Retained Ownership: A Management Alternative for the Beef Producer

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RETAINED OWNERSHIP:
A MANAGEMENT ALTERNATIVE FOR THE BEEF PRODUCER

William F. Hendrix and W. Douglas Warnock

INTRODUCTION

Retaining the ownership of calves, rather than selling at weaning, is a management alternative that can improve the profit potential for Pacific Northwest cow-calf producers. Retaining ownership is one type of integration in the beef production business. While the term may have different meanings to different people, it includes one or more of the phases of beef production: cow-calf to stocker, stocker to feedlot, or cow-calf to feedlot. It can be profitable, especially if the cattle perform well and provide a desirable end product. Retaining ownership of calves allows the producer increased control of the marketing process.

Even though retained ownership has received increased publicity in recent years, it is known that less than 9 per cent of the beef calves in the United States are retained from birth to slaughter, in a retained ownership program. This practice offers cow-calf producers an opportunity to expand their beef cattle enterprise and capitalize on the performance potential of the calves they produce. Many cow-calf producers are searching for ways to increase net income. Each producer must determine the potential profitability for that beef enterprise. Each ranch operation is unique and retaining ownership may or may not fit into an individual operation.

ADVANTAGES

Why retain ownership? The first reason is that the producer can realize greater economic returns. Retained ownership increases the number of marketing options available to the producer. The producer is able to experience the economic advantage, normally received by others, from both the post-weaning growth phase and the finishing phase of the beef production cycle. Retaining ownership also makes it possible for the cow-calf producer to obtain valuable information on both the feedlot performance and the carcass desirability of calves from that herd. This makes available a vital management tool that can be used to evaluate and improve a herd breeding program. Retaining ownership of feeder calves requires, in most cases, less investment in facilities and equipment than investing in other livestock operations. On many farms, building some fence, providing a few feed bunks or self feeders, adjusting vaccine schedules to complete the programs at or prior to weaning and, perhaps, taking advantage of an existing building or barn is all that is required.

Accelerated systems of finishing calves during retained ownership have several advantages for cow-calf producers in many Pacific Northwest areas:

- Calves are marketed at slaughter weights at 14 to 16 months of age. This reduces interest costs associated with owning calves for a longer period of time.

- In the marketing of spring-born calves, retained ownership systems place the market timing of finished cattle in the seasonally high value spring-early summer period, because calf weight gains in most areas of Washington and Oregon during the winter are higher than in the midwestern cattle feeding areas.
• Reduced stress, shrinkage, disease, marketing, and transportation expenses combine to greatly lower the cost of production.

• Rapid gains from high energy feeding programs allow the producer to take full advantage of the genetic improvement programs imposed on the cow herd.

• The system utilizes abundant by-product and grain supplies in the Washington and Oregon feeding areas.

• The potential for a profit from retained ownership has been documented by Washington State Cooperative Extension field studies in seventeen of the last eighteen years in tracking the Pacific Northwestern cattle markets.

DISADVANTAGES

Some disadvantages that must be considered when making a decision about retaining ownership in beef calves are:

• Many cow-calf producers do not have the experience or facilities needed to post-wean feed or finish their cattle, sometimes relying on someone else to provide the service. Several commercial feedlots in Washington custom feed cattle. It is a matter of deciding upon one of them and developing a relationship of trust with the operator of the feedlot.

• Marketing a small number of fed cattle and the distance from slaughter facilities may present problems. Some feed yards require a minimum number of animals per pen and a small producer may not have enough to fill a pen. In these situations it may be possible for two or more individuals to feed in a pen together.

• Obtaining credit, maintaining cash flow, and income tax implications must be considered also.

TEST AND EVALUATE

A successful retained ownership venture requires more intensive management and a well-planned herd health and feeding program. Favorable weight gains depend upon using a balanced ration, obtaining good feed intake and efficient feed conversion, as well as keeping the calves healthy throughout the retained ownership. Vaccination and feeding schedules must be planned well in advance.

The longer a producer retains ownership in the cattle, the greater the risk. Changes in the price of cattle and in the price of feeds can adversely affect the potential profitability of retaining ownership. This longer ownership period increases the time in which the owner must provide operating capital and increases the cash flow requirements of the production enterprise. Some lenders may disapprove of the increased capital requirement and risk. Cattle price risk can be limited by forward contracting/hedging.
HEALTH

Minimizing health problems, especially those associated with weaning and starting on feed, is critical to successful retained ownership programs. The common problems associated with purchasing feeder calves, such as stress, excessive shrink, and exposure to a wide variety of infectious agents, are avoided when weaning and feeding out your own calves.

Creep feeding prior to weaning is not always profitable, but it is a cost effective “health procedure” in successful weaning. It helps avoid stress, reduces digestive problems, and reduces respiratory diseases which are often associated with the post-weaning period.

Calves nursing cows and eating grass do not need extremely high protein levels in creep rations. The key is to get some concentrate into the calves to condition the rumen for the stress associated with weaning and to aid in the adjustment to a grain and forage diet. Calves eating even a small amount of grain in a creep ration have been shown to wean easier. They adjust to bunk feeding quicker and do less wandering of fence lines at weaning.

Stress, immunosuppression, and subsequent disease are major health problems in the post-weaning period. The key is prevention. The best procedure to follow is a preconditioning program where the vaccination program is completed 21 to 30 days prior to weaning. Performing any health procedures at weaning is not advised, since the goal of preconditioning and weaning, during a retained ownership program is to extend stress periods and have the calves at a high level of immunity at weaning. If any health procedure is done at weaning it should be limited to the last vaccinations in the planned herd health sequence.

Suggested health procedures include

• Individual identification
• Vaccinate for IBR, PI-3 and BVD
• Vaccinate for 7-way or 8-way Clostridia
• Vaccinate for Hemophilus somnus
• Treat for worms, grubs and lice
• Implant calves with a growth promotant

Castration and dehorning should be done when the calves are small. If it has to be done at weaning time, it should be delayed two weeks in order to spread out the stress.

GAIN/FEED/NUTRITION:

One of the often stated restrictions of a cow-calf producer retaining calf ownership is the lack of feeding expertise. The vast majority of problems related to nutrition of feeder calves can be traced to the first two weeks on feed. Once this start-up period is over, a successful feeding program can be accomplished in any phase of the feeding period.

The most important factor in establishing a retained ownership feeding program is to use a feed that will enhance intake. It is common sense, but worth noting, that a calf with a full belly will be less concerned about loosing its mama. Fence-line feeders work well at weaning,
because calves have a tendency to wander fence lines looking for their mother. Once a post-weaning feeding period has begun, it should be continued for at least two weeks. It has been our observation that when the post-weaning feeding period was stopped within two weeks, it has caused a multiplier effect on stress levels.

The expected level of feed intake of newly weaned calves will vary between 0.5 per cent of body weight in highly stressed calves to 3.5 per cent of body weight in calves that are less stressed. Some of the best results recorded in newly weaned calf feeding programs have been accomplished with pelleted, high energy, moderate protein, medicated rations. Many of these rations contain lures and flavor enhancers to attract the calves and stimulate intake. Anise, yeast, and molasses are common lures used to increase the intake of calves during the critical first several days of a feeding program. Self-feeders have been successfully used in a weaning program. It is recommended that a nutritionist be consulted, if a producer wants to design a personal ration and that consideration be given to adding 3 or 4 pounds of dry laundry detergent to each ton of pellets to help eliminate bloat. Antibiotics are incorporated in weaning rations to decrease the level of illness and limit coccidiosis that often accompanies weaning stress. Several excellent rations have been researched and have been on the market for many years that give excellent results during the first few weeks post-weaning.

A summary of newly weaned calf feeding trials between 1986 and 1992 in northwest field studies by Cooperative Extension is shown below. These trials used a self fed, highly palatable, medicated, commercially available, pelleted ration.

<table>
<thead>
<tr>
<th>Calf Numbers</th>
<th>2047</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of trials</td>
<td>15</td>
</tr>
<tr>
<td>Average days on feed</td>
<td>21</td>
</tr>
<tr>
<td>Average starting weight</td>
<td>542 pounds</td>
</tr>
<tr>
<td>Average ending weight</td>
<td>609 pounds</td>
</tr>
<tr>
<td>Average weight gained</td>
<td>67.2 pounds</td>
</tr>
<tr>
<td>Average daily gain</td>
<td>3.25 pounds</td>
</tr>
<tr>
<td>Average feed conversion</td>
<td>5.07</td>
</tr>
<tr>
<td>Average cost of gain</td>
<td>$0.38 per pound</td>
</tr>
<tr>
<td>Sick animals</td>
<td>0.44 percent</td>
</tr>
<tr>
<td>Death loss</td>
<td>0.15 percent (3 head)</td>
</tr>
</tbody>
</table>

CONCLUSION

Cattle producers are in constant search of increased profits in production and marketing. Retained ownership offers a way to increase the marketing options and may improve profits for many cattle producers. A producer can take advantage of favorable market conditions and avoid the stress and losses associated with weaning, transfer of ownership, and transportation. Although retained ownership may not be for everyone, retained ownership is a viable alternative that should be considered by cow/calf producers.

A suggested procedure for doing an economic analysis is included in the following section.

Remember that marketing costs and health care costs are recorded as expenses only once. If calves are retained through the finishing phase, the marketing and vaccination costs should only be listed as an expense once.
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

Case Study - Example: (work sheet analysis 7A through 11A)

Post Weaning Phase (page 7A)

Sam and Ruth McProfit are the owners of a ranch in northeastern Washington. The McProfit ranch runs approximately 120 Simmental Angus crossbred cows. The cows have been bred to Limousin bulls for the past two years as a terminal cross. For many years all calves have been sold at a local sales auction yard. The ranch has a weaning rate of 90% so there are 108 calves to market annually. The McProfits purchase all of their replacement heifers.

For several years Sam and Ruth have seriously considered retaining ownership of their calves. They consult with their Extension agent and decided to give it a try. To limit the risk, the Extension agent recommends a full vaccination schedule coordinated with their veterinarian which will conclude prior to calf weaning. The vaccination schedule should give the maximum coverage to their calves at weaning. In addition, since they are going to retain ownership, they have decided to worm the calves. The health program cost is $5.25 per animal. (record on line 5B)

The calves are weaned in October and weigh an average of 570 pounds. Market price at the time of weaning is $0.82. They have purchased a weaning ration from the local feed company. It is medicated, highly palatable, and costs $182 per ton ($0.091 per pound). (record on line 5A)

Sam and Ruth have consulted their banker about retaining ownership because it means they will have a larger line of credit during the next 200 days if they retain ownership that long. The bank rate of interest for their credit line is 9%.

Sam has built two 12-ton self feeders and placed them along the fence in an open corral for the calves. He has decided to charge a yardage fee of $.07 per day to the retained ownership operation because that is what the local feed yard charges. The yardage fee will offset repairs, maintenance, and his labor costs.

After 21 days the calves have gained an average of 72 pounds and there have been no health problems, although one animal died of unknown causes. The market price at the end of the post weaning phase is $.82 per pound. (record on line 6)

Total costs during the post weaning phase was $40.28. The gross value of the calves has risen $53.78 during the 21 days so the net return on the post weaning phase is $13.50 per animal. There are 107 animals remaining that have a net increase in value of $1,444.50.
Wintering/Background Phase (page 8A)

The calves enter the background phase weighing 642 pounds. The local market price of calves this weight is $0.82 per pound. Sam and Ruth McProfit raise all of their own alfalfa hay and are able to sell some each year. They can sell their alfalfa hay for $90.00 a ton. Sam and Ruth have purchased grain screening pellets for their calves for $100.00 per ton. (record these prices on 5A)

Sam and Ruth have once again consulted their veterinarian and determined that no further vaccinations are needed for the wintering/background phase. A high quality trace mineral has been added that contains Bovatec and 90 ppm of selenium. Yardage continues to be figured at $.07 per day and interest continues to be 9%.

Sam and Ruth feed an average of 20 pounds of alfalfa hay and 1.5 pounds of screening pellets to each animal for 100 days. During the 100 days the calves gain 2 pounds per day and end the phase weighing 842 pounds. The market price of this weight of animal is $0.78 per pound.

Total cost of the wintering/background phase is $120.06. The net increase in value of the calves is $10.26 per animal or $1,097.82 for the 107 calves.

Finishing Phase (page 9A)

Sam and Ruth decide the calves are large enough to enter a custom feed lot for the finishing phase of retained ownership. The market price on the day they enter the feedlot is $0.78 per pound.

During the next 120 days the McProfit calves gain an average of 3.5 pounds per day at a total custom feeding cost of $.49 per pound. One of their calves dies, but 106 head go to market at an average weight of 1,262 pounds. The market price is $.75 per pound. Marketing expenses are $2.25 and interest expenses have been at 9% during the finishing phase. The total gross ending value of each calf is $946.50. The costs during the finishing phase of retained ownership was $234.26. Net gain in value of each animal during the finishing phase was $55.48. The total net gain for the 106 McProfit calves was $5,880.88 as they marketed them in late spring.

Summary (page 10A)

Sam and Ruth McProfit were pleased with their retain ownership experience. They felt that their risk was limited because of their herd health program and the type of cattle they raise. Their total net gain was $79.24 per animal or $8,399.44 for the 106 animals they marketed.
## ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

**POST WEANING (per animal)**

1. **Value of calves at weaning**
   
   \[ \text{End Wt.} \quad \text{lbs.} \times \text{Market price} \quad \text{lbs.} = \text{Market price} \quad \text{lbs.} \]

2. **Weight Gained or Lost**

   \[ \text{End Wt.} \quad \text{lbs.} - \text{Starting Wt.} \quad \text{lbs.} = \text{lbs.} \]

3. **Average Daily Gain**

   \[ \frac{\text{End Wt.} \quad \text{lbs.} + \text{Starting Wt.} \quad \text{lbs.}}{\text{days}} = \text{lbs./day} \]

4. **Death Loss**

   \[ \text{Loss} \quad \text{Total Animals} \quad \% \]

5. **Costs**

   a. **Weaning Ration**

      \[ \text{Amount} \quad \text{lbs.} \times \text{Price} \quad \text{lbs.} = \text{lbs.} \]

   b. **Health Care**

      \[ \begin{array}{ccc}
         \text{Product} & \text{Amount} & \text{Cost} \\
         \hline
         \text{Product 1} & \text{Amount 1} & \text{Cost 1} \\
         \text{Product 2} & \text{Amount 2} & \text{Cost 2} \\
         \text{Product 3} & \text{Amount 3} & \text{Cost 3} \\
         \hline
      \end{array} \]

   c. **Yardage**

      \[ \text{Rate} \quad \text{X No. of days} \quad \text{TOTAL} \quad \text{lbs.} \]

   d. **Interest Cost**

      \[ \text{Interest Rate} \quad \frac{\text{sum of #1, #5 A, B & C}}{365} \quad \text{X No. of days} \quad \text{= $} \]

   e. **Total Postweaning Costs**

      \[ \text{sum of #5 A, B, C & D} \quad \text{=} \quad \text{TOTAL} \quad \text{lbs.} \]

6. **Gross value at end of post weaning period**

   \[ \text{End wt.} \quad \text{lbs.} \times \text{Market price} \quad \text{lbs.} = \text{lbs.} \]

7. **Returns**

   \[ \text{Gross value} \quad \text{#6} \quad \text{X No} \quad \text{4} \quad \text{minus} \quad \text{#1} \quad \text{=} \quad \text{lbs.} \]

8. **Profit or Loss**

   \[ \text{Returns (#7) minus Costs (#5E)} \quad \text{=} \quad \text{lbs.} \]
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

POST WEANING (per animal)

1. Value of calves at weaning
   570 lbs. @ Market price $ .82 = $ 467.40

2. Weight Gained or Lost
   End Wt. 642 lbs. - Starting Wt. 570 lbs. = 72 lbs.

3. Average Daily Gain
   $2 / 72 lbs. + 21 days = 3.43 lbs./day

4. Death Loss
   Loss 1 + Total Animals 108 = 1 %

5. Costs
   a. Weaning Ration
      Amount lbs. 340 x Price $.091 = $ 30.94
   b. Health Care
      Product     Amount     Cost
      Viral Shield          $ 1.50
      8 Way                $ 1.00
      Worm 5 1/2 cc @ .50   $ 2.75
      TOTAL               $ 5.25
   c. Yardage
      Rate .07 X No. of days 21 = $ 1.47
   d. Interest Cost
      $ .505.06 X .09 + 365 X No. of days 21 = $ 2.62
      (sum of #1, #5 A, B & C) Interest Rate
   e. Total Postweaning Costs
      (sum of #5 A, B, C & D)
      $ 40.28

6. Gross value at end of post weaning period
   End wt. 642 lbs. @ Market price $.82 = $ 526.44

7. Returns
   Gross value #6 $ 526.44 X No 4 .99 minus #1 $ 467.40 = $ 53.78

8. Profit or Loss
   Returns (#7) $ 53.78 minus Costs (#5E) $ 40.28 = $ 13.50
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

WINTERING/BACKGROUND PHASE (per animal)

1. Value of calves at weaning
   
   ______ lbs. @ Market price $_________ = $_________

2. Weight Gained
   
   End wt. ______ lbs. minus Starting Weight ______ lbs. = ______ lbs.

3. Average Daily Gain
   
   #2 Gain ______ lbs. + ______ days = ______ lbs./Day

4. Death Loss
   
   Loss ______ + Total Animals = ______

5. Costs
   a. Feed
      
      TYPE ______ AMOUNT ______ PRICE ______ TOTAL ______
      
      ______ ______ ______ ______
      ______ ______ ______ ______

      TOTAL FEED ______

   b. Health Care
      
      PRODUCT ______ AMOUNT ______ COST ______
      
      ______ ______ ______
      ______ ______ ______
      ______ ______ ______

      TOTAL HEALTH CARE ______

   c. Yardage
      
      Rate ______ X No. of days ______ = ______

   d. Interest Cost
      
      ______ X ______ + 365 X No of days ______ = ______
      (sum of #1, #5 A, B, & C) Interest Rate

   e. Marketing
      
      Commission ______
      Beef Checkoff ______
      Brand Inspection ______
      Hauling ______
      Total Marketing = ______

   f. Total Costs
      
      (sum of #5 A, B, C, D & E) ______

6. Gross value at end of wintering/background phase
   
   End wt. ______ lbs. @ Market price $_________ = $_________

7. Returns
   
   #6 ______ X No. 4 ______ minus #1 ______ = ______

8. Profit or Loss
   
   Returns #7 ______ minus costs (5F) $_________ = $_________
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

WINTERING/BACKGROUND PHASE (per animal)

1. Value of calves at weaning
   
   \[
   \text{Value} = \text{Market price} \times \text{Weight} = \$526.44
   \]

2. Weight Gained
   
   \[
   \text{End wt.} - \text{Start wt.} = 200 \text{ lbs.}
   \]

3. Average Daily Gain
   
   \[
   \text{Average Daily Gain} = \frac{\text{Gain}}{\text{Days}} = \frac{200 \text{ lbs.}}{100 \text{ days}} = 2.0 \text{ lbs./Day}
   \]

4. Death Loss
   
   Loss + Total Animals = 0 %

5. Costs
   
   a. Feed
      
      | TYPE     | AMOUNT/DAY | PRICE/lb | Days on Feed | TOTAL |
      |----------|------------|----------|--------------|-------|
      | Alfalfa  | 20 lbs.    | .045     | 100          | $90.00 |
      | Screen Pellet | 1.5 lbs. | .05      | 100          | $7.50  |

   b. Health Care
      
      | PRODUCT                | AMOUNT | COST |
      |------------------------|--------|------|
      | No Additional Vaccination |       |      |
      | Brand Inspection |       |      |
      | Hauling              |       |      |
      
      TOTAL HEALTH CARE = $0

   c. Yardage
      
      \[
      \text{Rate} \times \text{No. of days} = \$7.00
      \]

   d. Interest Cost
      
      \[
      \text{Interest} = \text{Sum of #1, #5A, B, & C} \times \text{Interest Rate} = \$15.56
      \]

   e. Marketing
      
      | Commission | Beef Checkoff | Did Not | Brand Inspection | Sell | Hauling |
      |------------|---------------|---------|------------------|------|---------|
      |            |               |         |                  |      | $0      |

      Total Marketing = $0

   f. Total Costs
      
      \[
      \text{Total Costs} = \text{Sum of #5 A, B, C, D & E} = \$120.06
      \]

6. Gross value at end of wintering/background phase
   
   \[
   \text{End wt.} \times \text{Market price} = \$656.76
   \]

7. Returns
   
   \[
   \text{Returns} = \text{Sum of #5 #6} \times \text{No. minus #1} = \$130.32
   \]

8. Profit or Loss
   
   \[
   \text{Returns} \times \text{Costs (SF)} = \$10.26
   \]
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

FINISHING PHASE (per animal)

1. Value of calves at beginning of finishing phase
   ___________________ lbs. @ Market price $ ________________ = $ ________________

2. Weight Gain
   Market Weight __________ lbs. minus Starting Weight __________ lbs. =

3. Average Daily Gain
   (#2 gain) __________ lbs. + __________ days = __________ lbs./day.

4. Death Loss
   Loss __________ + Total Animals __________ = __________ %

5. Costs
   a. Custom Feeding Expense
      (Includes yardage, feed and health care as needed)
      Rate $ _________ X gain __________ lbs. = $ __________
   b. Marketing
      Commission _______________________
      Beef Checkoff _______________________
      Brand Inspection _______________________
      Hauling _______________________
      Total Marketing = $ __________
   c. Interest Cost
      $ __________________ X __________ + 365 X No of days ____ = $______________
      (Sum of #1, 5A & B) Interest Rate
   d. Total Cost
      (Sum of #5 A, B, & C) = $ __________

6. Value at end of Finishing Phase
   End Wt. __________ lbs. @ Market Price $ ________ = $ __________

7. Returns
   #6 __________ minus # 1 __________ = $ __________

8. Profit or Loss
   Returns (#7) $________ minus Costs (#5d.) $________ = $ __________
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

FINISHING PHASE (per animal)

1. Value of calves at beginning of finishing phase
   \[842 \text{ lbs.} @ \text{ Market price } \$0.78 \text{ per lb.} = \$656.76\]

2. Weight Gain
   Market Weight \[1262 \text{ lbs.} \] minus Starting Weight \[842 \text{ lbs.} \] = 420

3. Average Daily Gain
   \[\frac{420 \text{ lbs.}}{80 \text{ days}} = 3.5 \text{ lbs/day.}\]

4. Death Loss
   Loss \[1\] + Total Animals \[107\] = \[1\%\]

5. Costs
   a. Custom Feeding Expense
      (Includes yardage, feed and health care as needed)
      \[\text{Rate } \$0.49 \text{ X gain } 3.5 \text{ lbs. } = \$1.72 \times 120 \text{ days } = \$205.30\]
   b. Marketing
      Commission \[0\]
      Beef Checkoff \[1.00\]
      Brand Inspection \[0.75\]
      Hauling \[0.50\]
      Total Marketing \[= \$2.25\]
   c. Interest Cost
      \[\frac{\$865.41}{865.41} \times 0.09 + 365 \times \text{No of days } 120 = \$25.61\]
      (Sum of #1, 5A & B) Interest Rate
   d. Total Cost
      (Sum of #5 A, B, & C)
      \[= \$234.26\]

6. Value at end of Finishing Phase
   End Wt. \[1262 \text{ lbs.} @ \text{ Market Price } \$0.75 \text{ per lb.} = \$946.50\]

7. Returns
   \[\text{#6 } 946.50 \text{ minus #1 } 656.76 = \$289.74\]

8. Profit or Loss
   \[\text{Returns (#7) } \$289.74 \text{ minus Costs (#5d.) } \$234.26 = \$55.48\]
ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

PASTURE PHASE (per animal)

1. Value of feeders at Market price beginning of pasture season
   lbs. @ Market Price $ = $

2. Weight Gained or Lost
   End Wt. lbs. minus Starting Wt. lbs. = lbs.

3. Average Daily Gain
   #2 Gain lbs. + days = lbs./Day

4. Death Loss
   Loss $ + Total Animals = %

5. Costs
   a. Grazing
      $/AUM x AUMS = $
   b. Health Care
      | Product           | Amount | Cost   |
      |-------------------|--------|--------|
      |                   |        |        |
      |                   |        | $      |
      |                   |        | $      |
      |                   |        | $      |
      Total Health Care $ = $
   c. Marketing
      Commission $ = $
      Beef Checkoff $ = $
      Brand Inspection $ = $
      Hauling $ = $
      Total Marketing Cost $ = $
   d. Interest Cost
      $ x 365 X No. of days = $
      (sum of #1, #5A, B, C) Interest Rate
   e. Total Costs
      (sum of #5 A, B, C, D) $ = $

6. Gross value at the end of grazing period.
   End wt. lbs. @ Market price $ = $

7. Returns
   #6 x No. 4 Minus #1 = $

8. Profit or Loss
   Returns (#7) minus Costs (#5E) $ = $

ECONOMIC AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

PASTURE PHASE (per animal)

1. Value of feeders at Market price beginning of pasture season
   __________ lbs. @ Market Price $______________ = $ __________

2. Weight Gained or Lost
   End Wt. __________ lbs. minus Starting Wt. __________ lbs. = __________ lbs.

3. Average Daily Gain
   #2 Gain __________ lbs. ÷ __________ days = __________ lbs./Day

4. Death Loss
   Loss $ __________ + Total Animals __________ = __________%

5. Costs
   a. Grazing
      $/AUM __________ x AUMS __________ = $ __________
   b. Health Care
      Product          Amount          Cost
      __________          __________          __________          __________          __________
      __________          __________          __________          __________          __________
      __________          __________          __________
      Total Health Care $ __________
   c. Marketing
      Commission $ __________
      Beef Checkoff $ __________
      Brand Inspection $ __________
      Hauling $ __________
      Total Marketing Cost $ __________
   d. Interest Cost
      $ __________ x __________ ÷ 365 x No. of days _____ = $ __________
      (sum of #1, #5 A, B, C) Interest Rate
   e. Total Costs
      (sum of #5 A, B, C, D) = $ __________

6. Gross value at the end of grazing period.
   End Wt. __________ lbs. @ Market price $ __________ = $ __________

7. Returns
   #6 __________ x No. 4 __________ Minus #1 __________ = $ __________

8. Profit or Loss
   Returns (#7) __________ minus Costs (#5E) $ __________ = $ __________
## ECONOMICS AND PERFORMANCE ANALYSIS OF RETAINING OWNERSHIP IN BEEF CALVES

### SUMMARY (per head basis)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Returns</th>
<th>Cost</th>
<th>Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Weaning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wintering/Background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasture Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishing</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
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ECONOMICS AND PERFORMANCE ANALYSIS OF RETAINING
OWNERSHIP IN BEEF CALVES

SUMMARY (per head basis)

<table>
<thead>
<tr>
<th></th>
<th>RETURNS</th>
<th>COST</th>
<th>PROFIT/LOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST WEANING</td>
<td>53.78</td>
<td>40.28</td>
<td>13.50</td>
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<tr>
<td>WINTERING/BACKGROUND</td>
<td>130.32</td>
<td>120.06</td>
<td>10.26</td>
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<tr>
<td>PASTURE PHASE</td>
<td>Did Not</td>
<td>Pasture</td>
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<tr>
<td>FINISHING</td>
<td>289.74</td>
<td>234.26</td>
<td>55.48</td>
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<tr>
<td>TOTAL</td>
<td>473.84</td>
<td>394.60</td>
<td>79.24</td>
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</tbody>
</table>