

# Guidelines for the Contract Rearing of Replacement Heifers





## **Guidelines for the Contract Rearing of Replacement Heifers**

This document is intended as a guidance document to support the specimen heifer rearing contracts. Included in it are the Teagasc recommended heifer liveweight targets, details of the standard costings of replacement heifer rearing and guidance on minimising the risk of disease.

### **Which dairy farmers should consider contract heifer rearing?**

Contract heifer rearing is an option worth considering in the following situations:

- Where overall farm profit can be increased by carrying a greater number of cows;
- Farms where labour is a limiting constraint;
- Farms where land is a limiting constraint;
- Farms where replacement heifers are failing to reach the target liveweights;
- Farms where separation of cows from replacement heifers (even calves) is required for disease control purposes e.g., Johne's Disease.

### **Why drystock farmers should consider rearing heifers on their farms?**

Contract heifer rearing is attractive to the drystock farmer for a number of reasons:

- It can provide them with a means of using their land and buildings without investing in stock – reducing the investment risk involved;
- It can often be possible to run the enterprise on a part-time basis;
- The need to buy and sell stock is reduced;
- Cash flow can be improved because the 'norm' is that the rearer is paid by direct debit on a monthly basis;
- The business may return a higher profit than the contract rearer's existing enterprise.

### **Recommended liveweight targets**

Achieving target body weight gains is an integral part of heifer rearing systems. Every heifer rearing programme should have a target liveweight and specified age at first-calving. Previous research indicates that heifers should be mated at 60% of mature liveweight and should calve at 90% of mature liveweight. However, recommended mature liveweights vary considerably between breeds and crossbreeds. The data in Table 1 shows the recommended target weights for Holstein Friesian, British and New Zealand Friesian and crossbred Jersey X Holstein Friesian heifers at different stages during the rearing period.

**Table 1. Target weights for pure bred and crossbred Replacement Heifers at different stages during the 24 month rearing period.**

	Month	% Mature liveweight	Holstein Friesian	New Zealand / Br. Friesian	Jersey X Holstein Fr.
Birth	February		41	38	34
6 Weeks	March		63	56	56
3 Months	May		90	80	80
6 Months	July	30%	155	148	138
8 Months	September		175	170	160
9 Months	October	40%	220	210	196
12 Months	February		280	267	250
15 Months	May	60%	330	315	295
19 Months	September		450	425	390
21 Months	November		490	470	437
24 Months (pre-calving)	February	90%	550	525	490

A Teagasc Moorepark study monitoring 1,400 heifers on more than 40 farms concluded:

- Liveweight and condition score of maiden heifers at mating start date are more critical in ensuring high fertility than age at which the heifers are mated;
- Heavier heifers at mating start date produce significantly more milk in their first lactation;
- Heifers in poor condition at mating start date (less than 3.0), calve later and produce significantly less milk during first lactation;
- Weight at first calving also significantly affects second lactation milk yield.

## Guideline costings

The costs associated with replacement heifer rearing included in Table 2 are based on the costs of rearing replacement heifer on 1,100 dairy farms for spring born heifers derived from the 2012 Profit Monitor database.

**Table 2. Costs associated with rearing replacement heifers to calving at 24 months of age (€ per LU).**

Category	Low cost	Average	High cost
<b>Variable costs<sup>1</sup></b>			
Milk replacer <sup>2</sup>	58	58	58
Concentrates	86	146	219
Fertiliser	101	120	137
Vet	41	55	70
AI <sup>3</sup>	45	45	45
Contractor	58	78	99
Other variable costs	30	38	47
<b>Total variable costs</b>	<b>419</b>	<b>540</b>	<b>675</b>
<b>Fixed costs</b>			
Hired labour	12	21	21
Machinery	23	29	34
Interest	8	13	17
Car / ESB / Phone	20	25	30
Depreciation	29	38	46
Other fixed costs	30	37	45
<b>Total fixed costs</b>	<b>122</b>	<b>163</b>	<b>193</b>

The charge for own labour and land used by the replacement heifers are not included in the costs outlined in Table 2. A replacement heifer calving at 24 months of age is equivalent to one livestock unit (LU). Most replacement heifers spend only part of the 24-month rearing period on the rearer's farm. Often calves are moved to the contract rearer's farm on the first of May and return home in early December of the following year. Calculating the LU equivalent for the period that the heifer is on the rearer's farm is outlined in Table 3.

The Moorepark costings model includes a land opportunity cost of €450 per hectare for the full year. The model also includes a charge of €149 per LU for the farmer's own labour for rearing the heifer from birth to calving at 24 months of age.

The calculations in Table 4 use the 'average rearing costs' detailed above for a farmer rearing February-born heifers from 12 weeks of age until their return to the dairy farmer's own herd at 22 months of age just before the start of the second winter. Labour and land charges are included based on the Moorepark costings model detailed above.

1 'Low cost' is the average rearing cost per LU for the lowest 1/3 of farms; 'High cost' is the average rearing cost per LU for the highest 1/3 of farms.

2 Based on Moorepark model costs per replacement heifer

3 Assumed that all heifers are bred to AI and 1.5 straws are required per LU.

**Table 3. Calculation of the livestock unit equivalent where replacement heifers are contract reared from May 1st (as a four month old weanling) until their return to the owner's farm pre-housing on December 1st of the following year (as a 22-month old in-calf heifer).**

1 <sup>st</sup> May to 1 <sup>st</sup> December (of the following year)				
	LU <sup>a</sup>	Months with rearer	Percentage of year <sup>b</sup>	LU equivalent (a x b)
Weanling	0.3	9	75 %	0.23
Yearling	0.7	10	83 %	0.58
Weighted average				0.81 LU

Thus in this example the heifer is on the farm for the equivalent of 81% of a full livestock unit (LU). All of the costs detailed in Table 2 are on a full livestock unit basis. In this example the period of time that the heifers are being contract reared was first calculated on a LU equivalent basis and then estimates within each cost category can be made.

- For some costs e.g. milk, no cost will be incurred by the contract rearer where the heifer calves are reared to weaning by the owner or where the owner supplies the milk to the rearer.
- For other costs, the LU equivalent value may be used to apportion the costs to the rearer e.g. fixed costs.

**Table 4. Estimate of costs and charges incurred in rearing a spring born replacement heifer from 1 May to 1 December of the following year (all calculations in this table are based on ‘average’ production costs).**

	Average cost per LU	Estimate of cost incurred	Comment
<b>Variable costs</b>			
Milk replacer	€58	-	Milk fed on owners farm
Concentrates	€146	€110	€36 fed on owners farm
Fertiliser	€120	€97	81% of LU cost
Vet	€55	€44	81% of LU cost
AI	€45	€45	100% of LU cost
Contractor	€78	€23	30% of LU <sup>4</sup>
Other variable costs	€38	€31	81% of LU cost
<b>Total variable costs</b>	<b>€540</b>	<b>€351</b>	
<b>Fixed costs</b>			
Hired labour	€21	€17	81% of LU cost
Machinery	€29	€23	81% of LU cost
Interest	€13	€11	81% of LU cost
Car / ESB / Phone	€25	€20	81% of LU cost
Depreciation	€38	€31	81% of LU cost
Other fixed costs	€37	€30	81% of LU cost
<b>Total fixed costs</b>	<b>€163</b>	<b>€132</b>	
Own labour charge	€149	€120	81% of LU cost
Own land charge <sup>5</sup>	€182	€147	81% of LU cost
<b>Total charge (€/ head)</b>		<b>€750</b>	
Daily charge (€/head)		€1.30	579 days

The cost of rearing replacements will vary considerably with the efficiency level obtained as detailed in Table 2.

- The total charge per heifer required to deliver a similar labour and land charge as detailed above for the ‘**low cost**’ rearer is €618 per heifer (€1.07 per heifer per day) – refer to Appendix 2 to see how this figure was obtained .
- The total charge per heifer required to deliver a similar labour and land charge as detailed above for the ‘**high cost**’ rearer is €887 per heifer (€1.53 per heifer per day) – refer to Appendix 2 to see how this figure was obtained.

4 In our example we assume that contractor charges are incurred for silage making and slurry spreading by a weanling heifer which is a 0.3 LU equivalent (i.e. 30% of a full LU).

5 Assumes a stocking rate of 2.47 LU/ha as described in the Moorepark model.

The owner and rearer of the replacement heifers may vary the contract and thus the charges incurred during the rearing period. For example if stock bulls are used to breed the heifers rather than AI, costs will be reduced because:

- The labour input required for heat detection and heifer drafting for insemination is eliminated – in the example detailed in Table 4, 10 hours of labour were included per heifer including the time required for heat detection. Typically 45 minutes to one hour per day is required for effective heat detection during the breeding season.
- AI costs are included in the costs outlined in Table 4.

Thus the total charges per heifer of €750 as detailed in Table 4 would be reduced by approximately €50 to €700 (€45 per heifer for AI and the remainder from the labour saved through the use of stock bulls). This would leave a return to the rearer of €262 per heifer (reduced from €120 where AI was used to €115 for his own labour where a stock bull was bred to all the heifers and €147 for the land charge).

Table 5 sets out the return to the rearer's land and labour (€/per hectare) at different stocking rates and charges based on the period and costs outlined in Table 4 for the 'average rearing costs' (before land and labour) is estimated.

**Table 5. Estimated return (€/ha) to the rearer for land and labour engaged in replacement heifer rearing at different stocking rates, rearing costs and charges.**

Charge (€/hd/day)	€0.90		€1.00		€1.10		€1.20	
Heifer unit/ha <sup>6</sup>	2	3	2	3	2	3	2	3
<b>'Average' cost producer</b>								
Receipts <sup>7</sup> (€/ha) <sup>a</sup>	1,042	1,563	1,158	1,737	1,274	1,911	1,390	2,084
Costs <sup>8</sup> (€/ha) <sup>b</sup>	966	1,449	966	1,449	966	1,449	966	1,449
Margin for land and labour <sup>(a-b)</sup>	76	114	192	288	308	462	424	635
<b>'Low' cost producer</b>								
Receipts (€/ha)	1,042	1,563	1,158	1,737	1,274	1,911	1,390	2,084
Costs (€/ha)	700	1,050	700	1,050	700	1,050	700	1,050
Margin for land and labour	342	513	458	687	574	861	690	1,034
<b>'High' cost producer</b>								
Receipts (€/ha)	1,042	1,563	1,158	1,737	1,274	1,911	1,390	2,084
Costs (€/ha)	1,238	1,857	1,238	1,857	1,238	1,857	1,238	1,857
Margin for land and labour	-196	-294	-80	-120	36	54	152	227

<sup>6</sup> A heifer unit is a weanling and yearling heifer.

<sup>7</sup> Receipts per hectare at 2 heifer units per hectare are calculated as follows: 579 days X 4 heifers X daily fee (€0.90) ÷ 2 years; For the 3 heifer units per hectare multiply by 6 heifers instead of 4 heifers.

<sup>8</sup> Cost per hectare at 2 heifer units per hectare are calculated as follows; (Variable costs [€351] + fixed costs [€132]) X 4 heifers ÷ 2 years For the 3 heifer units per hectare multiply by 6 heifers instead of 4 heifers.



As detailed in Table 5, the rearer's margin realised per hectare for land and labour varies considerably with the daily fee paid, the stocking rate employed and the production efficiency level realised.

The return per hectare may potentially be higher than that generated by the top one-third of sucking and non-breeding beef farms. However, stock and grassland management skills must be excellent to achieve the target weights demanded of replacement heifer rearing. In addition, excellent skills in reproductive management are required of the rearer. They must also have suitable facilities for overwintering the replacement heifers. If at all possible such animals should be accommodated in cubicle housing as this is the most common type of winter accommodation for dairy cows.

### **Contract rearing cost calculator**

Clearly the rearer will have to estimate their production costs before engaging in contract rearing. Teagasc has developed a contract rearing cost calculator to help rearers to estimate guideline costings for contract heifer rearing on their farms. The calculator is available online and can be downloaded free of charge. It can be accessed at the following site:

[http://www.teagasc.ie/collaborativearrangements/contract\\_rearing\\_of\\_heifers.asp](http://www.teagasc.ie/collaborativearrangements/contract_rearing_of_heifers.asp)

### **What are the risks for both when engaging in contract heifer rearing?**

The issues that need to be considered with contract heifer rearing include:

- Loss of control in the day-to-day management of the replacement heifers.
- The risk of a disease outbreak. With animals on two farms, the risk of either group contracting diseases such as TB, Leptospirosis etc. is higher. If the contract rearer is simultaneously taking heifers from other owners or has another livestock enterprise the risks may be further increased. Contingency plans must be put in place to ensure that an outbreak of disease does not have implications for the smooth return of the heifers to the dairy farm at the end of the rearing period or result in calving heifers 'stuck' with a contract rearer with no facilities to calve or milk such animals.
- Possibly poorer replacement heifers. Not all contract rearers will be suitably skilled to achieve the target weights set down for replacement heifers. It is very useful to weigh heifers at defined times throughout the rearing process (e.g., before the first winter; prebreeding and before the second winter) to ensure that the appropriate targets are achieved. A plan should be put in place in advance of entering the contract to address the issue where targets are not reached e.g., through concentrate supplementation over winter.

- Risk of conflict between the owner and contract rearer. In all cases, clear targets must be agreed by both parties in advance of entering the contract arrangement. In addition, an independent arbitrator should be agreed in advance in the event of a conflict occurring between the owner and contract rearer.

Many of the risks outlined above can be minimised by preparing a written contract of agreement. If underweight heifers are returned to the farmer who is at fault? The easy answer is the rearer; however, both parties are at fault. The contract rearer failed to manage the heifers and the dairy farmer failed to manage the contract rearer. Who will pay the higher price? It is the dairy farmer's future that is affected long-term.

## Disease control guidelines

Diseases associated with replacement heifers fall into two categories: regulatory diseases (TB and brucellosis) and non-regulatory diseases. These include: the viral diseases, BVD and IBR, bacterial diseases, leptospirosis, Johne's, Salmonellosis, Mycoplasmosis and parasitic diseases such as Neosporosis.

The fundamental step in any biosecurity programme is the maintenance of a closed-herd policy i.e., no cattle movement onto the farm. Engaging in the practice of contract heifer rearing makes closed herd farming an unrealistic goal. However, a number of other biosecurity measures should be strictly implemented to reduce the disease risk.

When contract heifer rearing is being practiced, always;

- Establish the current disease status of the contract rearer's herd. Such information is important in determining the likelihood of disease exposure before the heifers leave the farm, and is absolutely critical to the management of the heifer herd once they are reintroduced to the herd. They will need protection (e.g., management and vaccination strategies) against circulating diseases in the herd of origin before their re-introduction.
- Ideally, engage in a contract with a single rearing farm.
- If possible view heifers previously reared on the contract rearer's farm.
- Ensure that there are stock proof boundaries between the contract rearer's farm and neighbouring farms.
- Implement a strategic vaccination protocol for heifers based on the disease status of the farm of origin e.g., if required, BVD vaccination should be carried out at a specific time before breeding (specified by the vaccine manufacturer) and heifers should receive a primary course of two injections separated by a correct time interval. Incorrectly administered vaccines will not yield the desired level of disease protection.
- Implement a parasite control strategy to include roundworm, fluke and lungworm.

- Return in-calf heifers to the owner's farm in good time before they calve down. This is to ensure that they are not being transported on the point-of-calving and are properly acclimatised to their environment so that they also have the required level of 'local' antibodies in their system before calving.
- The pre-movement test should be carried out on the contract rearer's farm at not less than 120 days before the planned return date of the in-calf heifers to the owner's farm. A test should also be carried out on the owner's farm at the same time. Such tests, in the event of a reactor, should provide sufficient time to have two further tests done and enable clear herds to be achieved. The specific date of a test should take into account the time lag between the taking of tests and the results being returned to the farmer e.g. the TB and blood tests take three and at least five days respectively before the results are returned to the farmer.

### Issues to be considered in a rearing contract

Formal written contracts for rearing replacement heifers have been in place in New Zealand for over 20 years. Approximately 70% of heifers are grazed on a contract rearer's farm with a written contract in place. Farmer experience with replacement heifer contracts is that they are not foolproof. However contracts allow for some of the day to day issues that will arise to be identified, discussed and agreed upon before the heifers arrive on the contract rearer's farm.

Such issues will include:

- Is the contract verbal or written?
- Ownership status of the animals;
- Agreed costs;
- Dates of arrival/planned removal of animals to/from the contract rearer's farm;
- Agreed final and intermediate weights – will the heifers be weighed and if so, by whom and at what stage?
- Dosing, testing and vaccination programmes – who pays/who administers?
- Will heifers be mixed with stock from other herds?
- What happens in the event of a regulatory disease outbreak?
- Disease status of the owner's farm;
- Breeding programme – AI or stock bull sourcing/type, who does the heat detection?
- How will mortality be addressed;?
  - Who covers the cost of disposal:
  - Is the contract rearer paid for rearing the heifer up until the date of death or will rearing costs be refunded?
- Who will pay for the transport of the heifers to and from the contract rearer's farm?
- How often will the owner visit the contract rearer's farm to check the heifers?
- What method of payment is most suitable to operate?
- How will empty heifers be managed? Will they be fattened on the contract rearer's farm or returned?

- How will heifers be managed across the winter e.g., baled silage, pit silage?
- Quality of the land used to rear the heifers;
- How will heifers be managed during the grazing season e.g., rotationally grazed in a paddock system from 1 March to 1 November?
- Timing and quantity of concentrate supplementation.

## Getting started

If initial contact proves positive, what steps should then be taken to ensure both parties are satisfied to go into business together?

From the stock owner's perspective, he needs to be satisfied that he is not sending the replacement stock into a disease 'black spot'. A 'black spot' is an area where disease outbreaks occur every second and or third year (or more often).

- Establish if the Department is checking the local badger population for the presence of TB;
- Determine if neighbouring farms are restricted;
- Obtain the contract rearer's authorisation to check with the Department that his two previous herd test results are 'clear'.

On a first visit to the contract rearer's farm, the owner should:

1. Walk the farm with the contract rearer to satisfy himself/herself that the standard of grassland management is good enough to achieve the growth rates required by replacement heifers.
2. Observe the quality of existing stock on the contract rearer's farm.
3. Observe the condition of boundary fences.
4. Observe the quality of current housing facilities.

One preliminary visit may be all that is required to establish that the contract rearer is capable of doing a good job. The contract rearer should also visit the owner's farm to assess the standard of farming on the owner's farm i.e., the standard of grassland management, the facilities and the quality of the existing stock on the farm. Both of these visits are essential in helping both parties to build a working relationship and finally to decide if they want to go into business together.

Further guidelines on the documentation to be completed and other requirements to be adhered to when moving replacement heifers are detailed in Appendix 1 of this document.

## Summary

- Several advantages exist for the owner of the heifers, including:
  - Freeing-up time and labour to focus on dairying on the home farm;
  - Potentially allowing higher income to be made.
- Several advantages exist for the contract rearer, including:
  - Improved cash flow due to a steady monthly income;
  - A freeing up of the capital required to stock the farm
  - The potential to increase farm income.
- Challenges also exist for the rearer. These include:
  - Complying with the wishes of a third party (in this case the heifer owner) on how the heifers are raised;
  - Engaging in a new enterprise with different targets such as liveweight gain, reproductive performance and husbandry factors can be different than those associated with conventional drystock production.
- Animal disease issues, both regulatory and non-regulatory may represent a serious challenge to both owner and contract rearer of replacement heifers.

## **Appendix 1. Animal Contract Keeper Arrangements and Animal Movement Requirements**

The following is a guide to requirements regarding the movement and disposal of animals in a contract rearing/feeding/leasing or similar scenario where a Keeper of the animals is not the owner. Such clarification is particularly relevant for example where a dairy farmer enters into a contract with another farmer to have his replacements reared on that farm known as the rearer's farm and these are the terms used in the text below.

The usual herd number arrangement in contract rearing is that the dairy farmer and the contract rearer farm distinct separate holdings and therefore operate with their own separate herd numbers. Therefore the normal notification requirements for bovine movements apply for these contract-rearing moves.

Note: Under national and EU legislation, the animal's passports must accompany the animal at all times. It should therefore be held by the current keeper of the animal - be that the dairy farmer or the rearer.

### **1. Procedures for notifying the movement of animals from the dairy farm to the rearer's holding**

The dairy farmer should obtain a Certificate of Compliance prior to the animals moving off his holding. These Certificates can be obtained online if the dairy farmer is a registered user of the Department's [www.agfood.ie](http://www.agfood.ie) facility – otherwise he should forward a completed NBAS 31A form to the Cattle Movement Notification Agency, West Cork Technology Park, Clonakilty, Co. Cork.

If the Certificate is obtained online, it can be printed out from the dairy farmers computer (Certificates obtained online are not posted out from the Movement Agency.) The Certificate will consist of 3 A4 sheets of papers – one for the dairy farmer, one for the contract rearer and the movement notification copy which should be completed and returned to the Movement Notification Agency so that the movement can be recorded onto AIM.

If the contract rearer is also a user of the [www.agfood.ie](http://www.agfood.ie) facility and he has been nominated as the Destination Herd on the Certificate obtained by the dairy farmer (even if the Certificate is obtained from the Movement Notification Agency), then he can notify the movement electronically onto the AIM system.

If the Certificate of Compliance is obtained from the Movement Agency, then it will be a perforated 3- part single page A4 form with sections for the dairy farmer, the contract rearer and the movement notification section which should be completed by both keepers and returned to the Movement Notification Agency.

## 2. Procedures for notifying the movement of animals from the rearer's holding back to the dairy farm

The procedure for notifying the movement of the animal back to the dairy farmer's holding is exactly the same as outlined at 1. above except that the contract-rearer should obtain the Certificate of Compliance prior to the animals moving off his holding.

## 3. Movement of an animal from the contract-rearer's holding not back to the dairy farm

**Note:** The arrangements for on-farm sales or other onward movements to 3<sup>rd</sup> parties should be stated in the contract rearing contract.

### Farm to Farm movement (e.g. following Direct Sale)

The procedure for notifying the movement of the animal to another farm location (e.g. following a sale) is exactly the same as outlined at 2 above with the contract-rearer obtaining the Certificate of Compliance prior to the animals moving off his holding.

### Sale through a mart

A Certificate of Compliance is **not** required for the movement of an animal to a livestock mart.

The contract-rearer should present the animal and its passport at the Mart and provide his herd number to mart staff. The AIM system will check that that is the last recorded location of the animal on the database and provided the animal is in-test and all other checks are in order, then the animal can be presented for sale.

**Note:** unless informed to the contrary, the Mart will assume that the keeper (rearer) on the AIM record, from whose herd number the animal is moving, is the owner and the person entitled to payment.

If the dairy farmer wishes to move the animals directly from the contract rearing farm to the mart, then the contract rearing holding must be recorded as the Moved From destination at mart intake stage – the dairy farmer would be advised to have a written note signed by the rearer stating that the animals have been released by him back to the dairy farmer for sale. The mart will then be informed by this note to make payment to the dairy farmer rather than contract rearer.

## Sale to a factory

Follow the same procedure as with sale through the mart.

## On-farm death of an animal on the contract-rearers holding

The on-farm death of an animal in a contract rearing situation has to be notified by the keeper currently responsible for the animal and on whose holding the animal is located. The death is notified by way of an NBAS 31D Form which is supplied by the knackery when they are collecting the carcass. The completed NBAS 31D Form, the passport along with the dead animal are given to the knackery collector.

**NB:** AIM does not record ownership of an animal - it merely records the location of the animal and the current keeper. **Therefore animal identification numbers and ownership details should be clearly stated in the contract arrangement.**



# Copy of Form NBAS 31A

## Department of Agriculture, Food and the Marine



Application form for a Certificate of Compliance for the movement of cattle from a single holding to another holding

COMPLETE THIS FORM AND FORWARD TO THE CATTLE MOVEMENT NOTIFICATION AGENCY

NBAS 31A

<b>ANIMAL SOURCE DETAILS</b>										
HERD NUMBER	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
NAME	<input type="text"/>									
ADDRESS	<input type="text"/>									
TELEPHONE	(	<input type="text"/>	)							

<b>ANIMAL DESTINATION DETAILS</b>										
HERD NUMBER	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
NAME	<input type="text"/>									
ADDRESS	<input type="text"/>									
TELEPHONE	(	<input type="text"/>	)							

ENTER THE HERD NUMBER OF AGENT INVOLVED (IF ANY)

Herd No:-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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ENTER THE EARTAG NUMBER OF EACH ANIMAL PROPOSED TO MOVE IN THE SPACES PROVIDED

1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**SOURCE KEEPER DECLARATION**

I undertake (i) to move the cattle directly from the holding specified above, (ii) only to move the cattle listed above, (iii) to ensure that all animals moved will comply with all animal health/movement regulations including those relating to BVD and (iv) not to move any cattle that show any visible signs of disease or ill health.

**Signed**

**Date**

**Instructions for completion of form**

1. Completed form should be posted to *Cattle Movement Notification Agency, West Cork Technology Park, Clonakilty, Co. Cork*, or faxed to 023 8832891. A Certificate of Compliance will issue on the date of receipt of a valid application form or fax received before 3 pm.

Tick this box only if you require a separate Certificate for each of the individual animals listed above

**Appendix 2. Estimate of variable and fixed costs incurred in rearing a spring born replacement heifer from 1 May to 1 December of the following year for different production cost categories.**

Cost category	Average		Low		High		Comment
	Cost per LU	Cost incurred	Cost per LU	Cost incurred	Cost per LU	Cost incurred	
<b>Variable costs <sup>9</sup></b>							
Milk replacer	€58	-	€58	-	€58	-	Milk fed on owners farm
Concentrates	€146	€110	€86	€50	€219	€183	€36 fed on owners farm
Fertiliser	€120	€97	€101	€82	€137	€111	81% of LU cost
Vet	€55	€44	€41	€33	€70	€57	81% of LU cost
AI	€45	€45	€45	€45	€45	€45	100% of LU cost
Contractor	€78	€23	€58	€17	€99	€30	30% of LU <sup>10</sup>
Other variable costs	€38	€31	€30	€24	€47	€38	81% of LU cost
<b>Total variable costs</b>	<b>€540</b>	<b>€351</b>	<b>€419</b>	<b>€251</b>	<b>€675</b>	<b>€463</b>	
<b>Fixed costs</b>							
Hired labour	€21	€17	€12	€10	€21	€17	81% of LU cost
Machinery	€29	€23	€23	€19	€34	€27	81% of LU cost
Interest	€13	€11	€8	€6	€17	€14	81% of LU cost
Car / FSB / Phone	€25	€20	€20	€16	€30	€24	81% of LU cost
Depreciation	€38	€31	€29	€23	€46	€37	81% of LU cost
Other fixed costs	€37	€30	€30	€24	€45	€36	81% of LU cost
<b>Total fixed costs</b>	<b>€163</b>	<b>€132</b>	<b>€122</b>	<b>€99</b>	<b>€193</b>	<b>€156</b>	
Own labour charge	€149	€120	€149	€120	€149	€120	81% of LU cost
Own land charge <sup>11</sup>	€182	€147	€182	€147	€182	€147	81% of LU cost
<b>Total charge (€/ head)</b>		<b>€750</b>		<b>€618</b>		<b>€887</b>	
Daily charge (€/head)		€1.30/day		€1.07/day		€1.53/	

<sup>9</sup> Derived from variable and fixed cost categories detailed in Table 2.

<sup>10</sup> In our example we assume that contractor charges are incurred for silage making and slurry spreading by a weanling heifer which is a 0.3 LU equivalent (i.e. 30% of a full LU).

<sup>11</sup> Assumes a stocking rate of 2.47 LU/ha.



## Contact details:

### Teagasc Head Office

Oak Park, Carlow, Ireland.

Tel: +353 (0) 59 9170200

Fax: +353 (0) 59 9182097

Email: [info@teagasc.ie](mailto:info@teagasc.ie)

[www.teagasc.ie](http://www.teagasc.ie)

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