

Beef: Cow-Calf Split Session I

Dr. Roy Lewis, Presiding

Preconditioning Programs In Canada

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Introduction

Preconditioning has been a controversial issue since it was conceived about 25 years ago. While most agree that adequate preparation of calves to withstand the stresses of marketing is desirable, many veterinarians, cow-calf producers and feedlot operators remain sceptical that preconditioning adequately addresses this need. Both industry participants and observers have been frustrated by the lack of documented evidence that the concept is or is not beneficial. Recently, preconditioning has been criticized by several authors, mainly in the public press in the United States.

Growth and Development

Preconditioning programs in existence in Canada were based on the model developed by Dr. John Herrick and co-workers in Iowa in the mid 1960's. Organized and supported programs for preconditioning were not introduced into Canada until the early 1980's. By 1987, preconditioning programs had been established in Alberta, Saskatchewan and Ontario.

Alberta

Preconditioning, as an officially recognized program, was introduced in Alberta in 1980 with one sale of about 900 calves. The program grew quickly to 17,000 calves certified and 12 sales in 1984 and to 24,000 certified calves and 21 sales in 1987. Although the program has grown by 10 to 15% each year since 1984, the number of producers participating in preconditioning has averaged about 255 per year and has not increased. However, the average herd size grew from 68 to 94 calves in the same period.¹

Saskatchewan

In 1982, a preconditioning program similar to that in Alberta, was introduced in Saskatchewan, with one sale of about 1,000 calves. The sale was directed by a producer committee and was the first to incorporate pre-sorted load lots of calves. By 1987, there were about 9,500 calves sold at four sales in Saskatchewan. All sales were directed by a producer committee and pre-sorting remained a feature. Preconditioning was strongly viewed as a beneficial marketing strategy in Saskatchewan.

Ontario

Although a preconditioning program was started in Ontario in 1982, growth in the program really did not begin until 1984. In that year, preconditioning was incorporated into the Red Meat Plan and a \$10 per head incentive was provided for each preconditioned calf. In 1984, there were 11,000 preconditioned calves certified and by 1987, there were 27,000 fully preconditioned and another 6,000 calves processed under a retained ownership program. The majority of these calves were not sold through public markets, but placed in feedlots directly.

Other Provinces

In British Columbia, there were about 400 preconditioned calves produced by six operators in 1987, but there are no organized sales of preconditioned calves. There is no preconditioning program in Manitoba and no obvious movement to establish a program. While there were a few attempts in the late 1970's and early 1980's to establish preconditioning in Quebec, there is very little, if any, preconditioning practiced in Quebec today.

Support for Preconditioning

In contrast to the United States, preconditioning programs have been encouraged, supported, and

subsidized, to various degrees, by the provincial Departments of Agriculture. The degree of support provided includes education and extension, coordination and organization of sales, promotion, advertising and financial support ranging from \$10 per head payments in Ontario to provision of free ear-tags, certificates and veterinary visits in Alberta. There has been an effort among the provinces to coordinate the activities and to ensure uniformity of the program and requirements for preconditioning.

Benefits of Preconditioning—Fact or Fiction?

In Alberta, we attempted to collect as much objective data as feasible to evaluate the impact of the program on the cattle industry. Although these data were observational and not developed from a controlled study with accepted principles of experimental design, they have been very helpful in assessing the usefulness of preconditioning and determining future directions. Each year, we have published an annual report of the preconditioning program in Alberta.¹

Early in 1988, an independent evaluation of the Alberta program was sponsored jointly by Boehringer Ingelheim (Canada) Ltd. and Alberta Agriculture.² The study, which was conducted by Jim Townshend and Associates Agricultural Consulting of Edmonton, employed an interview and interpretation process. The study focused on the experiences of cow-calf producers, feedlot operators, veterinarians, market operators and Alberta Agriculture extension workers familiar with preconditioning. The primary objective of the study was to evaluate the growth and acceptance of preconditioning in Alberta. The findings of this study are summarized below.

Cow-Calf Producers

Net returns are often a major influence in the adoption of new production techniques or practices by livestock producers. The net returns to preconditioning are determined by weight gains during the preconditioning period, the costs of preconditioning, and to a much lesser extent, price premiums. From 1980 to 1987 the average price premium for preconditioned steers was \$5.15 and for preconditioned heifers, was \$4.25 per hundred weight. The premiums were quite consistent from year to year and from sale to sale. The average cost of preconditioning ranged from \$41.40 to \$53.23 per head during the period 1983 to 1987. When compared to these costs, there is no doubt that the amounts received from the price premiums alone are not sufficient to provide a positive return to preconditioning. Unless significant weight gains are achieved during the weaning period, preconditioning will not be financially advantageous.

In Alberta, fall grazing usually consists of cereal grain

stubble or mature forages of declining quality. Unweaned calves grazing these fields are expected to gain less than one pound per day. However, weaning calves in early October and starting them on well balanced rations may be expected to result in average daily gains of 2.20 to 2.25 pounds per day. This was confirmed in several monitored herds, in which the average daily gains of preconditioned calves have consistently been about 2 pounds, which is adequate to result in a positive net return. Therefore, if fall grazing conditions support an average daily calf gain of 1.5 pounds or more, preconditioning may not be advantageous. Many producers have reported that weaning calves earlier than normal, especially on declining fall pastures, results in an improvement in cow condition. Although difficult to measure, this practice is of much greater benefit in periods of drought or severe pasture shortages.

Whereas the numbers of calves preconditioned has grown, producer turnover in the program has been relatively high. From 1984 to 1986, 75% of those participating certified their calves only once, and 52% of producers who certified calves in 1987 were first time participants. Only 16% of producers certified calves in all three years. This information strongly indicates that many producers have not been satisfied with the returns or did not recognize any benefits from the program.

In Alberta, larger producers are generally more satisfied with the returns from preconditioning than the smaller mixed-farm operators, likely because they possessed better developed and more specialized management skills. They achieved more cost-efficient handling, better disease control, and more effective feeding for optimal post weaning gains. Calf producers who were supportive of preconditioning recognized that preconditioning provided an opportunity to realize increased net revenues if the cost of gain was significantly below the selling price, and when poor fall grazing conditions limited calf gains and cow maintenance. These producers also recognized that preconditioning enhanced calf marketability through improved nutrition, health status, and the benefits of increased buyer awareness associated with the establishment of a reputable herd.

Feedlot Operators

Preconditioning has long been promoted as a management technique which reduces sickness and death losses in feedlots. Survey questionnaires returned by feedlot operators have consistently reported lower morbidity and mortality rates among preconditioned calves. Over the eight year period from 1980 to 1987, the average treatment rate was 9.1% and the death loss was 0.6% among 13,567 preconditioned calves in Alberta feedlots compared at 21.3% treated and 1.6% dead in 23,180 regular calves

purchased at auction markets.

Based on their attitudes towards preconditioning, feedlot operators in Alberta tend to be either those who are risk-inclined or risk-averse. In larger feedlots, in which income is derived from continuous custom feeding and cattle investments are risk-inclined, owners are usually unwilling to pay a premium for preconditioned calves purchased through auction markets. Smaller, one-time per year feeders tend to be more risk-averse. They view preconditioning as a means to reduce morbidity, mortality and treatment costs. They were generally prepared to pay a premium for preconditioned calves.

Other Industry Participants

Veterinarians were generally philosophically supportive of preconditioning. Production-orientated veterinarians actively promoted the concept for its intrinsic economic value to calf producers. They utilized preconditioning as a bridge to reach their clients and an opportunity to expose them to new health management and marketing techniques. Other more traditional veterinarians simply provided services for preconditioning at the request of the client.

In Alberta, livestock marketers generally regarded preconditioning as a special calf sale opportunity. Their commitment was limited to the provision of a service to sellers and buyers of calves.

Conclusions

Preconditioning was shown to be beneficial to the beef cattle production system under certain conditions. The Alberta preconditioning program offered a profitable marketing alternative to progressive cow-calf producers. Net returns were increased by greater weights and price premiums at calf sales. The potential to increase net returns was greatest when calf performance was limited by unfavorable fall grazing conditions. Disadvantages for cow-calf producers were increased feed and labour costs and increased risk of sickness and death losses during the weaning period.

In Alberta, preconditioning has experienced limited growth, although a large number of calf producers were involved at least once since 1980. Although preconditioned calves were seldom purchased by larger, commercial

feedlots, promotion of the concept has increased the awareness of the need to improve the management and reduce the stresses of calves during the transfers from ranches to feedlots. Many smaller cattle feeders were willing to pay a premium for preconditioned calves because they obtained healthier calves which required fewer treatments, suffered less death loss and have rapidly adapted to feedlot conditions.

Inadequate assistance from extension services in the areas of goal setting, nutrition, health and marketing advice provided to those inexperienced or new to preconditioning was a major failing of preconditioning programs in the past. This deficiency has severely limited the potential for growth in the program. Cow-calf producers are often not skilled in post-weaning calf management and they are unable and unwilling to accept the economic loss from sickness, death loss, treatment costs and reduced gains. This is particularly the case for younger operators faced with a high debt to equity ratio, high operational costs, and limited credit. Without adequate training and assistance to acquire the management skills required to successfully precondition calves, they will try it once, often with disappointing results.

Preconditioning, and/or preimmunization, should be regarded by calf producers as options which should be individually evaluated each year for feasibility and profitability. These options may not be the choice of every producer in every year, but may provide greater opportunities for increased profits under certain conditions. The industry, as a whole, will benefit from improvements in marketing, production and health management of feeder calves. The continuing challenge to the beef cattle industry is to create and develop integrated marketing and distribution systems which maximize the economic performance and minimize the risk of loss from the production systems.

References

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