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DAIRY HEIFER CONTRACTING: MOTIVES, FORMS, AND ARRANGEMENTS

E.S.O. 2304

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Should a dairy producer enter a heifer raising arrangement in which a grower raises the producer's heifers? This publication covers issues related to this question. The purpose is to identify important points a producer should consider when examining heifer contracting. We cover three topics: (1) reasons for entering a contract, (2) forms of contracting, and (3) the arrangement between the producer and the grower.

Reasons for Entering a Heifer Raising Contract

Both the producer and the grower must gain from the heifer raising arrangement. Otherwise, they should not enter the agreement. The probability of having a successful raising arrangement increases if the producer knows the motives of the grower and the grower knows the motives of the producer.

Producer Motives

A producer's motives for entering a heifer raising contract depend on whether the costs of raising heifers are high or low. A producer may have high raising costs if heifers are spread over many locations or are located far from the milking herd. In this situation, labor costs will be high because of travel time and other logistical problems. High costs also may result if it takes more than 24 months to raise heifers to first calving. Raising periods longer than 24 months generally increase heifer raising costs by an average of $1.40 per day. In addition, high costs may occur if the producer is feeding poor quality forages. Feed costs and the time to raise heifers to first calving may increase. Other situations can result in high heifer raising costs. In a high cost situation, a producer can use a heifer raising arrangement to lower heifer raising costs.

A producer raising heifers efficiently will have low raising costs. A "low cost" producer will not decrease raising costs by entering a heifer raising contract. Generally, a grower can not raise heifers at a lower cost than an efficient producer. A producer will have to pay a grower at least the cost of raising heifers; otherwise the grower loses money.

Even though growing costs will not be reduced, a producer with low raising costs may still find it advantageous to enter into a heifer raising contract. Benefits from other areas may more than offset increased raising costs. Below are three potential benefits:

1. Reducing investment outlays during an expansion. Expanding the milking herd means that more heifers will be in the herd. These heifers often require addi

tional housing. A producer can postpone or eliminate the need to invest in additional heifer housing by contracting with a grower to raise heifers. Funds that would have been used to build heifer housing can be used to invest in the milking herd or to reduce debt required during the expansion. In certain cases, a producer may be housing heifers in an area that could be used for milking cows. In these cases, moving heifers to a grower would allow a producer to expand the herd with little investment in housing facilities.

2. Streamlining labor requirements. Eliminating heifer raising may allow a producer's labor force to focus on the milking herd. This focus may simplify laborers' job requirements allowing them to perform assigned jobs more efficiently. Efficiency gains may increase the productivity of the milking herd.

3. Reducing manure at one location. Moving heifers to a grower reduces manure at one site if the producer has heifers at the same site as the milking herd. Eliminating heifer manure reduces inflows into the producer's manure storage system, reducing the number of times manure storage must be emptied during a year. Moreover, the grower may be better able to use manure for crop production than the producer.

Grower Motives

Growers want to generate income by raising heifers for producers. Income a grower needs depends on the situation. Some growers have existing facilities that are usable for raising heifers. These individuals may view contracting as a way of using existing facilities to supplement their income. Other growers may wish to make heifer raising an important income generator. These individuals may invest in facilities to increase the size of the heifer raising enterprises.

Two factors affect the returns of the grower and therefore should be considered when deciding the payment provisions of the contract. The first is the number of heifers to be raised. Small number of heifers limit the return of the grower. Higher payments may be required in these cases. The second is the facility of the grower. Some growers will use existing housing such as an old dairy facility to raise heifers. These growers may not plan on replacing the housing once it reaches the end of its useful life. Because replacement is not needed, contract heifer payments do not have to cover the facility's replacement cost. Other growers may invest in heifer housing and must cover the cost of the facility. Growers with no plans to replace facilities require lower payments than growers who need to replace facilities.

Forms of Contracting

Heifer contracts vary between each producer and grower. These contracts can be divided into four forms based on payment provisions.

1. Per Day Form

The grower is paid on a per day payment. The current range of payment is between $1.25 and $1.60 per day. The grower generally provides and pays for all feed, labor, facilities, routine health, and other variable costs (see Table 1). The producer generally pays for artificial insemination and specifi-

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cally requested health items. If the heifer dies, the grower is paid up to the point the heifer dies and the producer bears the loss of the heifer's value.

2. Per Pound Form

Heifers are weighed when they are delivered to the grower and again when they are brought back to the producer. For example, the grower is paid on 1,000 pounds of gain if a heifer weighs 200 pounds when it is brought to the grower and 1,200 pounds when it is returned to the producer. Per pound prices range from $.65 to $.85. If the price is $.75, the grower would be paid $750 (1,000 pounds x $.75 price). The grower usually pays all feed, utility, bedding, and fixed costs. Artificial insemination and specifically requested health items usually are paid by the grower (see Table 1). If a heifer dies, the grower loses the input costs of the heifer while the producer loses the value of the heifer.

3. Sell/Buy Back Form

The producer sells the calves to the grower and retains the right to repurchase the same animal at freshening. (A variation allows the producer to buy back the same number of heifers as sold. However, the re-purchased animals do not have to be the same as the sold heifers.) The repurchase price may be a market price or may have been an agreed on price.

Table 1. Who Is Responsible For Costs Under Alternative Contracting Forms?

	Contracting Form			
Who pays for:	Per Pound	Per Day	Sell/Buy Back	Full Contract
Calve	Producer	Producer	Grower	Producer
Feed	Grower	Grower	Grower	Producer
Veterinary				
-- routine	Producer	Producer	Grower	Producer
-- emergency	Grower	Grower	Grower	Producer
Artificial insemination	Producer	Producer	Grower	Producer
Utilities	Grower	Grower	Grower	Grower
Bedding	Grower	Grower	Grower	Grower
Building	Grower	Grower	Grower	Grower
Labor	Grower	Grower	Grower	Grower

As an example, the grower may purchase one week old heifers at $120 per head. The producer then purchases the heifer as a springing heifer for $1,200. The grower pays all costs associated with raising the heifer and bears all death loss.

4. Full Contract Form

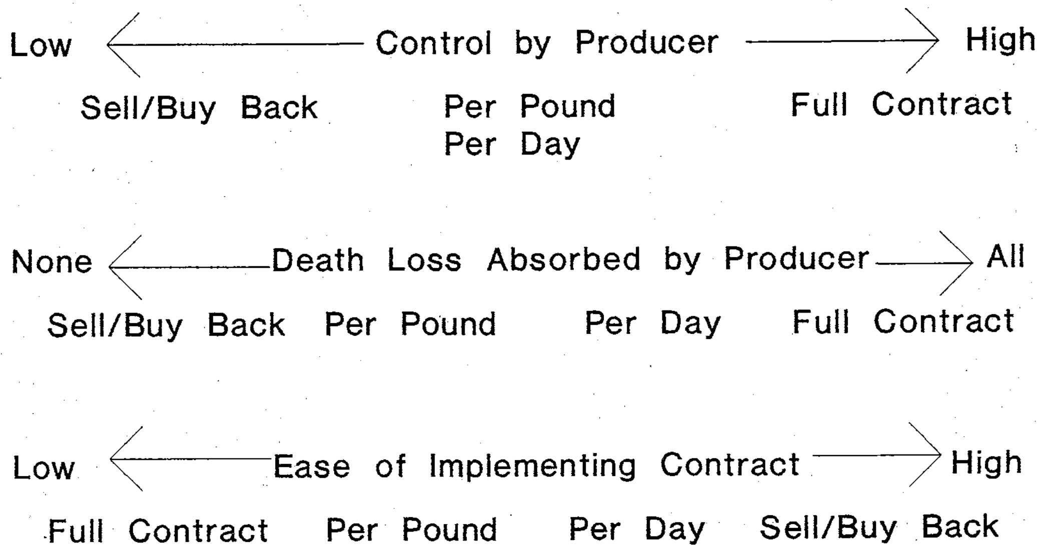
The producer provides the grower with all variable inputs such as feed and medical supplies. The producer dictates to the grower how the heifers will be cared for. The grower provides the facility, utilities, and labor. The producer pays the grower for labor and facilities. Losses are born by the producer.

Choosing a Form

The four forms differ in three dimensions. Choice between the forms is influenced by the producer's and grower's desires along each dimension.

The first dimension is control. Control refers to how many of the heifer raising practices a producer dictates to the grower. At one extreme is the full contract where the producer dictates all feeding, health, and breeding practices to the grower (see Figure 1). At the other extreme is a sell/buy back where the producer does not own the animal and the grower usually is responsible for all feeding, health, and breeding practices. In the middle are the per pound and per day forms. Under these forms, the grower may be responsible for most of the day to day decisions. For example, the grower usually decides the rations to feed the heifers and where feed will be purchased. The producer, however, may dictate certain feeds that must be fed to the heifers.

Figure 1. Comparison of Forms.



The second dimension is who bears death-loss. Under the full contract form, death loss is entirely the producer's risk. Death losses are absorbed by the grower under the sell/buy back form. When a heifer dies under the per pound form, the producer loses the value of the heifer while the grower loses the variable costs of raising the heifer. Under the per day form, the producer loses the value of the heifer. In addition, per day payments are usually made to the grower up to the day in which the animal dies. Therefore, the producer does not receive a return for the per day payments.

The third dimension is ease of implementing the contract. Here we refer to two items: (1) supervision required by the producer and (2) the ease of making heifer exchanges between the producer and grower. At the high extreme is the full contract. This form requires the producer to provide a great deal of supervision. At the low extreme is the sell/buy back. Under this form, the producer does not supervise the grower and exchanges can be made at pre-set prices. In the middle are the per day and per pound forms. Both forms require some supervision. The per day agreement is easier to implement than the per pound form because the heifers do not have to be weighed when they are exchanged.

In our opinion, most producers should not use the full contract form. The supervision costs outweigh the benefits from additional control. Also, most producers will likely prefer the per day form to the per pound form. The per day form is easier to implement because heifers are not weighed when exchanges are made. However, the per day form causes the producer to bear more of the death loss. If this is a major concern, the per day form can be modified so that the grower absorbs loss. For example, the producer could stipulate that the grower will not receive per day payments for the last two weeks of a dead heifer's life. Given that few producers desire the full contract form and the per day form is preferred to the per pound form, most producers will be choosing between the per day and sell/buy back forms. Examining the above dimensions can aid in the choosing between the two.

The Agreement

A producer and grower who deal with each other consistently and fairly will increase the chances that both are satisfied with the contracting arrangement. A written agreement aids in laying out the framework for this relationship. When beginning the contractual arrangement, the first choice is which of the four forms to use. This choice will determine the payment type and who retains ownership of the heifers. Other items requiring consideration are:

Payment terms: The rate at which the grower will receive payment must be determined. For example, a per day charge must be determined if the per day form of contracting is used. Besides the rate, two other issues under payment terms may be considered:

1 Adjusting the rate. Under certain conditions, the rate may be adjusted up or down. For example, the costs to the heifer grower increase as feed price increases. The grower may require a higher rate when feed costs are high. These rate changes can be specified in the contract.

2. Payment timing. The arrangement

should state when payments are expected. This issue is particularly important under the per day payment form. One alternative is to pay the grower at the end of each month. Another alternative is to pay the grower when the animal is returned to the producer.

Artificial insemination practices: In general, the following issues must be dealt with:

1. Who determines sires for the heifers?
2. Who is responsible for insemination (e.g., the grower, the producer, or a technician of the producer's choice)?
3. Who pays for the semen and insemination costs?
4. Who conducts pregnancy checks?

Generally, the grower selects the studs, is responsible for insemination, and pays for insemination under the sell/buy back form. These questions are negotiable under the per pound and per day agreement.

Health practices: The agreement can specify routine veterinary practices that should be performed. For example, the agreement can specify deworming, hoof trimming, external parasite control, vaccination practices, and pregnancy checking. In addition, who pays costs of these routine practices should be specified.

Other heifer raising practices: The producer may specify any other practices they desire. For example, some producers may wish to specify the source of feedstuffs for the heifers.

Commingling of heifers: Some growers may commingle heifers from several producers. A producer may request that his heifers be kept separate from other heifers. If heifers are commingled, an aggressive health and vaccination program should be used.

Death loss: To a large extent, who absorbs death loss is determined by the contract form. However, specific terms can be negotiated. Under the per day agreement, when payments are stopped on death need to be determined. Payments often stop at the death of the animal. However, the payment could be stopped for the last two weeks the heifer was alive. This shifts more of the death loss risk to the grower.

Transportation: The basic question is who provides transportation.

Animal identification: Animal identification is a must for determining charges under the per day and per pound payment methods. Identification may also be required if the grower raises heifers for several different producers. A permanent type of identification such as tattooing or freeze branding will aid in identification. In addition, a record of when the heifer arrives and leaves the grower should be maintained.

Length, renewal, and termination considerations: These specifications indicate how long the heifer raising contract will be in effect, how it will be renewed at the end of the contract, and how it will be terminated. Of particular importance is indicating how the grower and producer will extend or end the contract. Knowing these issues will aid in planning of both the grower and producer.

Arbitration: In certain cases, disputes may arise between the grower and the producer. How these issues will be handled can be outlined in the contract. Often, independent

parties are identified in the contract. These parties will seek to find a reasonable solution to the dispute.

The above issues should be resolved in a written form of agreement. In addition, the producer and grower should discuss heifer performance under the contract. This discussion will outline general criteria for indicating whether or not heifers are performing up to standard. This discussion should discuss the following points:

1. How long the heifers will be at the grower?
2. What is an acceptable death loss percent?
3. What is an acceptable non-breeding percent?
4. How large are heifers when they are returned to the producer?

Having an understanding of these issues will aid in evaluating whether the arrangement has been successful. We present benchmarks for heifer performance in Table 2.

Table 2. Performance Benchmarks for Holstein Heifers, Raised from 400 Pounds to 1,250 Pounds.

Item	Benchmark
Feed Efficiency	
Rate of gain	1.75 lbs. per day
Growth	
Age at first calving	24 months
Calving weight	1,250 lbs.
Reproductive performance	
Services per conception	1.5
Conception rate	75 percent
Death loss	less than 3 percent

Source: Cady, Roger A. and Gayle Willett. Case Study of Contract Raising. Presented at NARES Conference on Calves, Heifers, and Dairy Profitability: Facilities, Nutrition, and Health, January 11, 1995.