

# IMPACT

University of Idaho  
Extension

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## Comparison of Animal Performance Among Three Profit Groups of Cattle

### *The Situation*

Beef producers are interested in increasing their profits. In order to maximize profits, producers need to know what consumers want as expressed in the market place. It is important to know how their cattle measure up. By retaining ownership through the feeding and harvest stages, producers can gain the information necessary for making management decisions. Accurate data must be collected and properly analyzed. In the intermountain west, most cattle ready for harvest are marketed based on the value of the individual carcasses. Profits from individual animals can vary by \$200 or \$300 per head within the same herd. Producers are asking questions like: Which animals are profitable and which are losers and why? What factors influence profitability?

### *Our Response*

University of Idaho faculty developed an Idaho Total Beef education program with input from ranchers, bankers, feeders, packers and allied industries. Ranchers participate by enrolling a sample of their calves (5-50 head) in a feeding trial. The calves are preconditioned (weaned and vaccinated) on the ranch and delivered to Bruneau Cattle Company Feedlot. The feeding trial starts in November and ends in May when the finished cattle are processed at Tyson Fresh Meats, Boise. Owners receive feedlot, carcass and economic information on their calves.

Objectives of this integrated resource management (IRM) program are to help ranchers: (1) broaden their knowledge of the whole beef industry, (2) gain feedlot, carcass and economic information on their own cattle, (3) identify variables that affect profitability, (4) compare heifer and steer performance, and (5) apply this information to their own ranch management.

Educational methods include: (1) rancher participation through ownership of cattle, (2) computer projections of anticipated performance, (3) feedlot tour and program update, (4) market reports, (5) individual animal, ranch and pen data, (6) performance and financial analysis, (7) processing plant tour and carcass viewing, and (8) published reports and articles.

### *Program Outcomes*

One hundred twenty-four ranches from 4 states have consigned 6,538 head of cattle (3,880 steers, 2,658 heifers) to A to Z Retained Ownership, Inc. for the fourteen years of feeding trials implemented in 1992-2006. Cattle performed similarly each year. Incoming value of cattle, feed costs, marketing date, feedlot average daily gain and price premium or discount based on carcass quality and conformity account for most of the variation in profitability among animals. Recent industry pricing grids reward production of lean quality carcasses.

For the 2000-2006 years, cattle data were sorted into high, middle and low profit groups and compared as

part of the analysis process. Consistently, the high profit cattle have a higher rate of gain and lower cost of gain. The average daily gain (ADG) of the high profit steer group when averaged over the seven years was 3.60 pounds of gain per day; the middle profit group was 3.30 pounds per day and the low profit group was 2.97 pounds per day. That means that in a 170 day feeding period the high profit steers would gain 110 pounds more than the low profit steers. The average cost per pound of gain was lower for the high profit steer group (56.5¢ per pound of gain) compared to the middle profit group (58.2¢ per pound of gain) and the low profit group (62.0¢ per pound of gain).

The price grid was used to value each carcass. The base price was for a Choice quality grade, yield grade 3 carcass. Premiums were paid for carcasses that grade Prime, yield grades 1 and 2, or Certified Angus Beef (CAB)®. Carcasses grading Select, Standard or no roll, yield grades 4 and 5, light weight less than 525 pounds or heavy weight over 950 pounds were discounted. The base price, premiums and discounts fluctuate weekly as influenced by supply and demand. The average carcass price for the high profit steer group was \$134.22 per hundredweight (cwt) compared to \$128.52 per cwt for the middle profit and \$121.58 per cwt for the low profit group.

Cattle in the high profit group had 98.5% with quality grades of Choice or Prime with 58% qualifying for a premium. Fifty-three percent received premiums associated with yield grades 1 and 2 with 99.6% having yield grades of 1, 2 or 3.

Cattle in the low profit group had 83% receiving premiums for yield grades 1 and 2 carcasses. Eighty-one percent received discounts for carcasses grading Select, Standard or yield grade 4. Discounts tend to be larger (\$9.25/cwt for Select and \$17.09/cwt for yield grade 4) than the premiums for yield grade 1 at \$6.50/cwt or \$2.50/cwt for yield grade 2.

Ranchers like to produce profitable cattle. The most profitable cattle must gain well in the feedlot and grade Choice or Prime without becoming yield grade 4 or 5. Participants have rated the feeding program as highly successful with the most valuable outcomes being a better understanding of all phases of the cattle industry and obtaining performance and

carcass information on their own cattle. They use the information in selecting replacement heifers and bulls, fine-tuning ranch management and enhanced marketing of their calves. Producers use their individual data to market locally or on satellite and internet marketing systems.

### **The Future**

The participants are desirous for the program to continue. The closing of the Tyson Fresh Meats plant in Boise has presented a problem with collecting the carcass data. Continuing high feeder prices, increased feeding and transportation costs, and lower enrollment of cattle have caused a cancellation of the 2006-2008 feeding programs. Re-evaluation of conditions next summer will determine the future of the program.

### **Participating Faculty**

Gordon Keetch, Adams/Washington Counties  
Scott Jensen, Owyhee County  
Neil Rimbey, Range Economist  
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