

WHAT ARE HEIFER REPLACEMENTS REALLY COSTING YOU?

On many dairy farms heifer rearing costs are unmeasured and out of control, adding an unnecessary drain on the business according to Promar consultant Scott Cowan.

While the provision of strong, healthy, high genetic merit heifers is an objective for most dairy farmers, doing so at the optimum cost is often overlooked, mainly because it is an enterprise where cost recording is difficult. In most cases costs are underestimated and the heifer enterprise offers an opportunity to reduce production costs, making it worthy of closer scrutiny.

“The cost is often referred to by different names such as ‘Herd Depreciation’ or ‘Herd Replacement Cost’. It is also made up of a range of elements such as loss of beef calf income, cull cow income, cost of youngstock feed, as well as overhead costs, and consequently is difficult to determine. And you never write a cheque for ‘Herd Replacement Cost!’

“In the UK, heifer rearing is the second highest variable cost of milk production, with only feed and forage cost being greater. For the national average herd producing 7,500 litres, calving replacements at two years and four months and with a 25% replacement rate, replacement costs work out at 2.84ppl,” Mr Cowan explains.

The table below summarises the true cost of rearing a replacement to calve at two years and four months old. Many farmers are surprised at the true cash cost of the calf.

“If you breed two cows to a continental beef breed, you would on average have one crossbred bull calf and one heifer to sell. If you breed the same two 2 cows to a dairy bull, then on average you will have one Friesian/Holstein bull to sell and a heifer calf to rear. There is also a difference in semen cost, between beef and dairy straws for beef, and on average it takes 6.5 straws of semen to get two cows in calf.

“Together these give the ‘opportunity cost’ of having the heifer calf born and it currently amounts to £280. And then we have to allow for 8% mortality at, or soon after birth”.

Mr Cowan believes the variable costs of feed, bedding, vet and med and forage are probably the best understood. However, the true overheads costs of heifer rearing are often not fully considered and can add up to over £400 per heifer, giving a gross cost of rearing a heifer of around £1273.

“This cost of rearing the heifer is not the final cost to the herd of that replacement as it will be reduced by the average value of the cull animal it replaces. Currently the average cull price is around £420, having allowed for casualty cows so the net cost becomes £853 per animal replaced.”

At these prices the annual net cost of rearing replacements for a 150 cow herd with a 25% replacement rate will be about £32,000, but Mr Cowan believes that with a structured approach most farms will be able to reduce rearing costs.

He suggests the starting point must be to calculate the true costs of heifer rearing and to assess if any costs can be reduced. In many cases some individual costs will be high and it should be possible to reduce them. However he argues the biggest savings will come from reviewing the system and asking two fundamental questions

Can I rear heifers to calve sooner? It is perfectly possible to rear heifers to calve at the right bodyweight (which is 85% of the mature cow's liveweight) at 22 – 24 months, having averaged a liveweight gain of 0.8kg/day. The feed bills may be a little higher, but the overheads and interest charges will be less, to give a gross cost of £1100 per heifer reared (£680 net). Calving at two years compared to two years and four months also reduces the total number of youngstock on the farm.

Do I need so many heifers? Keeping fewer replacements is the most effective way to bring down overall rearing costs. If replacement rates are reduced then fewer heifers will be required. Cutting replacement rate from 25% to 20% would reduce total heifer numbers from 86 to 69 in the 150 cow herd currently calving down at two years and four months.

In addition, resist the temptation to keep more heifers than you actually need as all this will do is increase costs.

“With all production costs under close scrutiny, heifer rearing is one area where many farmers would see a real benefit. Making the time to assess the actual cost and planning how to make economies will be a good investment,” Mr Cowan concludes.

Heifer Rearing Cost (at March 2011)	Costs £
Opportunity Cost of a heifer calf	
Lost sale value of Continental bull calf, Continental heifer calf and Holstein bull calf plus allowance for 8% calf mortality value	304
Feed Costs	
Calf milk powder	32
Weaner to 3 months	42
Rearer to 6 months	67
Rearer 6months to calving	110
Bedding straw - calf to calving	90
Veterinary	36
AI and other costs	48
Forage cost	138
Total Variable Costs	867
Overhead Costs	
Paid and unpaid labour for 2 years	202
Machinery, fuel, electricity	70
Land and building maintenance	35
Water	16
Share of sundry ohc, depreciation	60
Interest on avg working capital 2yrs 4mths	24
Total overheads	407
Total Costs	1273