Contract Rearing Programs for Replacement Dairy Heifers

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Abstract

The demand for contract heifer-rearing business is growing because environmental, land, capital, and labor requirements on producing dairy farmers is increasing, especially among larger farms. Specialized growers that offer cost competitive services that return a quality heifer are in demand. Growers that provide good facilities and management can prevent common heifer diseases and provide consistent gains so heifers will calve at 24 months or less. Good accounting and record systems allow for the goals of the grower and dairy to be monitored and achieved.

Résumé

Les entreprises d'élevage de génisses à contrat sont de plus en plus en demande, en raison du resserrement, pour les producteurs laitiers, des contraintes reliées à l'environnement, à la terre, au capital et à la main-d'oeuvre, en particulier dans les grandes fermes. Les producteurs spécialisés qui offrent des services d'élevage à prix concurrentiel et produisent des génisses de qualité sont en demande. D'autant plus que les producteurs qui font un élevage rigoureusement géré et dans des fermes bien aménagées peuvent prévenir les maladies communes des génisses et optimiser leur croissance, en leur permettant de vêler à 24 mois ou moins. De bons registres comptables et de gestion d'élevage permettent de suivre et d'atteindre les buts fixés par l'éleveur à forfait et la ferme laitière.

Introduction

There are several pressures causing the growth of the contract heifer-rearing industry. One is the expansion of dairy farms. Because heifers are viewed as an expense, and not as an investment, many bankers are loath to loan money to new dairy expansion projects for heifer facilities. Also, as farms specialize in milking cows, owners and managers are recognizing that in some cases someone may be able to do a better job raising their heifers. Some capacity for the heifer grower industry has been created because of the vacated dairy farms and feedlots.

The 2007 National Animal Health Monitoring System (NAHMS)[5] dairy study showed that 9.3% of all size range dairy units utilized offsite heifer rearing. However, 46% of operations with over 500 head of dairy cows used an offsite grower to raise some or all of their young stock. Of these, 35% were wet calves and 54% were weaned calves with an average age of six months when they left the farm of origin. Currently, dairy herds of 1,000 or more own 34% of all cows. It is projected that by 2015 herds this size will comprise 8% of the total dairy herds and house 56% of all cows. The growing demographics of this larger herd size almost predispose that more dairy heifers will be raised offsite.

Another factor contributing to the growth of the heifer industry is environmental protection. As state and federal governments enact more rigid environmental protection laws, there is advantage to reducing animal density on a fixed-land base. Moving heifers offsite allows greater income per unit of land owned by the dairy producer and reduces nutrient loading on the soil and exposure to pollution liability.

Wage price competition for a quality labor force, with all its attendant insurance, housing, and tax demands, has made outsourcing for young stock care a specialty service in demand, just as custom grain harvesting and forage chopping has before it. The old axiom of "jack of all trades and master of none" has historically caused a lack of special skills regarding young stock care on many smaller farms. When employees can concentrate their energy and attention on calves or heifers 365 days a year, lapses of attention are dramatically less than when it is diverted to cropping or other activities on a regular basis.

The emergence of the dairy heifer grower industry has presented opportunities as well as problems in its growth from infancy. One of the most common errors has been a tendency by the dairyman to try to get his heifers raised for the absolute bottom dollar. Due to a lack of wide understanding by the industry about the true cost of growing quality heifers, many naïve growers have under priced themselves to the dairyman. They either lose money or send back an inferior product, which leaves a bad taste in the mouth of both the grower and the dairyman and hurts the reputation of the industry as a whole. Marketing is the heifer grower's biggest challenge. The real competition for this industry is the dairy farmer, not other heifer growers. There are many misconceptions held by dairy farmers that cause them to underestimate the cost of their heifer enterprise and value of

their heifers. Few dairy farms have their financial and performance records set up on an enterprise analysis basis. There is usually little on-farm data monitoring of growth performance and reproductive performance, and virtually no data on how heifer management may affect herd life or lifetime production. It is a rare farm that can provide the true itemized cost per head of a heifer entering the milk line. Without an information system to collect this data and the conclusions it can generate, it is difficult to market growing services to dairymen or set good goals to strive for.

The Dairy Calf and Heifer Association has completed an ambitious project to establish standards and criteria for the rearing of wet calves and weaned heifers termed the Gold Standards.[2] A previous effort determined what would constitute a quality heifer grower. This has been outlined in a very helpful booklet called *Raising Quality Replacement Heifers-A Guide to Best Management Practices*. Using the benchmarks and standards including business ethics, financial accountability, and adequate record-keeping that are now available, both growers and dairymen alike will be able to evaluate their performance and financial needs.

Economics

The first and most difficult step in determining whether contract heifer rearing is a viable option is to do an indepth financial analysis of the heifer enterprise on the dairy farm. This must include a complete and accurate accounting for the variable and fixed costs involved. Allocation of these costs to the heifer enterprise can be quite elusive since the heifer enterprise is typically embedded in the milking enterprise. University studies of average heifer enterprise costs are quite revealing. Currently in 2010, costs are ranging between $1,600 to $1,850 over the rearing period of the heifer. Queries to experienced successful heifer growers indicate that in stand-alone, efficiently run operations, custom raisers are capable of returning Holstein heifers at 22 months, ready to calve at 24 months of age and at 1,300 lb (590 kg), for a cost of about $1,100. Under this example, heifers arrive at the grower around five months of age weighing 300-400 lb (136-182 kg). Allowing for approximately $375 cost incurred by the dairyman before going to the grower, the dairy producer has the opportunity to calve heifers at appropriate age and weight for approximately $1,475. Zwald, Kohlman, Gunderson, Keuning Hoffman and Kriegl[3] completed a survey of 44 Wisconsin dairies' average cost of rearing from birth to calving in 1999 and 2007. The cost ranged from $922 to $1,807 per heifer, with $1,360 being the average in 1999. That translates into an average cost per day of $1.69, with a range from $1.33 to $1.94. In 2007, the cost ranged from $1,595 to $2,935, with an average of $2,148. Karzes[4] in New York surveyed 17 large dairy herds in 2007. He found the cost of rearing ran from $1,598 to $1,867, with a $1,734 average. In the past, feed costs were the top expense category on a dairy farm, followed by labor. In the last few years, replacement costs have moved into second place, dropping labor to third.

Issues and Concerns to Address

Experience and Track Record

As in any business, there are those that can deliver and those that cannot. Each heifer raised by a custom grower will represent a minimum investment of $1,100 paid out to the grower, or about $38,500 annually per 100 milking cows at a 35% replacement rate. Would you trust just any stockbroker to invest that amount of money for you without investigating their track record? In the heifer raising business, reputation is everything. A grower of dairy heifers, in reality, is in the business of "managing assets." The custom raiser should be able to provide documentation for the growth rate, conception rate, and mortality rate. The identification program should ensure return of heifers to their proper owner. Increasing demand for custom rearing provides opportunity for new people to enter the industry, and often these new entries are retired dairy producers. Certainly it is easy to assume that a retired producer is capable of doing the job, but this may not always be the case, especially if the former producer quit milking cows for financial reasons. Poor heifer management can be a significant contributing factor leading to failing dairy farm finances.

Size of Operation

Assuming custom raisers are in the business to do more than offset their fixed and variable costs, there must be a profit. A historical rule of thumb is that it takes the income from rearing six to seven heifers to equal that from one lactating cow. The last few years have turned all rules of thumb on their heads, so one must take such rules with a grain of salt. Therefore, if it takes 100 milking cows for a dairyman to make a living on a given farm, he must be prepared to care for and feed 600 to 700 head of heifers to make a similar income. Normally, the most profit that can be expected is 20 to 25 cents per head per day. To achieve this requires not only excellent heifer management skills, but also the economic advantage of size and scale. As dairy operations get larger, this will by necessity require that growers get bigger. Dairymen do not like to deal with and monitor various entities to get their young stock raised. This introduces one more item of variability into the equation.

Growth Rate

Dairy heifer growth rates are unique in that rapid gains can be detrimental to future productivity, but is

critical that a uniform rate of approximately 1.75 lb (0.8 kg) per day be achieved to ensure that heifers weigh approximately 1,250 lb (570 kg) post-calving. This requires constant vigilance and attention to nutritional inputs. Beware of custom growers with a beef feedlot mentality. Pasture growing systems require frequent assessments of forage quality and availability, but may offer better foot and leg development. A grower should be able to provide an acceptable feeding and resting area for all kinds of weather, and adequate supplies of potable water at all times.

Breeding and Health Capabilities

The grower should have facilities to allow efficient artificial insemination (AI) programs, such as lockups or corrals with safely designed chutes. Most growers commingle heifers from different farms because they group by size and age to take advantage of the economies of scale and feeding efficiency. It is critical that there be a fail-safe ID program in place to insure that the owner gets their own heifers back. A top-notch vaccination program is imperative. We, as well as many custom growers, require the heifer to have a negative bovine viral diarrhea persistent infection (BVD PI) test before entering our facility. If the grower is accepting baby calves, the vaccination program for acceptable results must start in the cows at the dairy herd of origin. Colostrum delivery success should be continually monitored. Poor colostrum management by the dairyman can nullify a grower's calf livability success, no matter how good the grower's husbandry. In my own heifer growing operation, I place great importance on a pre-receiving vaccination protocol. I require that at least three weeks prior to arrival the heifers have received one dose of modified-live virus vaccine for infectious bovine rhinotracheitis, bovine viral diarrhea virus, parainfluenza 3, bovine respiratory syncytial virus, and 5-way lepto (IBR-BVD-PI3-BRSV-L5); 7-way clostridium; and two doses of ENDOVAC Bovi® vaccine for pasturella prevention. This has significantly reduced the number of respiratory cases after arrival.

Contracts between Grower and Dairyman

All of the important items mentioned in the previous text of this article should be outlined in written form so that both the grower and the dairyman have no question of their own responsibilities to each other. Most growers have found that these issues must be addressed so there is no question what is to be done when a given event or situation occurs. Most growers provide two or three AI services, with the owner providing semen from his bull of choice. Who will provide transportation to and from the grower's farm should be defined. The owner typically provides trucking. Size and condition of the heifer on arrival and time of return to the dairy farm needs to be addressed. It is recommended heifers go home at least two months prior to calving to become acclimated to the home-farm environment. Payment options may be either by pound of gain, purchase buy back, or per day. Most growers I am acquainted with have opted for a daily board charge fee for simplicity of billing and to prevent large accounts receivable from accumulating. Billing and reports are done on a monthly basis. Volatile commodity and milk markets have necessitated many growers adopting a variable daily rate to address input cost changes. How deaths, non-breeders, and veterinary needs are handled should be in the contract prior to the event. I have found if the item is covered in your agreement, the likelihood of it being a divisive issue is minimized.

Growers typically carry liability insurance to cover instances of negligence. It is not widely known that in some states a grower cannot legally insure cattle they do not own for mortality caused by a variety of natural events such as lightning, drowning, or building collapse under snow. This is the situation in the state of Virginia. We make a special point to make sure the heifer owner understands this, and if insurance is desired that they obtain it from their insurer.

Conclusion

There is no set formula or list of things to follow that will absolutely indicate whether contract heifer rearing is a viable option for a particular dairy producer. In the end, the answer lies with the goals, conditions, and preferences of the dairy producer and whether a working and successful relationship can be developed with a reputable heifer grower.

References

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