



MANAGING FERTILITY FOR BETTER MARGINS

First and vital step: Assess true level of herd fertility efficiency.

- Ignore Calving to Calving Index totally - often referred to as Actual calving index/interval - because it depends on pregnancy length; which varies considerably and has nothing to do with the efficiency with which cows get in calf. As it also depends on two calvings, the first of which will be more than a year ago, it is always seriously out of date.
- Measure efficiency rather by the **Predicted Calving Index/Interval**. This is the calving to conception interval, the measure of the efficiency with which the cows get in calf, with a fixed, assumed pregnancy length added (e.g. 283 days).
- Target for average predicted calving interval for herds producing less than 10,000 litres/cow/year is 365 days. That produces most milk/cow/year.
- If culling rate on fertility grounds is over 6% per year or for all reason over 20%, predicted herd calving interval may be over-optimistic.
- Delays before first service to fit a tight calving pattern may artificially extend calving interval.
- Make sure that at least 75% of the herd have been included in the predicted herd calving interval. Or calving to conception/predicted calving intervals include virtually all calvings in a year. If this check is not made, the average herd figure may be over-optimistic.
- What matters most? Cows in calf when and in the time scale you want them or cows in calf to particular expensive bulls? For the majority of cows it is the former. How can this be achieved most effectively?
- By serving cows sooner after calving primarily but also by detecting returns to service more efficiently. NOT by increasing conception rate. Leaving cows 'a little bit longer' does increase conception rate often but it also increases predicted calving interval at the same time. A real example: A herd with an average predicted calving interval of 412 days, a first service conception rate of 33% and an average calving to 1st service interval of 89 days reduced the calving interval to 384 days by reducing calving to 1st service to 73 days in spite of a conception rate drop to 30%.
- Improving conception rate is always difficult anyway.
- If you don't know your herd's average calving to 1st service interval, you don't really have control of fertility efficiency/management.
- Most cows culled on infertility grounds could get in calf. They just are not in calf - in the right time.
- Most cows not in calf at scanning/PD or returning to service at more than three weeks were never in calf in the first place or lost the foetus by 18 days served - and the return to service has been missed. Everybody including the bull misses some returns!
- Loss of condition (energy problems) in the first 30 days of lactation is the main influence on reduced first service conception rate; followed by failure to gain condition or loss in the dry period.
- How can you spot that energy problems are inhibiting your herd's fertility efficiency?
Second service rates higher than first - if energy problems seasonal, difference may not be obvious throughout the year.
1st lactation heifers may have higher conception rates than cows.
Cows may be slow in coming bulling after calving, heat signs may be poor and returns difficult to detect. There may be an incidence of ovarian cysts.
- If conception rate below 35% and DIY AI used, check semen store and operator technique
- If conception rate below 35% and natural service used in part even, check for *Campylobacter* infection.
- **Talk to your vet. Talk to us. Set the right targets. Keep checking.**