

Using milk from forage figures, all-year-round

The great gr

What is the financial reality of switching to a totally housed system, and how does it compare to putting cows out to grass? We look at the benchmarks that should be used to assess herd performance.

text **Allison Matthews**

When cows are housed milk from forage obviously takes a hit, but producers may be using the wrong benchmark to assess the herd's performance. So says Northern Ireland's Department of Agriculture and Rural Development's Alan Hopps. "Producers have traditionally looked at their milk-from-forage figures to gauge performance, but there are more elements to the calculation of margin over concentrate. "Milk quality, yield, price and concentrate costs all factor into this figure, making it a more reliable measure of turnover than milk from forage. Combine this with the knowledge that producers can retain 40% of their margin over concentrate as profit and there can be no question that producers need to study it as a means of assessing performance."

Feed prices

Systems that result in the highest margin over concentrate (MOC) are heavily dependent on both milk price and concentrate input. Mr Hopps explains that while a falling milk price and elevated feed costs hit all systems, they have the biggest impact on those where the milking herd is housed all year round.

"Just a £25 per tonne increase in feed prices adds a 1ppl to production costs for the high input system, which is already hit by higher overhead costs. A totally housed herd is likely to have a higher outlay per cow – an additional £60 per head compared to those managed on a conventional grazing system. "So, for example, with a milk price of 23ppl and concentrate costs of £300 per tonne, profits for all-year-round housed herds are lower than those for grazed herds.

This takes into account the fixed costs of £60 per cow, which means that profit for those using a housed system are £20 lower per cow than for those with fully grazed herds

Setting weekly and monthly targets provides essential management information, but it must be practical and not add to the already huge administrative burden carried by producers. Dairy nutritionist Richard Moore uses the example of Thompsons' dairy costings service, Milk Manager, that provides producers with feedback on both monthly and rolling average performance by simply filling in one on-line or freepost sheet. "Producers must be able to compare month on month performance at a glance. This should include figures such as

margin over concentrate, milk from forage, daily yields and concentrate use, to ensure they can see how effective their system is. If there is no way of assessing this, the decision to graze may be based on historical performance rather than on hard facts."

Successfully managing a totally housed system is dependent on silage quality and strictly adhering to the principles of efficient feeding. Mr Moore points out that setting realistic milk from forage targets from silage is essential and must be backed up by accurate target feeding. "Ad-lib high quality forage is imperative to support a realistic milk yield. If running



housing would be ruled out, so why isn't it?

Amazing debate

a grouped system, cows should ideally not exceed a yield span of 20 litres when a diet feeder is being used, with the wagon mix set to maintenance level to support the milk level of the lowest yielder in the group.

“Once a week, those not meeting the milk yield requirements of the group must be moved to the next lowest yielding group.” Mr Hopps agrees: “If these cows are being sufficiently topped up with concentrates through the parlour, moving them to this group should not check their performance. The calibration of both milk meters and concentrate feeders must be accurate to ensure the information is exact.”



Attention to detail vital on any dairy unit, but when it comes to housing cows all year round this is even more important in order to achieve success. “Lameness has such a major bearing on dry matter intakes and milk yields, so for those serious about the all-year-round housing approach, foot bathing two to three times per week is essential. “This keeps on top of digital dermatitis and focuses the mind on locomotion scoring, which should be done on a monthly basis,” adds Mr Hopps.

Fertility management

Mr Moore goes on to stress how crucial yield is in an all-year-round housed system and to this end fertility management becomes a vital piece in the jigsaw. “Fertility management can make or break such a finely tuned system.

“Where mid-lactation animals make up the herd, they will not drive the performance required and the fertility programme must be geared towards maintaining a supply of fresh calved animals into the system,” adds Mr Moore.

But without accurate monthly data, it all becomes irrelevant as there is uncertainty about what is actually working in practice. “Cows milking, cows dry, milk sold, milk value, milk to calves, concentrate fed and concentrate price are all figures that should be recorded on a monthly basis,” says Mr Moore.

Benchmarking provides producers with the opportunity to review data annually and gives a good reflection of historic performance. When milk from forage and margin over concentrate are compared for similar systems it can act as a reality check and allow producers to critically evaluate whether things are really going as well as they think they are. “Ultimately the success of the decision to graze or house will only be dictated by the producer’s ability to manage whatever system they choose,” adds Mr Hopps. |

Table 1: Financial comparisons between different systems

	grazing 24/7 in summer	only grazing at daytime	no grazing
herd size	157	194	276
annual milk produced per cow (litres)	7,393	8,244	9,176
annual concentrate fed per cow (t)	2.36	2.85	3.6
annual total milk production (mlitres)	1.2	1.6	2.5
annual dairy herd feed usage (t)	370	553	994
margin over concentrate (£/cow)			
25ppl and £250/t concentrate	£1.258	£1.349	£1.394
23ppl and £300/t concentrate	£992	£1.041	£1.031