

### Tough economic times need efficient youngstock management

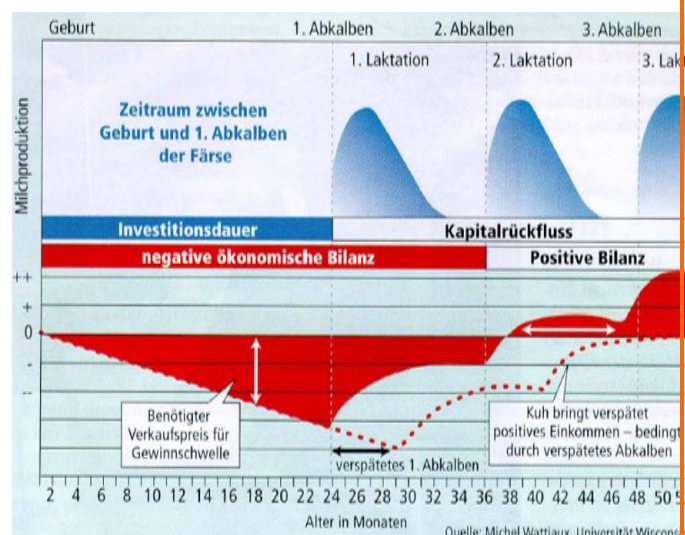
Everybody is well aware of the tough economic climate farming is in today, with an average 21ppl May 2016 (AHDB Dairy), and a huge range depending on contract. With only limited ways of increasing income, a focus on controlling costs and efficiency are key to a sustainable future.

The second highest cost is due to youngstock rearing. Recent work carried out by Dr Alana Boulton from the Royal Veterinary College on her PhD study with support from AHDB dairy, collected data from over 100 farms across the UK.

The cost of rearing, including fixed and variable costs, interest on capital and opportunity costs ranged from £1,073.36 to £3,070.46, with an average cost of £1,819.01 per heifer – considerably more than previous estimates.

The period from birth to weaning contributed on average to 10.8% of the total cost of rearing, weaning to conception had an average contribution of 40.4% to total cost, with conception to calving contributing 24.5%. The daily cost of rearing a heifer ranged from £1.47 to £3.35 with an average of £2.31. The period from birth to weaning had the highest average daily cost of £3.14, weaning to conception had an intermediate daily cost of £1.65 and conception to calving had the lowest daily rearing cost of £1.64 per heifer.

The study tried to determine the repayment period for the heifer to pay back the cost of its rearing, after she had calved. Extra cost in the form of maintenance or variable costs was balanced against the revenue secured from milk production. It found that the average number of day's post first calving it took for heifers to recoup their rearing cost was 530 days, ranging from 168 to 2,321 days. This translates into approximately 1.5 lactations (range 1 to 6 lactations) before heifers begin to make a profit for the farm.



The factor identified as having the most significant effect on cost of rearing was age at first calving (AFC) as this accounts for 35% of the variation. She found the mean cost of rearing increased by £2.87 for each day, so on average £85 a month. This is clear as the more days spent not milking the higher the cost of the rearing. However this also takes into consideration the fact that older heifers are less fertile and less productive. 1<sup>st</sup> service conception in heifers calved in at 23-25m is on average 42%, compared to 32% in heifers calved over 30m. Days to conception in lactation one is also strongly linked with 23-25m heifers on average taking 111d compared to 144d with heifers calved in at over 30m. The total 5yr milk yield also shows that older heifers are less productive at 15777kg, compared to 22477kg for those that were calved in at 23-25m. This links together with better survival rates: with heifers calved in at 23-25m, 70% of them will reach their 3<sup>rd</sup> lactation, 59% heifers calved at 26-30 will reach this compared to only half (50%) of those calving at over 30m.



## Age at first calving

	23-25 months	26-30 months	>30 months
<b>Better fertility:</b>			
1st service conception rate (L1)*	42%	39%	32%
Days to conception (L1)*	117	137	170
1st service conception rate (L2)*	47%	35%	33%
Days to conception (L2)*	111	133	144
<b>More milk:</b>			
Total 5 year milk yield (kg)	22477	20605	15777
<b>Better survival:</b>			
% of cows at calving 3	70%	59%	50%

The percentage of time the heifer spent at grass also decreased the overall cost of rearing a heifer. This factor accounts for 19% of the cost, with more time grazing meaning a decrease in feed, bedding and labour costs. She found that increasing the grazing period by one percent gave the farm a saving of £6.06. However, we have to watch that youngstock are gaining the expected weight or this lack of growth could increase days to service so actually increase costs!

Calving pattern was also found to be significant, both spring and autumn block calvers were found to have lower cost of rearing compared to multi-block or all year round calvers.

Those with herd sizes greater than 100 had lower average costs of rearing compared with farms with less than 100 cows. This is likely due to economies of scale where all input costs and cost of mortality is apportioned to a larger number of surviving heifers. The average cost of mortality apportioned to each surviving heifer was £139.83, ranging from £103.49 to £146.19, which represented average mortality rates of between 3.4% and 7.9% throughout the heifer rearing period.

Breed was also found to be indicated in the cost of rearing; this ranged over £300 dependent on breed with cross breeds having the lowest costs. Other factors do play a part in this, such as younger age at calving, grazing and calving pattern. Overall, the results of the economic analysis indicate that management decisions on key events, such as age of calving and grazing policy significantly influence the cost of rearing and can be altered with only a couple of changes needed.

However, changing breed or size is more dramatic and difficult despite having minimal impact on the overall cost.

Heifers are the future of the dairy herd and deserve to have the best management that incorporates all the latest research and management advice. In return they will repay the investment through higher milk production and a longer productive life.

So why not book a visit with me to carry out a Youngstock Rearing Plan specific to your farm, establish what you would like to get out of your heifers. It ranges from the calving cow right up to when the heifer calves in, highlights bottle necks and creates practical low cost solutions to help you achieve your rearing aims.

### Did you know...

Finadyne Transdermal is now available. It is a pour on non-steroidal anti-inflammatory. Suitable for all ages and will compete on price. Please ask for more details.

*Thanks  
Kat*

