gain, lb/day	200	2.86	1.95	3.83	0.43
Dry matter intake, lb[a]	200	20.70	13.70	30.10	3.20
Feed efficiency, lb feed DM/lb gain	200	7.28	5.53	9.44	0.85

[a]Individual steer dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al. 1984).

Table 4. Animal performance, finishing period (1/13/93 to out-date).

	No. of steers	Mean	Minimum	Maximum	Std dev
Finished weight, lb[a]	198	1,164.00	860.00	1,583.00	122.00
Days on feed	198	119.00	101.00	136.00	10.80
Average daily gain, lb/day	198	3.31	1.13	4.84	0.62
Dry matter intake, lb[b]	198	22.60	11.50	35.30	4.30
Feed efficiency, lb feed DM/lb gain	198	6.86	5.65	11.33	0.70

[a]Calculated from hot carcass weight using a standard 63 percent dressing percentage.

[b]Individual steer dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al. 1984).

Table 5. Animal performance, total feeding period (12/1/92 to out-date).

	No. of steers	Mean	Minimum	Maximum	Std dev
Average daily gain, lb/day	198	3.19	1.60	4.39	0.49
Days on feed	198	161.00	143.00	178.00	10.80
Dry matter intake, lb[a]	198	22.10	13.81	33.54	3.62
Feed efficiency, lb feed DM/lb gain	198	6.94	5.76	9.87	0.64

[a]Individual steer dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al. 1984).

per cwt and NEg = 62.35 Mcal per cwt). With an average weight of 968 pounds during the finishing period, steers were consuming 2.3 percent of their body weight in dry matter. Steer performance for the combined start-up and finishing periods is reported in Table 5. Over the entire feeding program, steers gained 3.19 pounds per day, consuming 22.1 pounds of dry matter per day. Average feed efficiency was 6.94 pounds of DM feed per pound of gain, and the average days on feed were 161 days.

Carcass data for the feedlot steers is reported in Table 6. Overall 59.7 percent (138 out of 198) of the steers graded choice with the remainder grading select. While there was some extra carcass trim on the kill floor during the processing of these steers, there were no substantial carcass discounts.

Two carcasses were more than 950 pounds, four were less than 600 pounds, eight carcasses were yield grade 4, and one had a ribeye less than 10 square inches. Discounts for these undesirable traits (quoted by IBP) were $10 to $12 per cwt for 950 pounds or heavier carcasses, $20 to $26 per cwt for 600 pounds or lighter carcasses, and $10 to $12 per cwt for yield grade 4 carcasses. On a pen basis, these problems were infrequent and did not trigger any financial penalties.

Calculations for cutability indicate the lean meat yield of the carcass. Carcass lean gain calculations indicate growth composition, or how much of the average daily gain was purely muscle gain and not fat deposition.

Table 7 lists the effect of breed-of-sire on feedlot performance. Breeds-of-sire represented by less than 10 head were combined into the *Other* category. No statistically significant differences were detected for average gain between breeds-of-sire. However, heavier, larger framed steers entering the feedlot tended to have higher average daily gains. Considerable variation existed within each breed for average daily gain and therefore, numerical differences between breeds are not significantly different.

Steers sired by Simmental bulls in this trial were on feed for fewer days than the rest of the cattle. This is primarily due to the heavier initial weights of the Simmental steers entering the feedlot. Sim-

Table 6. Animal performance, carcass data.

	No. of steers	Mean	Minimum	Maximum	Std dev
Hot carcass weight, lb	198	733.00	542.00	997.00	77.00
Final yield grade	198	2.80	1.30	4.80	0.60
Ribeye area, sq. inches	198	12.36	11.50	16.70	1.48
Kidney, pelvic & heart fat, %	198	2.00	0.50	3.00	0.59
Adjusted back fat, inches	198	0.43	0.20	0.80	0.12
Marbling score[a]	198	5.80	3.00	14.00	1.90
Quality grade[b]	198	11.40	9.00	14.00	1.20
Cutability, %[c]	198	50.30	45.50	53.80	1.50
Carcass lean gain, lb/day[d]	198	1.02	0.53	1.38	0.16

[a]Marbling score, 2 = Standard$^+$, 3 = Select$^-$, 4 = Select^0, 5 = Select$^+$, 6 = Choice$^-$, 7 = Choice^0, 8 = Choice$^+$, 9 = Modest$^-$, 10 = Modest^0, 11 = Modest$^+$, 12 = Moderate$^-$, 13 = Moderate^0, 14 = Moderate$^+$.

[b]Quality grade, 9 = Select$^-$, 10 = Select^0, 11 = Select$^+$, 12 = Choice$^-$, 13 = Choice^0, 14 = Choice$^+$.

[c]Cutability = 51.34 - (5.784 x adjusted backfat, inches) - (.462 x kidney, pelvic and heart fat, %) - (.0093 x hot carcass weight, lb) + (.74 x ribeye area, sq. inches)

[d]Carcass lean gain = (hot carcass weight x (cutability/100) - (empty body fat x .70) x (cutability/100))/days on feed.

Table 7. Effect of breed-of-sire on feedlot performance.[a]

Breed-of-sire	No. of steers	Days on feed	Total average daily gain (lb/day)	Total dry matter intake (lb/day)	Feed efficiency (lb feed/lb gain)
Angus	39	162[c] ± 2	3.09 ± .08	21.4[ef] ± 0.5	7.0 ± .05
Charolais	20	161[c] ± 4	3.38 ± .18	23.0[e] ± 1.1	6.8 ± .12
Hereford	27	166[c] ± 3	2.95 ± .14	20.8[ef] ± 0.8	7.1 ± .09
Limousin	16	162[c] ± 4	3.31 ± .15	22.7[e] ± 0.9	6.8 ± .10
Salers	10	164[c] ± 6	3.18 ± .25	21.7[ef] ± 1.5	6.9 ± .16
Simmental	32	148[d] ± 2	3.20 ± .13	22.2[e] ± 0.8	6.9 ± .08
Other[b]	53	162[c] ± 3	2.99 ± .07	20.8[f] ± 0.4	7.0 ± .04

[a]Least-square means followed by the standard error of the least-square mean.

[b]Remaining breed-of-sires with less than 10 representatives per breed including Gelbvieh, Murray Grey, Brangus, Tarentaise, Santa Gertrudis, Piedmontiese, Beefmaster, Red Angus, Shorthorn, and unknown.

[cd]Means without a common superscript differ (P<.05).

[ef]Means without a common superscript differ (P<.10).

Table 8. Effect of breed-of-sire on carcass performance.[a]

Breed-of-sire	No. of steers	Hot carcass weight, lb	Quality grade[b]	Final yield grade	Ribeye area, sq in	Cutability %[c]	Carcass lean gain, lb/day[d]
Angus	39	724 ± 8	11.8 ± .2	3.3 ± .1	11.7 ± .2	49.1 ± .2	.96 ± .03
Charolais	20	752 ± 19	11.3 ± .5	2.8 ± .2	12.6 ± .5	50.3 ± .5	1.08 ± .06
Hereford	27	718 ± 14	11.7 ± .4	3.3 ± .2	11.1 ± .4	49.1 ± .4	.92 ± .04
Limousin	16	746 ± 16	10.8 ± .4	2.5 ± .2	13.3 ± .4	50.9 ± .4	1.07 ± .05
Salers	10	739 ± 26	11.0 ± .6	2.4 ± .3	13.0 ± .7	51.2 ± .7	1.03 ± .08
Simmental	32	722 ± 13	11.3 ± .3	2.7 ± .2	12.0 ± .3	50.4 ± .4	1.02 ± .04
Other[e]	53	715 ± 7	11.3 ± .2	2.7 ± .1	12.3 ± .2	50.6 ± .2	.96 ± .02

[a]Least-square means followed by the standard error of the least-square mean.

[b]Quality grade, 9 = Select$^-$, 10 = Select^0, 11 = Select$^+$, 12 = Choice$^-$, 13 = Choice^0, 14 = Choice$^+$.

[c]Cutability = 51.34 - (5.784 x adjusted backfat, inches) - (.462 x kidney, pelvic & heart fat, %) - (.0093 x hot carcass weight, lb) + (.74 x ribeye area, sq. inches)

[d]Carcass lean gain = (hot carcass weight x (cutability/100) - (empty body fat x .70) x (cutability/100)) per days on feed.

[e]Remaining breed-of-sires with less than 10 representatives per breed including Gelbvieh, Murray Grey, Brangus, Tarentaise, Santa Gertrudis, Piedmontiese, Beefmaster, Red Angus, Shorthorn, and unknown.

mental steers averaged 754 pounds entering the feedlot, or 91 pounds more than the pen average.

As expected, heavier, larger framed steers had higher calculated dry matter intakes. In addition, Charolais, Limousin, and Simmental-sired steers consumed more feed than the steers combined in the *Other* category. Lighter weight steers entering the feedlot were more efficient in converting feed to gain than heavier steers, especially during the receiving and start-up period. Feed efficiency was not affected by breed-of-sire.

Table 8 lists the effect of breed-of-sire on carcass performance. There were no detectable differences in carcass traits between breeds-of-sire of these steers. Again, there was considerable variation both within and across sire breeds. Carcass lean gain (pounds per day) tended to be higher for heavier, larger framed steers entering the feedlot.

Costs and Returns

Costs associated with the custom feeding operation on a per steer and per pound of gain basis are reported in Tables 9 and 10. Processing, medicine, death loss, and interest were assessed on a fixed basis and, therefore, were the same for each steer. On a cost per pound of gain basis, these costs are lower for steers with higher average daily gains.

Table 11 shows the overall break-even prices and profitability of the feeding program. Keep in mind that profitability as represented here is for the feeding period only; it is not a net income value for that calf since the total annual cow costs are approximated with the initial value.

Factors that affected profitability were feedlot average daily gain, quality grade (choice vs. select), and marketing date. These three factors alone

Table 9. Costs associated with custom feeding on a $ per steer basis.

	No. of steers[a]	Mean	Minimum	Maximum	Std dev
Total feed[b]	197	277.36	191.05	373.24	35.65
Yardage[c]	197	32.21	28.60	34.40	2.15
Processing[d]	197	7.72	7.72	7.72	
Medicine[d]	197	1.64	1.64	1.64	
Death loss	197	7.27	7.27	7.27	
Interest[de]	197	3.48	3.48	3.48	
Opportunity[f]	197	14.87	10.94	18.77	1.53

[a]Two of the steers died while on the finishing ration and one steer was held over for drug withdrawal.

[b]Individual steer dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al. 1984).

[c]Yardage costs were $.20 per steer each day.

[d]Fixed cost shared by owners on a per steer basis.

[e]Feeding period financing costs, including interest at 8.5 percent and a loan origination fee.

[f] Opportunity cost was calculated at 6 percent interest on the initial value of each steer for the duration of the feeding period.

accounted for 95.5 percent of the variation in profitability for the feeding phase. Quality grade and marketing date, when considered together, are the choice/select spread for carcass price over time. The difference in profitability between choice and select steers was more than $80 per head on May 14 when the choice/select spread was $11 per carcass cwt. Profitability of steers as affected by marketing date and quality grade is shown in Fig. 4.

The relationships between average daily gain and quality grade on profitability are illustrated in Fig. 5. Select steers had to gain at least 2 pounds per day in order to break even, while choice steers had to gain at least 1.5 pounds per day. The difference in profitability between choice and select steers gaining 3 pounds per day was approximately $65 per head.

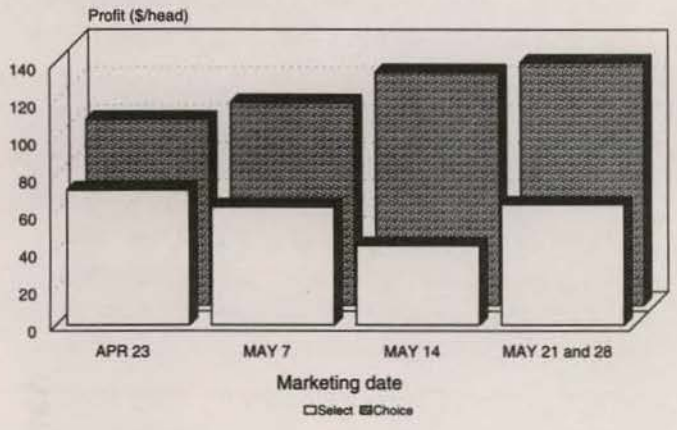


Fig. 4. Effect of quality grade and market date on profitability.

Table 10. Costs associated with custom feeding on a $ per pound of gain basis.

	No. of steers[a]	Mean	Minimum	Maximum	Std dev
Total feed[b]	197	.430	.360	.600	.040
Yardage[c]	197	.063	.056	.067	.004
Processing[d]	197	.016	.011	.034	.003
Medicine[d]	197	.003	.003	.007	.001
Death loss[d]	197	.015	.010	.032	.003
Interest[de]	197	.007	.005	.015	.001
Opportunity[f]	197	.029	.021	.037	.003
Total cost of gain	197	.580	.460	.900	.060

[a]Two of the steers died while on the finishing ration and one steer was held over for drug withdrawal.

[b]Individual steer dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al. 1984).

[c]Yardage costs were $ .20 per steer each day.

[d]Fixed cost shared by owners on a per steer basis.

[e]Feeding period financing costs, including interest at 8.5 percent and a loan origination fee.

[f]Opportunity cost was calculated at 6 percent interest on the initial value of each steer for the duration of the feeding period.

Table 11. Break-even price and profitability associated with custom feeding.

	No. of steers[a]	Mean	Minimum	Maximum	Std dev
Break-even price, $ per cwt	197	73.65	64.93	84.18	2.53
Profit, $ per steer	197	95.03	-23.40	224.43	43.16

[a]Two of the steers died while on the finishing ration and one steer was held over for drug withdrawal.

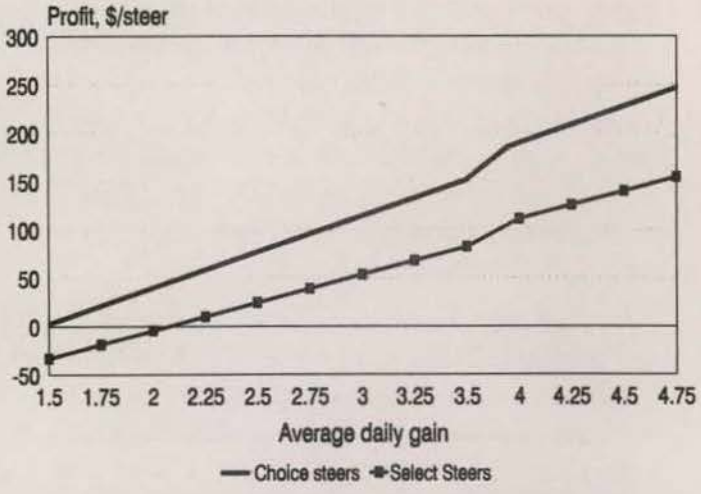


Fig. 5. Effect of ADG and quality grade on profitability.

Table 12. Effect of breed-of-sire on costs and profitability.[a]

Breed-of-sire	No. of steers	Total costs ($/per steer)	Break-even price ($/per cwt)	Cost per lb of gain, $ per $ lb	Profit ($/steer)
Angus	39	856.00[b] ± 11.26	73.72 ± .15	.58[c] ± .01	87.59 ± 1.59
Charolais	20	823.21[ab] ± 15.78	73.38 ± .21	.57[c] ± .01	87.62 ± 2.24
Hereford	27	821.98[a] ± 13.11	73.83 ± .17	.56[c] ± .01	85.81 ± 1.86
Limousin	16	837.10[ab] ± 17.92	73.48 ± .24	.57[c] ± .01	88.61 ± 2.54
Salers	10	920.93[c] ± 21.67	74.20 ± .29	.61[d] ± .01	87.62 ± 3.07
Simmental	32	926.35[c] ± 12.44	74.19 ± .16	.62[d] ± .01	91.45 ± 1.76
Other[b]	53	841.68[ab] ± 9.49	73.60 ± .13	.57[c] ± .01	87.92 ± 1.35

[a]Least-square means followed by the standard error of the least-square mean.

[b]Remaining breed-of-sires with less than 10 representatives per breed including Gelbvieh, Murray Grey, Brangus, Tarentaise, Santa Gertrudis, Piedmontiese, Beefmaster, Red Angus, Shorthorn, and unknown.

[cd]Means without a common superscript differ (P<.05).

Breed-of-sire had very little effect on profitability during this project. Larger framed animals (Salers and Simmentals) had higher total costs than other breeds in the trial and Angus had higher feeding costs than Hereford (Table 12). However, there was no significant difference between breeds in terms of profitability per steer. Final yield grade; kidney, pelvic, and heart fat; hot carcass weight; ribeye area; breed of sire; and owner did not affect profitability. In fact, all of these variables combined would account for less than 5 percent of the variation in profitability observed in this feeding demonstration.

Summary

For the 1992-93 feeding program, overall average daily gain of the steers was 3.19 pounds per day during the 161-day feeding period. Dry matter intake was 22.1 pounds per day, with a feed efficiency of 6.94 (pounds of feed per pounds of gain). Hot carcass weight was 733 pounds with 59.7 percent of the steers grading choice. Breed differences were relatively minor in respect to feedlot and carcass performance. Profitability averaged $95.03 per steer with a live weight price of $73.65 per cwt required to break-even. Feedlot average daily gain and the choice/select spread across the different marketing dates accounted for most of the variation in profitability. Breed-of-sire had little effect on profitability.

Overall, the A to Z Retained Ownership Company program was a success as determined by a review of the summary questionnaires filled out by 29 of the 31 ranchers at the year-end meeting. All respondents (100 percent) indicated satisfaction with the project and more than half of the ranchers were considering retained ownership in their future marketing plans (56 percent) and would participate in another demonstration project (85 percent). Producers offered several suggestions involving additional animal weights and tighter restrictions on the initial weight of steers entering the program, which will be used in future retained ownership educational programs.

Literature Cited

Beef Improvement Federation. 1990. Guidelines for uniform beef improvement programs. Sixth Edition. Raleigh, NC: North Carolina State University.

Marousek, G. E., L. D. Stodick, and J. G. Schimmel. 1992. The economics of alternative beef cattle management and marketing systems. Research Bulletin No. 153. Moscow, ID: University of Idaho Agricultural Experiment Station.

Owens, F. N., W. M. Sharp, and D. R. Gill. 1984. Net energy calculation from feedlot performance data. Research Report MP-116 p. 290. Stillwater, OK: Oklahoma State University Agricultural Experiment Station.

Sims, D. D., A. G. Maddux, and J. Mintert. 1991. Kansas steer futurities: An analysis of the retained ownership program. Publication C-725. Manhattan, KS: Kansas StateUniversity Cooperative Extension Service.

Wagner, J. J., T. B. Goehring, D. L. Boggs, L. W. Insley, D. M. Feuz, G. E. Murra, D. E. Moore and B. Knutson. 1992. South Dakota Retained Ownership Demonstration. Report 92-15. Brookings, SD: South Dakota State University Agricultural Experiment Station.

Appendix

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Producer Steering Committee

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Ferrell Crossley
Larry Derie, Council
Russell Mink, Cambridge
Mike Paradis, Council
Mike Routson, Weiser
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Parma, ID 83660
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