

# A TO Z RETAINED OWNERSHIP, INC.

## 2002 Year-End Summary

### INTRODUCTION

The A to Z Retained Ownership, Inc. program was started in 1992 as a cooperative venture by cow-calf producers, the Bruneau Cattle Company feedlot, veterinarians, packers, bankers, allied industry representatives and the University of Idaho Cooperative Extension System. The primary goal of this educational program is to provide information to cow-calf producers on how their cattle perform through the feeding and carcass grading phases. This report presents the results of the tenth year of the retained ownership program.

For the third time, the A to Z Retained Ownership, Inc. program included a yearling feeding program. Yearling grass cattle, fall calves and open replacement heifers were consigned. Cattle entered the feedlot in late August and were quickly brought up to the "hot" or finishing ration. Marketing was during December.

Both the yearling and calf feeding programs showed poor profitability mostly due to higher feed costs and decreased carcass prices. Decreased carcass prices have been attributed to a decrease in consumption due in part to general economic trends following the September 11<sup>th</sup> tragedy. Hoof and mouth and BSE outbreaks, which occurred in Europe, Asia, and other parts of the world, are also to blame as imports of US beef dropped considerably in some countries.

Marketing conditions proved to be one of the biggest challenges for the calf program in 2002. Cattle were on feed for an average of two weeks longer than last year, awaiting improving market conditions. While we were successful in hitting the high point in the spring fed cattle market, it was not without some cost. Following an average of two additional weeks on feed, the

percentage of YG4 steers more than doubled those of the previous year. In spite of the increase in the number of YG4s and the associated heavy discounts, it paid to hold the cattle as evidenced by the increased return for the entire pen.

### OBJECTIVES

In an effort to provide Idaho ranchers with information concerning retained ownership, marketing alternatives and individual animal performance, an educational program was started by University of Idaho Cooperative Extension System faculty during the fall of 1992. Over the last ten years, the A to Z program has expanded to provide this opportunity for ranchers throughout the Pacific Northwest.

Specific project objectives are to provide cattle producers with:

- A process for selecting a custom feedlot,
- A process for selecting a financial institution to finance feeding,
- Feedlot performance information for their cattle,
- Individual animal carcass information at slaughter and experience with value based carcass pricing,
- Marketing alternatives available during the feed program, and
- 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 in the spring of 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. University of Idaho faculty conducted this survey, based upon information requested by the steering committee. Survey information was summarized and presented to the committee. After review of the information, Bruneau Cattle Company in Bruneau, Idaho was selected by the steering committee as the custom feedlot for the retained ownership program.

### Financing

A similar approach was followed to secure financing for the feeding program. University of Idaho faculty surveyed four 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 non-profit corporation, and others. After much discussion by the steering committee, members selected US Bank to finance the program annually.

### Program Design

Once the feedlot was selected and financing secured, the feeding program was ready to begin. 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. Allied industry representatives

provided technical and financial support for the pre-weaning/receiving program.

A mid-year meeting held in January at Bruneau provides producers with the opportunity to view their cattle in the feedlot, along with animal performance data and a review of the marketing plan. Cattle are finished and sold by Bruneau Cattle Company to IBP of Boise. Carcass data is gathered for individual animals by University of Idaho faculty with assistance from the USDA Grading Service. IBP carcass sales personnel have conducted tours during the marketing period. Feedlot performance information, carcass data, and costs and returns are gathered throughout the program and summarized for each owner's individual steer or heifer and each pen of cattle, as a whole. These data form the basis for the final educational programs held in Fruitland and Mackay, Idaho, conducted after all cattle are marketed. Producers and numerous other guests attending the meetings receive animal performance (feedlot and carcass) data, as well as the proceeds from the sale of their cattle. All of the information is explained and evaluated during the educational session. In addition, a questionnaire is distributed to the participants in order to evaluate the program and make suggestions for future programs.

The tenth year feeding phase had 692 cattle consigned to the program including 78 yearling steers, 42 yearling heifers, 320 steer calves and 252 heifer calves. Data gathered during the project are tabulated and analyzed in computerized format.

## **PROCEDURES**

### Program Design: Yearlings

Three ranches consigned 78 yearling steers and 42 yearling heifers to the A to Z Retained Ownership, Inc. program in August 2001. Steers selected were to weigh between 700 and 950 pounds upon arrival at the feedlot. The heifers were to be 50 pounds lighter (650 to 900 pounds).

Cattle were to be dehorned and castrated. Owners provided birth date, sex, breed-of-sire, breed-of-dam, color, and tag information.

Yearlings arrived and were weighed on a truckload basis at the feedlot on August 20 and 21, 2001. On August 28, 2001 cattle were individually weighed (assessed a percentage shrink back to truck weight), administered vaccines which included Lepto-5 (bacterin), IBR, BVD (killed vaccine), PI<sub>3</sub> (heat sensitive) and BRSV (modified live vaccine) (Cattle Master 4+L5, Pfizer\*) and 7-way blackleg and *H. somnus* (Ultrabac 7/Somubac, bacterin-toxoid, Pfizer\*), treated for internal and external parasites (Dectomax, Pfizer\*), tagged with a duplicate eartag for individual identification if necessary, and implanted with a growth promotant (Ralgro, Schering-Plough\*). A coccidiostat (Deccox, ALPHARMA\*) was used in the receiving ration.

Initial yearling values were determined using a price of \$86.00/cwt for an 800 lb steer with a \$4.00 slide and \$86.00/cwt for a 700 lb heifer with a \$4.00 slide. These values were taken from an electronic marketing service report for feeder cattle prices for the week of August 20, 2001.

Cattle were placed on the finishing ration on September 10, 2001. From this point in the feeding trial, yearling cattle were fed and marketed in the same manner as previous years, unless otherwise noted. All cattle were processed at IBP of Boise on December 15, 2001.

#### Program Design: Calves

Twenty-five ranches consigned 320 steer calves and 252 heifer calves to the A to Z Retained Ownership, Inc. program in November 2001. Steers selected were to weigh between 550 and 750 pounds upon arrival at the feedlot. The heifers were to be 50 pounds lighter (500 to 700 pounds). Calves were to be dehorned, castrated,

weaned at least 21 days prior to feedlot delivery, and accustomed to feed bunks, waterers and trace mineral salt. Calves received their first set of vaccinations at the ranch 13 or 14 days prior to receiving their booster shots at the feedlot. Initial vaccinations included Lepto-5 (bacterin), IBR, BVD (killed vaccine), PI<sub>3</sub> (heat sensitive) and BRSV (modified live vaccine) (Cattle Master 4+L5, Pfizer\*) and 7-way blackleg and *H. somnus* (Ultrabac 7/Somubac, bacterin-toxoid, Pfizer\*). Backup A to Z identification eartags were placed in calves at the ranch. Owners provided breed-of-sire, breed-of-dam, color, weaning and calving date, and tag information.

Calves arrived and were weighed on a truckload basis at the feedlot on November 12 and 13, 2001. On November 19 and 21, 2001 calves were individually weighed (assessed a percentage shrink back to truck weight), administered boosters to vaccines, treated for internal and external parasites, including liver flukes (Ivomec-F, Merial Ltd.\*), tagged with a duplicate eartag for individual identification if necessary, measured for hip height, and implanted with a growth promotant (Ralgro, Schering-Plough\*). A coccidiostat (Deccox, ALPHARMA\*) was used in the receiving ration.

Initial value of the steers was \$83.75/cwt for a 600 lb base weight with a \$4.00 slide. Heifer initial value was \$78.50/cwt for a 550 lb base weight with a \$6.00 slide. These values were taken from an electronic marketing service report for feeder cattle prices for the week of November 11, 2001. All owners were responsible for salvage, medicine and death loss charges incurred by their calves. Feedlot costs encumbered by a calf that died or was salvaged were deducted from sale proceeds of the owner's remaining calves. Only for analytical purposes were death loss and medicine charges averaged across all calves in order

\* Reference to brand or trade names does not indicate or imply an endorsement of the product or representation that comparable products may not be available.

to relate the current year to previous years' data.

Steer and heifer pens were placed on the finishing ration on January 21, 2002. Calves were individually weighed (assessed a 5% shrink) on January 17 and 18, 2002. Dry matter intakes were determined on an individual calf basis for the receiving and start-up rations combined, and 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 ( $NE_m$ ) and net energy for gain ( $NE_g$ ) equations of Owens et al. (1984).

The outdate for finished cattle was determined by Bruneau Cattle Company personnel using days on feed and visual observation as indicators of cattle reaching the Choice quality grade, as well as market conditions. Cattle were processed at IBP of Boise on May 10, 2002 (150 heifers and 149 steers), May 17, 2002 (98 heifers and 46 steers), and May 24, 2002 (121 steers).

Base carcass value was determined according to the formula for average cash price for cattle in the Texas/Oklahoma Panhandle during the current week and adjusted for quality grade, yield grade and carcass non-conformity discounts according to the IBP RTMV (Real-Time Market Value) pricing grid. Prices received are reported in Table 13.

Carcass data collection and grading were accomplished the first work day following a weekend carcass chill, after each kill date. 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). Profitability of cattle feeding on an individual owner basis was determined by subtracting feedlot costs (feed, yardage, processing, medicine, death loss and interest on feedlot costs), initial value of the animal, and opportunity costs on the initial

value (6 percent interest for the duration of the feeding period) from the total carcass value of the animal (less transportation, brand inspection, and checkoff).

## RESULTS AND DISCUSSION

### Animal Performance: Yearlings

Initial information on the two pens of yearling cattle is reported in Table 1. Average age of the steers entering the feedlot was 380 days with an initial weight of 721 pounds. Heifers averaged 355 days of age and weighed 691 pounds.

Animal performance for the feeding period is reported in Table 2. Steer finished weight was 1,114 pounds with an average feeding period of 117 days. Performance averaged 3.36 pounds of gain per day, with feed efficiency of 6.57 pounds of feed (dry matter basis) per pound of gain. Average dry matter intake was 18.30 pounds per day. During the feeding period one steer died due to clostridial problems (death loss 1.28%).

Heifer finished weight for the feeding period was 1,100 pounds (Table 2), averaged 116 days on feed and gained 3.52 pounds per day. Dry matter intake was 19.08 pounds per day and feed efficiency was 6.14 pounds of dry matter per pound of gain. One heifer died due to chronic respiratory problems (death loss 2.38%).

Carcass data for the yearling cattle is reported in Table 3. Overall, steer carcass quality grading produced 0 percent Prime, 67.5 percent Choice, and 32.5 percent Select. Heifer carcasses graded 4.9 percent Prime, 82.9 percent Choice, and 12.2 percent Select. Steer carcass yield grading produced 2.6 percent yield grade 1, 53.25 percent yield grade 2, 42.85 percent yield grade 3 and 1.3 percent yield grade 4. Heifer carcasses graded 7.3 percent yield grade 1, 34.2 percent yield grade 2, 58.5 percent yield grade 3 and 0 percent yield grade 4.

During this marketing year, cattle were sold on the traditional formula basis and adjusted for quality differences. Price discounts were applied for heavy (> 950 pounds) and light weight (< 550 pounds). The Choice/Select spread was \$10.40 (Table 4) at marketing. Prime carcasses

brought an additional \$6.40/cwt for the December market date. Yield grades 1 and 2 were priced \$6.50 and \$2.50 per cwt, respectively over yield grade 3. Heavy weight carcasses were discounted \$21.81/cwt and light carcasses were discounted \$22.51/cwt.

Table 1. Initial yearling performance, receiving (8/20-21/01).

|                                     | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                       |                       |             |                |                |                           |
| Weight, lb                          | 77                    | 721.48      | 473.03         | 920.91         | 86.78                     |
| Age, days                           | 77                    | 380.10      | 290.00         | 483.00         | 48.80                     |
| Initial value, \$/head <sup>a</sup> | 77                    | 640.16      | 468.68         | 747.44         | 52.32                     |
| <u>Heifers</u>                      |                       |             |                |                |                           |
| Weight, lb                          | 41                    | 691.26      | 536.10         | 846.09         | 89.78                     |
| Age, days                           | 41                    | 354.69      | 298.00         | 391.00         | 27.86                     |
| Initial value, \$/head <sup>a</sup> | 41                    | 593.75      | 496.19         | 678.20         | 52.51                     |

<sup>a</sup> Initial value of the steers was \$86.00/cwt for 800 lb base weight with a \$4.00 slide. Heifer initial value was \$86.00/cwt for a 700 lb base weight with a \$4.00 slide.

Table 2. Yearling performance, total feeding period (8/20-21/01 to 12/15/01).

|                                     | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                       |                       |             |                |                |                           |
| Weight, lb                          | 77                    | 1114.43     | 846.77         | 1417.74        | 119.35                    |
| Average daily gain, lb/day          | 77                    | 3.36        | 2.01           | 4.89           | .53                       |
| Days on feed                        | 77                    | 116.86      | 116.00         | 117.00         | .35                       |
| Dry matter intake, lb <sup>a</sup>  | 77                    | 18.30       | 11.10          | 29.58          | 3.40                      |
| Feed efficiency, lb feed DM/lb gain | 77                    | 6.57        | 5.16           | 7.78           | .47                       |
| <u>Heifers</u>                      |                       |             |                |                |                           |
| Weight, lb                          | 41                    | 1100.31     | 877.42         | 1359.68        | 146.96                    |
| Average daily gain, lb/day          | 41                    | 3.52        | 2.22           | 4.60           | .66                       |
| Days on feed                        | 41                    | 116.27      | 115.00         | 117.00         | .98                       |
| Dry matter intake, lb <sup>a</sup>  | 41                    | 19.08       | 11.39          | 29.02          | 4.47                      |
| Feed efficiency, lb feed DM/lb gain | 41                    | 6.14        | 5.56           | 7.25           | .36                       |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

Table 3. Yearling performance, carcass data.

|                               | No. of Animals | Mean   | Minimum | Maximum | Standard Deviation |
|-------------------------------|----------------|--------|---------|---------|--------------------|
| <u>Steers</u>                 |                |        |         |         |                    |
| Hot carcass weight, lb        | 77             | 690.95 | 525.00  | 879.00  | 74.00              |
| Final yield grade             | 77             | 2.88   | 1.63    | 4.46    | .54                |
| Ribeye area, sq in            | 77             | 11.66  | 8.70    | 15.60   | 1.39               |
| Kidney, pelvic & heart fat, % | 77             | 2.18   | 1.00    | 3.00    | .40                |
| Backfat, in                   | 77             | .42    | .15     | .80     | .13                |
| Marbling score <sup>a</sup>   | 77             | 6.57   | 3.00    | 13.00   | 2.29               |
| Quality grade <sup>b</sup>    | 77             | 11.61  | 9.00    | 14.00   | 1.20               |
| Carcass price, \$/cwt         | 77             | 104.87 | 83.48   | 117.43  | 7.70               |
| <u>Heifers</u>                |                |        |         |         |                    |
| Hot carcass weight, lb        | 41             | 682.20 | 544.00  | 843.00  | 91.11              |
| Final yield grade             | 41             | 2.78   | 1.04    | 4.10    | .57                |
| Ribeye area, sq in            | 41             | 11.91  | 9.10    | 16.40   | 1.77               |
| Kidney, pelvic & heart fat, % | 41             | 1.68   | .50     | 2.50    | .38                |
| Backfat, in                   | 41             | .47    | .15     | .75     | .15                |
| Marbling score <sup>a</sup>   | 41             | 8.12   | 3.00    | 15.00   | 2.84               |
| Quality grade <sup>b</sup>    | 41             | 12.29  | 9.00    | 15.00   | 1.19               |
| Carcass price, \$/cwt         | 41             | 107.87 | 91.20   | 117.25  | 6.57               |

<sup>a</sup> Marbling score: Standard ≤ 2; Slight = 3, 4, 5; Small = 6, 7, 8; Modest = 9, 10, 11; Moderate = 12, 13, 14; Abundant ≥ 15.

<sup>b</sup> Quality grade: ≤ 8 = Standard, 9 = Select<sup>+</sup>, 10 = Select<sup>0</sup>, 11 = Select<sup>+</sup>, 12 = Choice<sup>+</sup>, 13 = Choice<sup>0</sup>, 14 = Choice<sup>+</sup>, ≥ 15 = Prime.

Table 4. Yearling carcass prices received by quality and yield grade (\$ per cwt).

|                   | Yield Grade | Prime  | Choice | Select |
|-------------------|-------------|--------|--------|--------|
| <u>Steers</u>     |             |        |        |        |
| December 15, 2001 | 1           |        | 112.67 | 102.27 |
|                   | 2           | 112.57 | 108.67 | 98.27  |
|                   | 3           |        | 106.17 | 95.77  |
| <u>Heifers</u>    |             |        |        |        |
| December 15, 2001 | 1           |        | 112.49 | 102.09 |
|                   | 2           | 112.39 | 108.49 | 98.09  |
|                   | 3           |        | 105.99 | 95.59  |

### Costs and Returns: Yearlings

Costs associated with the custom feeding operation on a per animal and per pound of gain basis are reported in Tables 5 and 6. For analysis only, processing, medicine, death loss and interest were assessed on a fixed basis and were the same for each animal. Death loss was calculated as the initial value of the animal less any feedlot

cost incurred to the time of mortality. These values were summed and divided by the number of finished animals to derive a death loss cost per head. On a cost per pound of gain basis, these costs are lower for animals with higher average daily gains. Total feedlot costs per steer averaged \$192.95 and heifers averaged \$198.52 per head. Feed and yardage costs per pound of gain averaged 40 cents per pound of gain

for both steers and heifers. Total feeding costs/pound of gain were 49 cents for both steers and heifers.

\$74.96 per cwt for steers and \$72.31 per cwt for heifers. The average profit/loss was -\$107.26 per steer and -\$54.51 per heifer, with death loss.

The overall break-even prices and profitability of the feeding program are shown in Table 7. Profitability, as represented here, is for the feeding period only. Overall break-even live price was

Critical factors that affected profitability were feedlot average daily gain, initial value, feed cost, and quality grades.

Table 5. Costs associated with custom feeding yearlings on a \$ per animal basis.

|                          | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|--------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>            |                       |             |                |                |                           |
| Total feed <sup>a</sup>  | 77                    | 128.38      | 77.87          | 206.17         | 23.72                     |
| Yardage <sup>b</sup>     | 77                    | 29.21       | 29.00          | 29.25          | .09                       |
| Processing <sup>c</sup>  | 77                    | 5.00        | 5.00           | 5.00           | --                        |
| Medicine                 | 77                    | .57         | .57            | .57            | --                        |
| Death loss               | 77                    | 8.05        | 8.05           | 8.05           | --                        |
| Interest <sup>cd</sup>   | 77                    | 1.83        | 1.83           | 1.83           | --                        |
| Opportunity <sup>e</sup> | 77                    | 12.30       | 9.01           | 14.38          | .99                       |
| Total Cost               | 77                    | 192.95      | 140.02         | 273.38         | 24.83                     |
| <u>Heifers</u>           |                       |             |                |                |                           |
| Total feed <sup>a</sup>  | 41                    | 133.20      | 80.21          | 204.29         | 30.42                     |
| Yardage <sup>b</sup>     | 41                    | 29.07       | 28.75          | 29.25          | .24                       |
| Processing <sup>c</sup>  | 41                    | 5.00        | 5.00           | 5.00           | --                        |
| Medicine                 | 41                    | 1.82        | 1.82           | 1.82           | --                        |
| Death loss               | 41                    | 8.78        | 8.78           | 8.78           | --                        |
| Interest <sup>cd</sup>   | 41                    | 1.83        | 1.83           | 1.83           | --                        |
| Opportunity <sup>e</sup> | 41                    | 11.34       | 9.54           | 12.82          | .94                       |
| Total Cost               | 41                    | 198.52      | 143.96         | 272.56         | 31.75                     |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

<sup>b</sup> Yardage costs were \$.25 per animal each day.

<sup>c</sup> Fixed cost shared by owners on a per animal basis.

<sup>d</sup> Feeding period financing costs, including interest at 5.50 percent and a loan origination fee.

<sup>e</sup> Opportunity cost was calculated at 6 percent interest on the initial value of each animal for the duration of the feeding period.

Table 6. Costs associated with custom feeding yearlings on a \$ per lb of gain basis.

|                               | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                 |                       |             |                |                |                           |
| Total feed <sup>a</sup>       | 77                    | .33         | .21            | .38            | .03                       |
| Feed and yardage <sup>b</sup> | 77                    | .40         | .29            | .50            | .03                       |
| Total cost of gain            | 77                    | .49         | .37            | .64            | .04                       |
| <u>Heifers</u>                |                       |             |                |                |                           |
| Total feed <sup>a</sup>       | 41                    | .32         | .28            | .38            | .02                       |
| Feed and yardage <sup>b</sup> | 41                    | .40         | .36            | .43            | .02                       |
| Total cost of gain            | 41                    | .49         | .45            | .56            | .03                       |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

<sup>b</sup> Yardage costs were \$.25 per animal each day.

Table 7. Break-even price and profitability associated with custom feeding yearlings.

|                          | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|--------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>            |                       |             |                |                |                           |
| Break-even price, \$/cwt | 77                    | 74.96       | 68.54          | 83.31          | 2.60                      |
| Profit/Loss, \$/steer    | 77                    | -107.26     | -270.53        | 33.37          | 58.40                     |
| <u>Heifers</u>           |                       |             |                |                |                           |
| Break-even price, \$/cwt | 41                    | 72.31       | 68.40          | 79.21          | 2.66                      |
| Profit/Loss, \$/heifer   | 41                    | -54.51      | -200.00        | 37.33          | 53.80                     |

### Animal Performance: Calves

Initial information on the two pens of cattle is reported in Table 8. Average age of the steer calves entering the feedlot was 265 days (equaling a February 18, 2001 average calving date), with an initial weight of 588 pounds. Heifers had an average age of 266 days (February 17, 2001 average calving date) and weighed 551 pounds.

Animal performance for the start-up period, which lasted 66 days, is reported in Table 9. Steers averaged 741 pounds at the first weigh period (January 17, 2002). Performance averaged 2.35 pounds of gain per day, with feed efficiency of 8.84 pounds of feed (dry matter basis) per pound of gain. Average dry matter intake was 20.12 pounds per day. From delivery through the end of the grower rations, one steer died from respiratory problems.

Heifers averaged 693 pounds at the first weigh period (January 18, 2002) and gained 2.14 pounds per day. Feed efficiency for the heifers was 8.87 pounds of feed per pound of gain, with average dry matter intake of 18.42 pounds per day. Three heifers died during the initial grower phase (1 respiratory, 1 brainer/polio, and 1 coccidia).

Performance for the finishing period is reported in Table 10. Average finish weight of the steers was 1218 pounds, with steers consuming 22.07 pounds dry matter per day and gaining 4.01 pounds per day. Feed efficiency was 5.51 pounds of dry matter per pound of gain over the 120-day finishing period. Final death loss was 0.95 percent, as 3 steers died ( 2 from respiratory and 1 from clostridia).

Heifers finished at an average weight of 1103 pounds, consumed 20.47 pounds of dry matter per day and gained 3.58 pounds

per day, during the finishing phase. Feed efficiency was 5.71 pounds of feed per pound of gain over the 113-day finishing period. Final death loss was at 1.6 percent, as 4 heifers died (1 from respiratory, 1 coccidiosis, 1 brainer/polio and 1 broken leg).

Performance for the combined start-up and finishing periods is reported in Table 11. Over the entire feeding period, steers

gained 3.42 pounds per day, consuming 25.23 pounds of dry matter per day. Average feed efficiency was 7.32 pounds of dry matter per pound of gain and the average days on feed was 184 days. Heifers gained 3.05 pounds per day, consumed 23.86 pounds of dry matter and converted 7.76 pounds of feed to a pound of gain over an average of 181 days on feed.

Table 8. Initial animal performance of calves, receiving 11/12-13/01.

|                                     | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                       |                       |             |                |                |                           |
| Weight, lb                          | 317                   | 587.90      | 411.29         | 840.70         | 75.55                     |
| Hip height, in                      | 317                   | 46.74       | 42.50          | 52.25          | 1.75                      |
| Frame score                         | 280                   | 5.69        | 3.43           | 8.31           | .96                       |
| Age, days                           | 280                   | 264.96      | 155.00         | 311.00         | 22.70                     |
| Initial value, \$/head <sup>a</sup> | 317                   | 492.94      | 375.50         | 623.14         | 44.79                     |
| <u>Heifers</u>                      |                       |             |                |                |                           |
| Weight, lb                          | 248                   | 550.53      | 388.40         | 791.51         | 74.28                     |
| Hip height, in                      | 248                   | 46.12       | 42.00          | 51.50          | 1.77                      |
| Frame score                         | 203                   | 5.48        | 3.39           | 7.97           | .94                       |
| Age, days                           | 203                   | 265.86      | 200.00         | 353.00         | 34.59                     |
| Initial value, \$/head <sup>a</sup> | 248                   | 428.70      | 342.55         | 506.64         | 32.31                     |

<sup>a</sup> Initial value of the steers was \$83.75/cwt for 600 lb base weight with a \$4.00 slide. Heifer initial value was \$78.50/cwt for a 550 lb base weight with a \$6.00 slide.

Table 9. Animal performance of calves, receiving through start-up period (11/12-13/01 to 1/17-18/02).

|  | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|--|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                          |                       |             |                |                |                           |
| Weight, lb (1/17-18/02)                | 317                   | 741.24      | 527.25         | 1021.25        | 77.98                     |
| Average daily gain, lb/day             | 317                   | 2.35        | .53            | 4.39           | .64                       |
| Dry matter intake, lb/day <sup>a</sup> | 317                   | 20.12       | 8.84           | 35.27          | 4.06                      |
| Feed efficiency, lb feed DM/lb gain    | 317                   | 8.84        | 6.73           | 16.92          | 1.50                      |
| <u>Heifers</u>                         |                       |             |                |                |                           |
| Weight, lb (1/17-18/02)                | 248                   | 692.58      | 498.75         | 916.75         | 73.08                     |
| Average daily gain, lb/day             | 248                   | 2.14        | -0.49          | 3.57           | .61                       |
| Dry matter intake, lb/day <sup>a</sup> | 248                   | 18.42       | 5.74           | 30.48          | 3.79                      |
| Feed efficiency, lb feed DM/lb gain    | 248                   | 8.87        | - <sup>b</sup> | 23.26          | 2.26                      |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

<sup>b</sup> Minimum values are not reported because the formula showed animals losing weight having negative dry matter intake and feed efficiency which would not be valid.

Table 10. Animal performance of calves, finishing period (1/17-18/02 to out-date).

|                                     | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                       |                       |             |                |                |                           |
| Finished weight, lb <sup>a</sup>    | 317                   | 1218.40     | 977.78         | 1606.35        | 102.66                    |
| Average daily gain, lb/day          | 317                   | 4.01        | 1.52           | 5.31           | .56                       |
| Dry matter intake, lb <sup>b</sup>  | 317                   | 22.07       | 10.99          | 34.64          | 3.54                      |
| Feed efficiency, lb feed DM/lb gain | 317                   | 5.51        | 4.58           | 7.25           | .35                       |
| <u>Heifers</u>                      |                       |             |                |                |                           |
| Finished weight, lb <sup>a</sup>    | 248                   | 1102.71     | 777.78         | 1379.37        | 102.83                    |
| Average daily gain, lb/day          | 248                   | 3.58        | .79            | 4.94           | .53                       |
| Dry matter intake, lb <sup>b</sup>  | 248                   | 20.47       | 6.91           | 31.81          | 3.71                      |
| Feed efficiency, lb feed DM/lb gain | 248                   | 5.71        | 4.77           | 8.77           | .42                       |

<sup>a</sup> Calculated from hot carcass weight using a standard 63% dressing percentage.

<sup>b</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

Table 11. Animal performance of calves, total feeding period (11/12-13/01 to out-date).

|                                     | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                       |                       |             |                |                |                           |
| Average daily gain, lb/day          | 317                   | 3.42        | 1.79           | 4.47           | .43                       |
| Days on feed                        | 317                   | 184.43      | 171.00         | 193.00         | 6.66                      |
| Dry matter intake, lb <sup>a</sup>  | 317                   | 25.23       | - <sup>b</sup> | 50.44          | 9.38                      |
| Feed efficiency, lb feed DM/lb gain | 317                   | 7.32        | - <sup>b</sup> | 14.33          | 2.61                      |
| <u>Heifers</u>                      |                       |             |                |                |                           |
| Average daily gain, lb/day          | 248                   | 3.05        | 1.39           | 4.13           | .41                       |
| Days on feed                        | 248                   | 181.18      | 177.00         | 186.00         | 3.49                      |
| Dry matter intake, lb <sup>a</sup>  | 248                   | 23.86       | - <sup>b</sup> | 53.60          | 9.68                      |
| Feed efficiency, lb feed DM/lb gain | 248                   | 7.76        | - <sup>b</sup> | 18.23          | 3.14                      |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

<sup>b</sup> Minimum values are not reported because the formula showed animals losing weight having negative dry matter intake and feed efficiency which would not be valid.

Carcass data for the cattle is reported in Table 12. Average hot carcass weight for the steers was 768 pounds, with a yield grade of 3.06 and a 12.91 in.<sup>2</sup> ribeye. Average marbling score was high-small (8.24) and average quality grade was mid-choice (12.33). Heifer average carcass weight was 695 pounds, with a yield grade of 2.82 and a 12.72 in.<sup>2</sup> ribeye. Average marbling score for the heifers was high-small (8.00) and quality grade was low choice (12.25).

All A to Z calves were sold through IBP's Real-Time Market Value (RTMV) pricing grid system. Base price (USDA Choice yield grade 3) is established as in previous years (weekly average price for fed cattle in the

Panhandle feeding region). Individual carcass incentives and discounts were then applied using the RTMV pricing grid. Market dates, number of steers and heifers marketed on those dates and incentives and discounts for specific traits are outlined in Table 13. Base price remained relatively constant over the marketing period, ranging from a high of \$111.69/cwt to a low of \$106.77. The USDA Choice/Select spread ranged from \$9.85/cwt to \$10.45. USDA yield grade 2's received an additional \$2.50/cwt, while yield grade 1's received a \$6.50/cwt premium over 3's. The yield grade premiums were constant over the marketing period. Yield grade 4 discounts were \$15/cwt through the first two weeks of the marketing period and then increased to

\$25.25 the final week. Light weight carcasses were discounted to a greater extent (\$16.55 to \$21.39/cwt) than heavy weight carcasses (\$11.55 to \$12.39/cwt). Carcasses qualifying

for Certified Angus Beef (CAB) received premiums ranging from \$3.94/cwt to \$5.16/cwt, while USDA Prime premiums ranged from \$9/cwt to \$9.30/cwt.

Table 12. Animal performance, carcass data.

|                               | <i>No. of<br/>Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard<br/>Deviation</i> |
|-------------------------------|---------------------------|-------------|----------------|----------------|-------------------------------|
| <u>Steers</u>                 |                           |             |                |                |                               |
| Hot carcass weight, lb        | 317                       | 767.59      | 616.00         | 1012.00        | 64.68                         |
| Final yield grade             | 317                       | 3.06        | 1.34           | 6.49           | .73                           |
| Ribeye area, sq in            | 316                       | 12.91       | 9.80           | 16.10          | 1.21                          |
| Kidney, pelvic & heart fat, % | 317                       | 2.15        | 1.00           | 3.50           | .47                           |
| Backfat, in                   | 317                       | .53         | .15            | 1.05           | .17                           |
| Marbling score <sup>a</sup>   | 317                       | 8.24        | 2.00           | 16.00          | 3.03                          |
| Quality grade <sup>b</sup>    | 317                       | 12.33       | 8.00           | 15.00          | 1.31                          |
| Carcass price, \$/cwt         | 317                       | 108.23      | 81.52          | 123.39         | 6.52                          |
| <u>Heifers</u>                |                           |             |                |                |                               |
| Hot carcass weight, lb        | 248                       | 694.71      | 490.00         | 869.00         | 64.78                         |
| Final yield grade             | 248                       | 2.82        | .45            | 4.76           | .75                           |
| Ribeye area, sq in            | 248                       | 12.72       | 9.50           | 16.70          | 1.33                          |
| Kidney, pelvic & heart fat, % | 248                       | 2.23        | 1.00           | 3.50           | .51                           |
| Backfat, in                   | 248                       | .52         | .15            | 1.05           | .17                           |
| Marbling score <sup>a</sup>   | 248                       | 8.00        | 2.00           | 19.00          | 3.29                          |
| Quality grade <sup>b</sup>    | 248                       | 12.25       | 8.00           | 16.00          | 1.41                          |
| Carcass price, \$/cwt         | 248                       | 107.99      | 77.23          | 122.31         | 6.86                          |

<sup>a</sup> Marbling score: Standard ≤ 2; Slight = 3, 4, 5; Small = 6, 7, 8; Modest = 9, 10, 11; Moderate = 12, 13, 14; Abundant ≥ 15.

<sup>b</sup> Quality grade: ≤ 8 = Standard, 9 = Select<sup>-</sup>, 10 = Select<sup>0</sup>, 11 = Select<sup>+</sup>, 12 = Choice<sup>-</sup>, 13 = Choice<sup>0</sup>, 14 = Choice<sup>+</sup>, ≥ 15 = Prime.

Table 13. IBP Prices (RTMV – Real-Time Market Value).

|                  | 12/15/01<br>Yearlings<br>41 Heifers<br>77 Steers | 5/10/02<br>Calves<br>150 Heifers<br>149 Steers | 5/17/02<br>Calves<br>98 Heifers<br>46 Steers | 5/24/02<br>Calves<br>121 Steers |
|------------------|--|--|--|---------------------------------|
| Pr               | +6.40  | +9.30  | +9.20  | +9.00                           |
| CAB              | +8.94  | +3.94  | +4.09  | +5.16                           |
| YG1              | +6.50  | +6.50  | +6.50  | +6.50                           |
| YG2              | +2.50  | +2.50  | +2.50  | +2.50                           |
| <b>Ch 3 Base</b> | <b>105.99</b>                                    | <b>107.35</b>                                  | <b>111.69</b>                                | <b>106.77</b>                   |
| Se               | -10.40   | -9.85  | -10.45                                       | -10.25                          |
| YG4              | -20.00   | -15.00   | -15.00                                       | -25.25                          |
| < 550            | -22.51   | -21.39   | -20.63                                       | -16.55                          |
| > 950            | -21.81   | -12.39   | -11.63                                       | -11.55                          |
| Steers           | +0.18  | -1.12  | -1.08  | +0.81                           |

Most bonuses are additive. Discounts are not.

#### Costs and Returns: Calves

Costs associated with the custom feeding operation on a per animal and per pound of gain basis are reported in Tables 14 and 15. For analysis only, processing, medicine, death loss and interest were assessed on a fixed basis and were the same for each animal. Death loss was calculated as the initial value of the animal less any feedlot cost incurred to the time of mortality. These values were summed and divided by the number of finished animals to derive a death loss cost per head. On a cost per pound of gain basis, these costs are lower for animals with higher average daily gains. Total feedlot costs per steer averaged \$274.67 and heifers averaged \$247.22 per head. Feed and yardage costs per pound of gain averaged 51 cents and 53 cents for steers and heifers, respectively. Total feeding costs/pound of gain were 54 cents and 57 cents for steers and heifers, respectively.

The overall break-even prices and profitability of the feeding program are shown in Table 16. 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. Overall break-even live price was \$69.83 per cwt for steers and \$68.76 per cwt for heifers. Break-even feeder price (possible price paid for calves going into the feedlot which would produce \$0.00 profit/loss for the retained ownership program) was \$81.30 for steer calves and \$77.27 for the heifer calves, including death loss. In other words, if the average price for steer calves in the fall of 2001 was less than \$81.30, then the retained ownership program was more profitable than selling weaned calves in the fall. The average loss was -\$19.83 per steer and -\$6.58 per heifer.

Critical factors that affected profitability were initial animal value, feedlot average daily gain, and quality grade with relation to the changes in quality grade premiums and discounts across the marketing period.

Initial value of the steers was \$83.75/cwt for a 600 lb base weight with a \$4.00 slide. Heifer initial value was \$78.50/cwt for a 550

lb base weight with a \$6.00 slide. Using these market prices, initial values of the cattle going into the feeding program averaged \$493/steer and \$429/heifer. The opportunity cost of not selling the calves at weaning (an interest expense tied directly to the initial value of the calves) averaged \$14.93/head and \$12.76/head over the feeding period, for steers and heifers, respectively.

Animal performance was slightly above last year's program, with steers gaining 3.42 pounds per day and heifers gaining 3.05 pounds per day. Feed efficiency (pounds of feed per pound of gain) decreased by more than 1 pound (more than 1 pound of additional feed was required per pound of gain) over last year's performance. Feed efficiency this year was 7.32 pounds of feed per pound of gain for the steers, while heifers converted at 7.76 pounds.

Table 14. Costs associated with custom feeding on a \$ per animal basis.

|                          | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|--------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>            |                       |             |                |                |                           |
| Total feed <sup>a</sup>  | 317                   | 274.67      | 178.56         | 414.96         | 37.68                     |
| Yardage <sup>b</sup>     | 317                   | 46.11       | 42.75          | 48.25          | 1.67                      |
| Processing <sup>c</sup>  | 317                   | 5.38        | 5.38           | 5.38           | --                        |
| Medicine                 | 317                   | 1.01        | 1.01           | 1.01           | --                        |
| Death loss               | 317                   | 3.36        | 3.36           | 3.36           | --                        |
| Interest <sup>cd</sup>   | 317                   | 3.77        | 3.77           | 3.77           | --                        |
| Opportunity <sup>e</sup> | 317                   | 14.93       | 11.74          | 19.17          | 1.33                      |
| Total Cost               | 316                   | 357.16      | 263.54         | 501.24         | 38.54                     |
| <u>Heifers</u>           |                       |             |                |                |                           |
| Total feed <sup>a</sup>  | 248                   | 247.22      | 136.44         | 367.31         | 38.05                     |
| Yardage <sup>b</sup>     | 248                   | 45.30       | 44.25          | 46.50          | .87                       |
| Processing <sup>c</sup>  | 248                   | 5.18        | 5.18           | 5.18           | --                        |
| Medicine                 | 248                   | 1.11        | 1.11           | 1.11           | --                        |
| Death loss               | 248                   | 5.52        | 5.52           | 5.52           | --                        |
| Interest <sup>cd</sup>   | 248                   | 3.77        | 3.77           | 3.77           | --                        |
| Opportunity <sup>e</sup> | 248                   | 12.76       | 10.02          | 15.14          | .94                       |
| Total Cost               | 248                   | 328.32      | 216.29         | 449.46         | 38.68                     |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

<sup>b</sup> Yardage costs were \$.25 per animal each day.

<sup>c</sup> Fixed cost shared by owners on a per animal basis.

<sup>d</sup> Feeding period financing costs, including interest at 9.00 percent and a loan origination fee.

<sup>e</sup> Opportunity cost was calculated at 6 percent interest on the initial value of each animal for the duration of the feeding period.

Table 15. Costs associated with custom feeding on a \$ per lb of gain basis.

|                               | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|-------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                 |                       |             |                |                |                           |
| Total feed <sup>a</sup>       | 317                   | .44         | .37            | .56            | .03                       |
| Feed and yardage <sup>b</sup> | 317                   | .51         | .44            | .69            | .03                       |
| Total cost of gain            | 317                   | .54         | .47            | .74            | .04                       |
| <u>Heifers</u>                |                       |             |                |                |                           |
| Total feed <sup>a</sup>       | 248                   | .45         | .37            | .57            | .03                       |
| Feed and yardage <sup>b</sup> | 248                   | .53         | .45            | .75            | .04                       |
| Total cost of gain            | 248                   | .57         | .48            | .82            | .04                       |

<sup>a</sup> Individual animal dry matter intake was calculated by adjusting for live weight and average daily gain (Owens et al., 1984).

<sup>b</sup> Yardage costs were \$.25 per animal each day.

Table 16. Break-even price and profitability associated with custom feeding.

|                                 | <i>No. of Animals</i> | <i>Mean</i> | <i>Minimum</i> | <i>Maximum</i> | <i>Standard Deviation</i> |
|---------------------------------|-----------------------|-------------|----------------|----------------|---------------------------|
| <u>Steers</u>                   |                       |             |                |                |                           |
| Break-even live price, \$/cwt   | 316                   | 69.83       | 64.75          | 80.65          | 2.13                      |
| Break-even feeder price, \$/cwt | 316                   | 81.30       | 44.64          | 109.87         | 11.25                     |
| Profit/Loss, \$/steer           | 316                   | -19.83      | -243.14        | 93.13          | 58.51                     |
| <u>Heifers</u>                  |                       |             |                |                |                           |
| Break-even live price, \$/cwt   | 248                   | 68.76       | 65.96          | 83.02          | 1.78                      |
| Break-even feeder price, \$/cwt | 248                   | 77.27       | 28.87          | 99.58          | 10.43                     |
| Profit/Loss, \$/heifer          | 248                   | -6.58       | -267.29        | 114.43         | 51.35                     |

## SUMMARY

For the 2001-2002 feeding program, steer calves had an average daily gain of 3.42 pounds per day and heifers gained an average of 3.05 pounds per day during the feeding period. Yearling steers gained an average of 3.36 pounds per day and yearling heifers gained 3.52 pounds per day. Dry matter intake was 25.23 and 23.86 pounds per head daily for steer and heifer calves, respectively. Average dry matter intake for yearlings was 18.30 and 19.08 for steers and heifers, respectively. Feed efficiency was 7.32 pounds for the steer calves and 7.76 pounds for the heifer calves (pounds of feed per pound of gain). Yearling feed efficiency was 6.57 pounds of feed per pound of gain for steers and 6.14 pounds of feed per pound of gain for heifers. Hot carcass weights were 768 pounds (steer calves) and 695 pounds

(heifer calves). Yearlings had average carcass weights of 691 and 682 for steers and heifers, respectively. Eighty two percent of the steer calves and 80 percent of the heifer calves graded choice or higher. In addition, 28 percent of all the steer calves (41% of the black steer calves) and 14.5 percent of all the heifer calves (29% of the black heifer calves) met Certified Angus Beef (CAB) specifications. Calf losses averaged -\$19.83 per steer and -\$6.58 per heifer. The range in profits and losses was large for both steers (+\$93.13 to -\$243.14 per head) and heifers (+\$114.43 to -\$267.29 per head). Yearling losses were -\$107.26 per head for steers and -\$54.51 per head for heifers, with similar large ranges in per head profitability as was shown by the calves. Prime and CAB carcasses were responsible for the high-end of prices received and carcasses discounted for being light weight or yield

grade 4 were on the low-end. Animals that were treated for sickness or those that did not gain weight were also on the low end of the profitability scale. Feedlot average daily gain, and quality grade with relation to the changes in quality grade premiums and discounts across the marketing periods accounted for most of the variation in profitability.

Overall and in spite of poor profitability, the 2001-2002 A to Z Retained Ownership, Inc. program was deemed a success. Evaluations were conducted at the year-end meetings in Fruitland and Mackay. A review of the questionnaires filled out by the participating ranchers at the year-end meetings indicated satisfaction in the way the program was run during the year. A majority of the ranchers would participate in this retained ownership program again and expressed an interest in feeding cattle for 2002-2003. This year ranchers indicated that the highest value of the A to Z Retained Ownership, Inc. program was enhanced marketing of their calf crop followed closely by improved selection of replacement heifers and bulls. Other areas where the A to Z program was deemed very useful are: keeping abreast with changes in the beef, retaining ownership of a calf crop, and fine-tuning ranch management. Producers are using their individual data to market calves on satellite and Internet marketing systems, with very positive results. All suggestions, interests and comments will be considered in designing future retained ownership educational programs.

Cattle performance, feed costs and profitability for 2001-2002 compared to the previous nine years are shown in Appendix B. The three years of yearling data are included in Appendix C. Incoming value of calves, feed costs, feed efficiency, and carcass prices are variable over years and contribute greatly to the variation in profitability. Cattle performance is much less variable from year to year.

## LITERATURE CITED

- BIF. 1990. Guidelines for uniform beef improvement programs. Beef Improvement Federation. North Carolina State University, Raleigh, North Carolina.
- Owens, F.N., W.M. Sharp, and D.R. Gill. 1984. Net energy calculation from feedlot performance data. Research Report MP-116, p. 290. Oklahoma Agricultural Experiment Station, Stillwater, Oklahoma.
- Sims, D.D., A.G. Maddux, and J. Mintert. 1991. Kansas steer futurities: An analysis of the retained ownership program. Cooperative Extension Service Publication C-725, Manhattan, Kansas.
- 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. South Dakota State University Agricultural Experiment Station, Brookings, South Dakota.

## **Appendix A** **Program Participants**

---

### **Yearling Program**

Bert Brackett  
Brackett Livestock Inc.  
Flat Creek Ranch  
Rogerson, ID 83302  
208-857-2217

Virgil Fairchild  
880 NW 11th Ave.  
Payette, ID 83661  
208-642-4280

Shane Rosenkrance  
Mountain Springs Ranch  
5550 Barton Flat Road  
Mackay, ID 83251  
208-588-3110

### **Calf Program**

Doug Boggan  
HC 69, Box 430  
Riggins, ID 83549  
208-628-3567

Gary Chamberlain  
HC 1770  
Challis, ID 83226  
208-879-4417

Robert Chouinard  
HCR 01 Box 921  
Dayville, OR 97825  
541-987-2129

Alison Davis  
Deets Polled Hereford  
3068 Lampman Road  
Ferndale, WA 98248  
360-384-1628

Shawn Ellis  
M-M Ranch  
Box 571  
Challis, ID 83226  
208-879-5359

Virgil Fairchild  
880 NW 11th Ave.  
Payette, ID 83661  
208-642-4280

Mark Frisbie  
Frisbie Cattle Co.  
HC 79 Box 21  
Melba, ID 83641  
208-495-2601

Jack Harrop  
Harrop Ranch, Inc.  
HC 60, Box 240  
Moore, ID 83255

Roy Hoffman  
Box 1344  
Salmon, ID 83467  
208-756-2110

Ron & Dave  
Holman  
Route 2 Box 800  
Grangeville, ID 83530  
208-983-1393

John Kienitz  
Tin Cup Ranch  
3512 Sunset Dr.  
Emmett, ID 83617  
208-365-2753

Chris Lord  
PU Ranch  
Route 1, Box 447  
Arco, ID 83213  
208-527-3133

Dan Mahoney  
M-M Ranch  
Box 1  
Stanley, ID 83278  
208-774-3417

Jim Malcom  
Box 124  
Leadore, ID 83464  
208-768-2208

Bruce McConnell  
HC 68 Box 18  
Leadore, ID 83464  
208-768-2203

Cornelius & Johanna  
Nielsen  
P.O. Box 474  
Council, ID 83612  
208-253-6120

Mike Routson  
493 Fraiser Road  
Weiser, ID 83672  
208-549-2090

Jack Rubelt  
Harrington & Rubelt  
2280 Old Hornet Road  
Council, ID 83612  
208-253-6963

Joy & Maggie Sisler  
4455 Sunset Dr.  
Emmett, ID 83617  
208-365-2776  
Boyd Stokes

Dale Jolley  
646 Lemhi Rd.  
Salmon, ID 83467  
208-756-3923

Howard Sutton  
S Diamond Cattle  
2660 Farm to Market Rd.  
Midvale, ID 83645  
208-355-2450

John Sutton  
2719 Knob Hill Rd.  
Midvale, ID 83645  
208-355-2443

Tom Sutton  
2302 Old Highway  
Road  
Midvale, ID 83645  
208-355-2610

Joe Tonsmeire  
Box 72  
Lemhi, ID 83465  
208-756-3959

David Van Buren  
Van Buren Ranch LLC  
93 Sagebrush Lane  
Lewiston, ID 83501  
208-743-4283

**Board of Directors**

Joy Sisler, Chairman  
Mike Routson, Director  
Jack Rubelt, Director  
Howard Sutton, Director  
John Sutton, Director  
Gordon Keetch, Secretary

**Participating Feedlot**

Bruneau Cattle Company  
HC 85 Box 138  
Bruneau, ID 83604  
208-845-2762  
*Eric Davis, Manager*

**Participating Lending Institution**

US Bank  
Payette, ID 83661

**Feedlot Veterinarian**

Lloyd Knight, DVM  
Knight Veterinary Clinic  
P.O. Box 603  
Mountain Home, ID 83647  
208-587-7941

**Packing Industry Representative**

Larry Roberts, Head of Sales  
Iowa Beef Processors (IBP)  
P.O. Box 9346  
Boise, ID 83707  
208-345-6660

**Allied Industry Technical & Financial Support**

Pat Moran  
Schering-Plough  
474 Ranch Drive  
Eagle, ID 83616  
208-939-6031

Paul Trout  
Pfizer Animal Health  
1304 N. Middleton Rd.  
Nampa, ID 83651  
208-465-9418

B. Joe Dedrickson  
ALPHARMA  
One Executive Drive  
Fort Lee, NJ 07024  
201-947-7774

**University of Idaho Faculty**

Jim Church  
Idaho County Extension Educator  
320 W. Main  
Grangeville, ID 83530  
208-983-2667

Will Cook  
Gem County Extension Educator  
2199 S. Johns  
Emmett, ID 83617  
208-365-6363

Benton Glaze, Range Livestock Specialist  
District III Extension  
P.O. Box 1827  
Twin Falls, ID 83303-1827  
208-736-3638

Wilson Gray, Agricultural Economist  
District III Extension  
P.O. Box 1827  
Twin Falls, ID 83303-1827  
208-736-3622

Jim Hawkins  
Custer County Extension Educator  
P.O. Box 160  
Challis, ID 83226  
208-879-2344

Scott Jensen  
Canyon County Extension Educator  
P.O. Box 1058  
Caldwell, ID 83606  
208-459-6003

Gordon Keetch  
Adams County Extension Educator  
P.O. Box 43  
Council, ID 83612  
208-253-4279

Patrick Momont, Director  
District II Extension  
UI Boise Center  
800 Park Blvd., Ste. 200  
Boise, ID 83712-7742  
208-364-4032

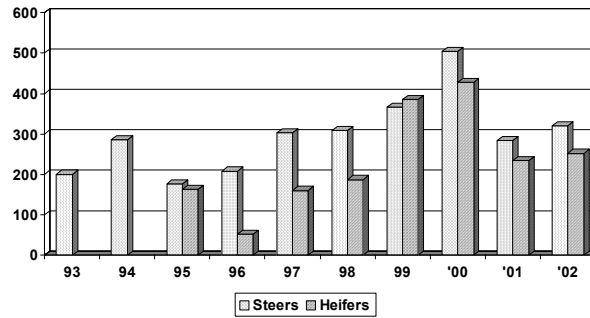
Eric Morrison  
Owyhee County Extension Educator  
P.O. Box 400  
Marsing, ID 83639  
208-896-4104

Neil Rimbey, Range Economist  
Caldwell Research & Extension Center  
16952 S. 10<sup>th</sup> Ave.  
Caldwell, ID 83607-8249  
208-459-6365

Shannon Williams  
Lemhi County Extension Educator  
201 Broadway  
Salmon, ID 83467  
208-756-2824

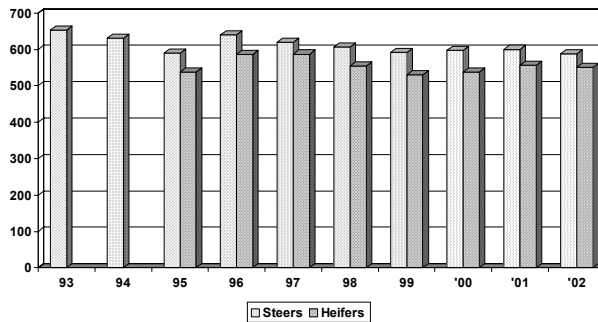
## Appendix B

### A to Z Consignments Calves

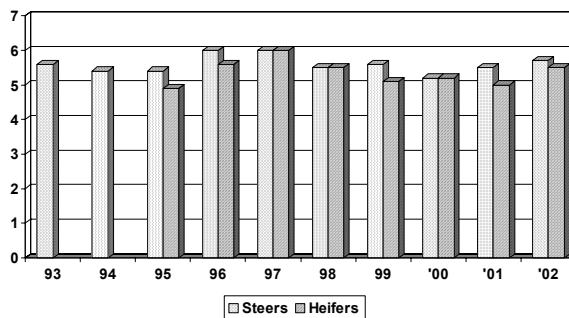


4,817 Head Total

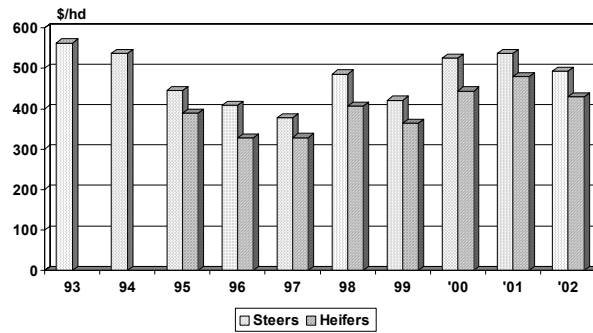
### A to Z Receiving Weights Calves



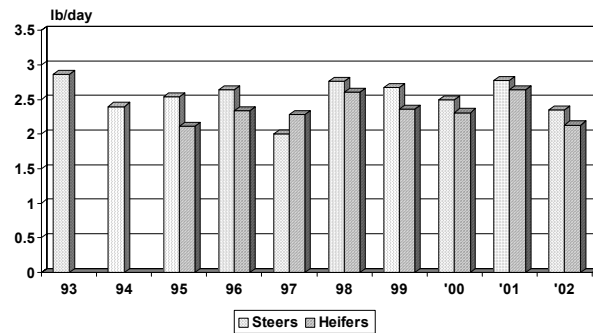
### A to Z Frame Scores Calves



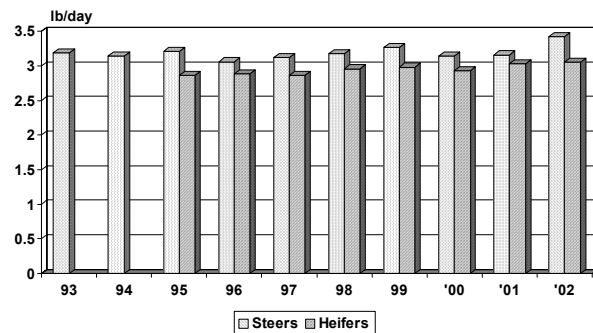
## A to Z Initial Value Calves



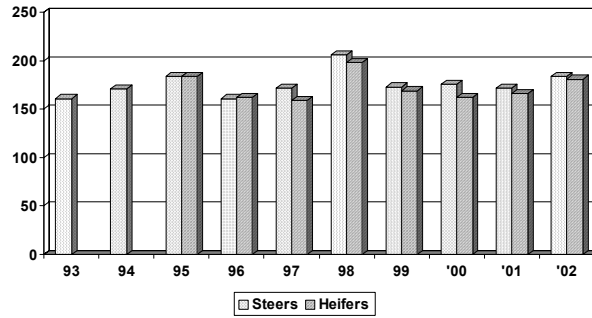
## A to Z – ADG (Receiving – Startup) Calves



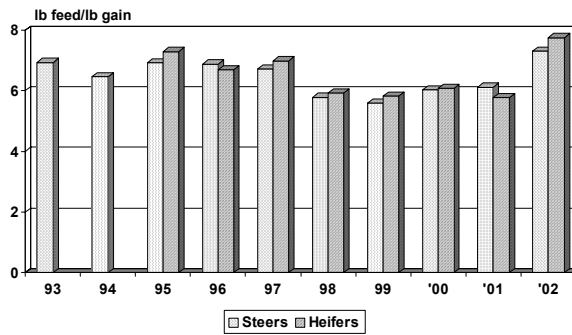
## A to Z – ADG Total Calves



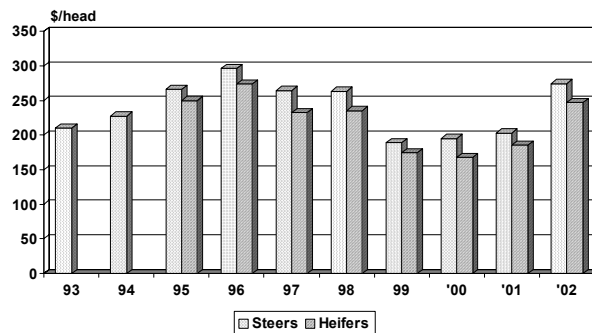
## A to Z – Days on Feed Calves



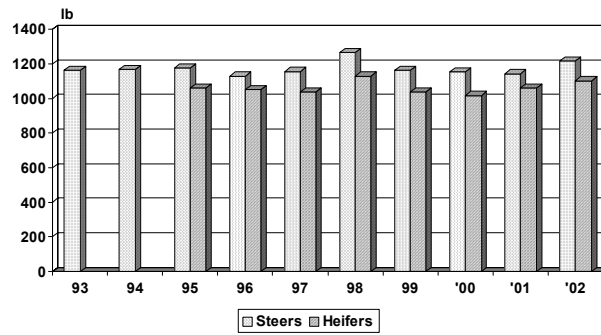
## A to Z – F/G Calves



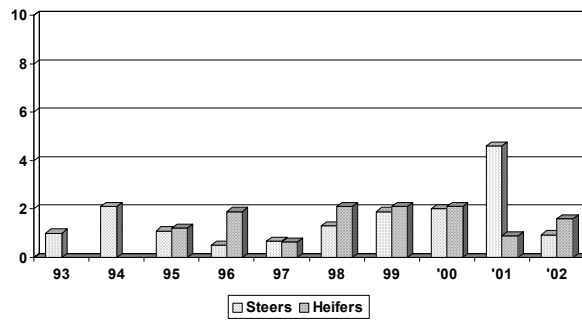
## A to Z – Feed Cost Calves



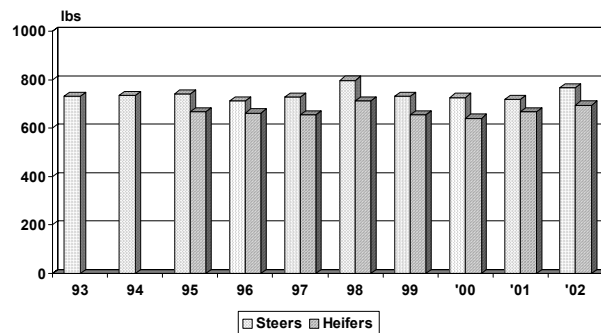
## A to Z Finished Weights Calves



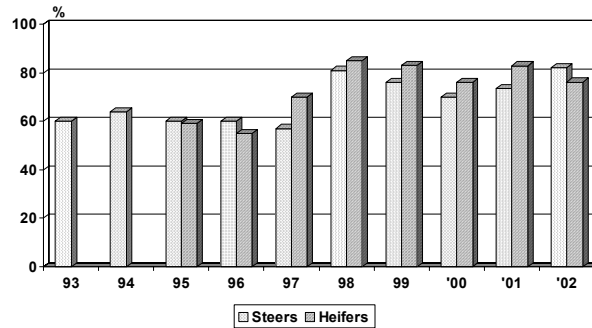
## A to Z Death Loss (%) Calves



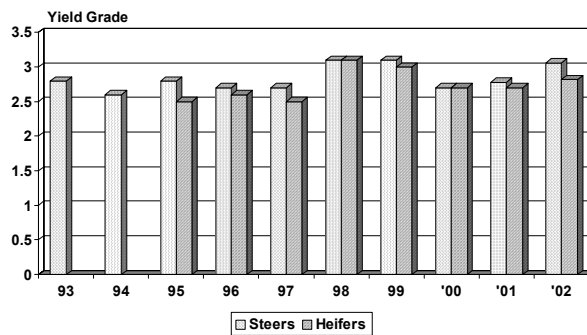
## A to Z Carcass Weights Calves



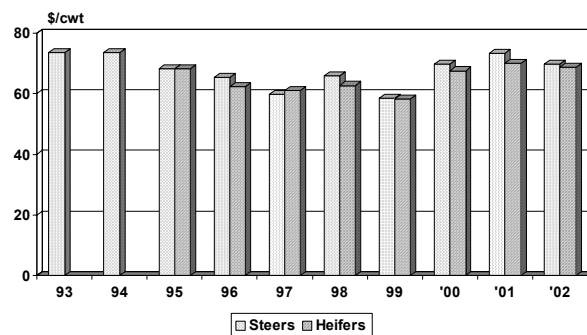
## A to Z Quality Grade (% Ch and Pr) Calves



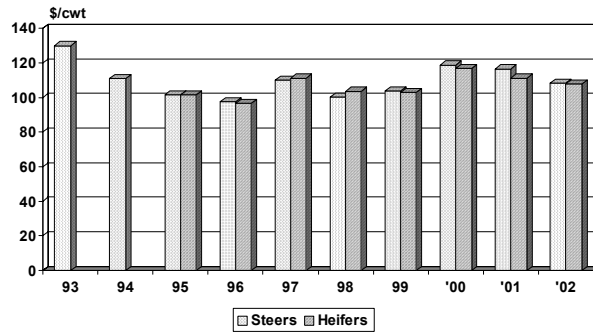
## A to Z Yield Grades Calves



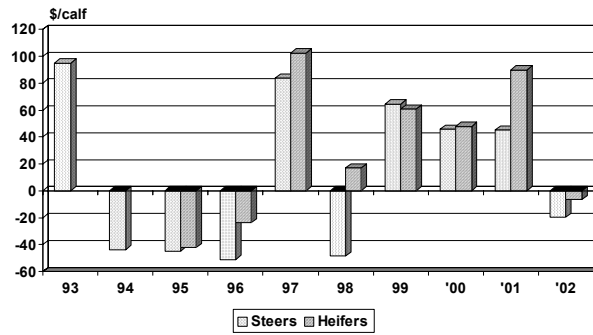
## A to Z – Break-Even Calves



## A to Z Carcass Price Calves

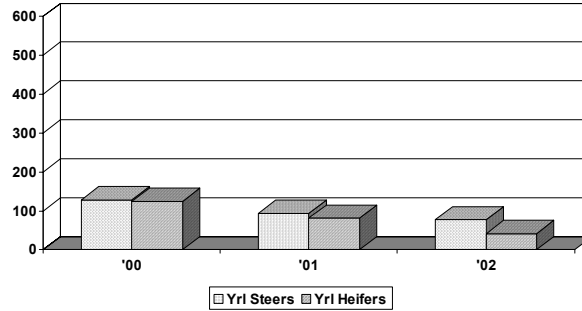


## A to Z – Profit Calves



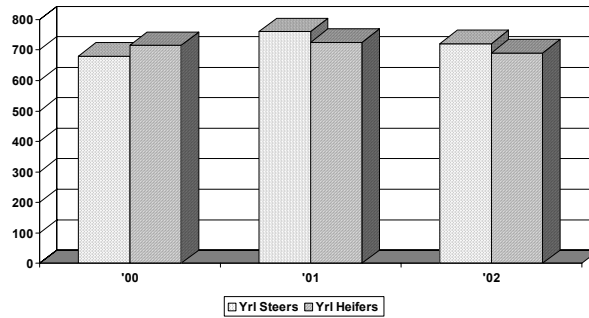
## Appendix C

### A to Z Consignments Yearlings

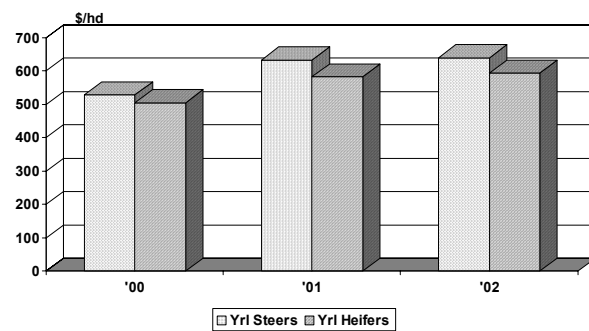


549 Head Total

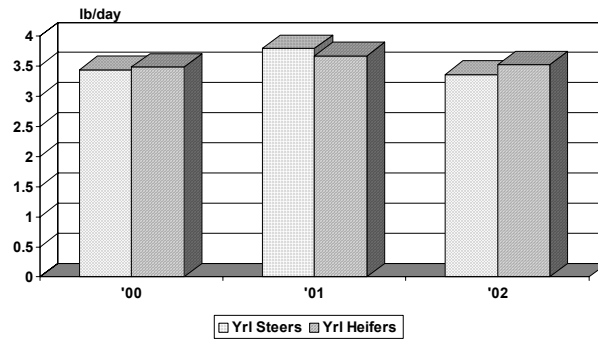
### A to Z Receiving Weights Yearlings



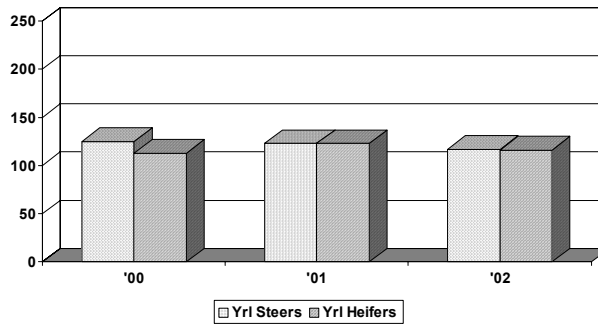
### A to Z Initial Value Yearlings



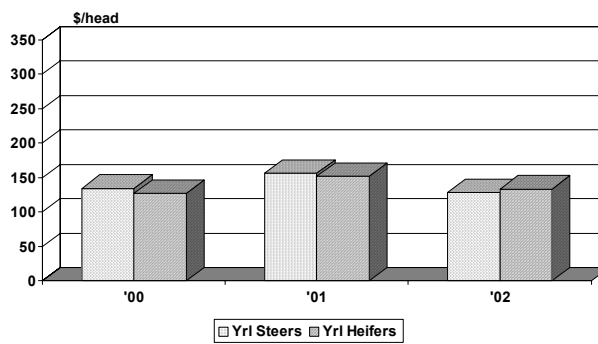
## A to Z – ADG Total Yearlings



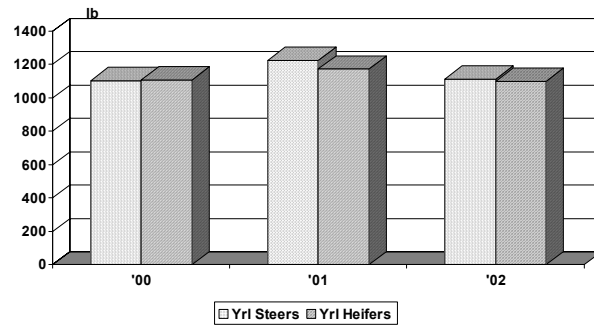
## A to Z – Days on Feed Yearlings



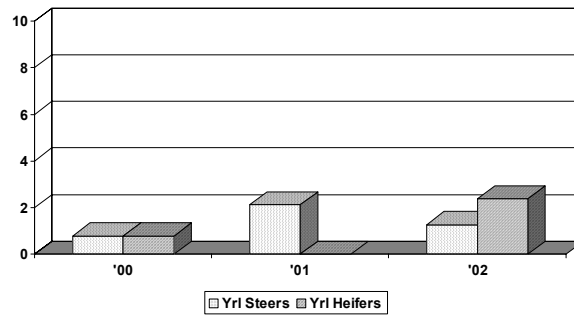
## A to Z – Feed Cost Yearlings



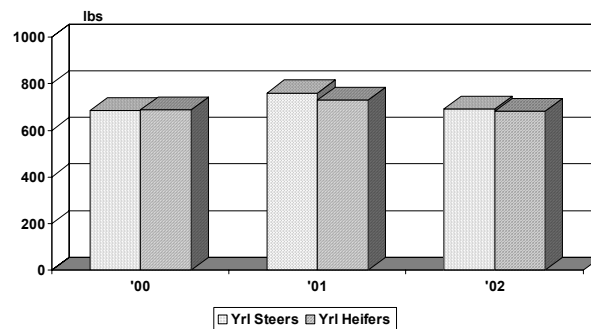
## A to Z Finished Weights Yearlings



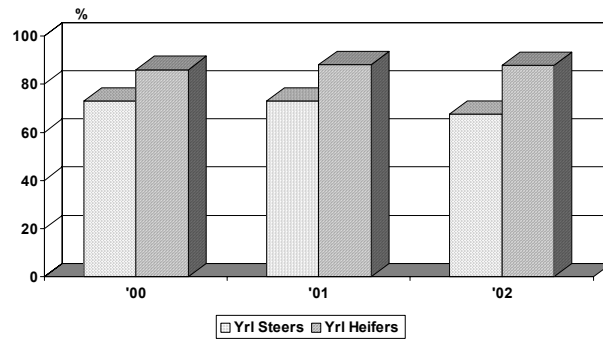
## A to Z Death Loss (%) Yearlings



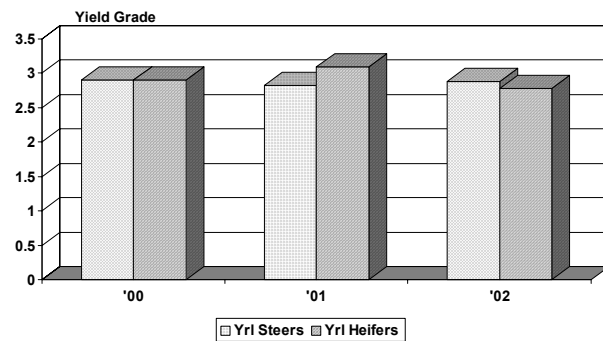
## A to Z Carcass Weights Yearlings



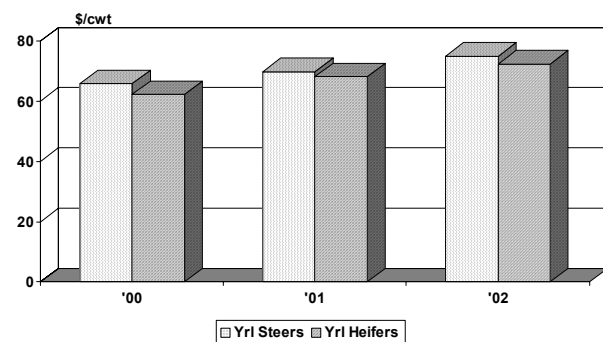
## A to Z Quality Grade (% Ch and Pr) Yearlings



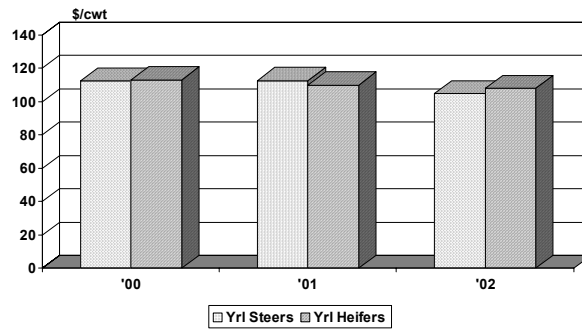
## A to Z Yield Grades Yearlings



## A to Z – Break-Even Yearlings



## A to Z Carcass Price Yearlings



## A to Z – Profit Yearlings

