

# Infertility Problems in Dairy Herds



Infertility issues within dairy herds can be subtle, complex and costly. Losses per cow per day could be £2 - £4.50 depending on the management system. However the scope for improvement is great with farmer and vet partnership having the potential to improve herd fertility rates over time.

## Some Causes of Infectious Infertility

- BVD (Bovine Viral Diarrhoea)
- Lepto (Leptospira)
- IBR (Infectious Bovine Rhinotracheitis)
- Campylobacter
- Salmonellosis

## Disease Control

Vaccines are a useful tool in the fight against major diseases affecting fertility. In addition to the vaccine option, farmers can monitor levels of herd exposure to disease by measuring bulk milk tank antibody levels every few months.

Monitoring antibody levels will allow judgement of whether the biosecurity measures taken to keep these infections out are working, or warn of disease level and prompt appropriate action.

If your herd is not currently vaccinated against these diseases, or not being monitored, then consult your vet about cost-effective control measures.

## Nutrition

When infectious diseases are under control farmers can focus even more on nutrition. Today we have a much better understanding of the cow's requirements and total mixed rationing has enabled a much better composition of the diet.

However, dairy cows often give so much milk they physically cannot eat enough to meet their requirements in the first 100 days

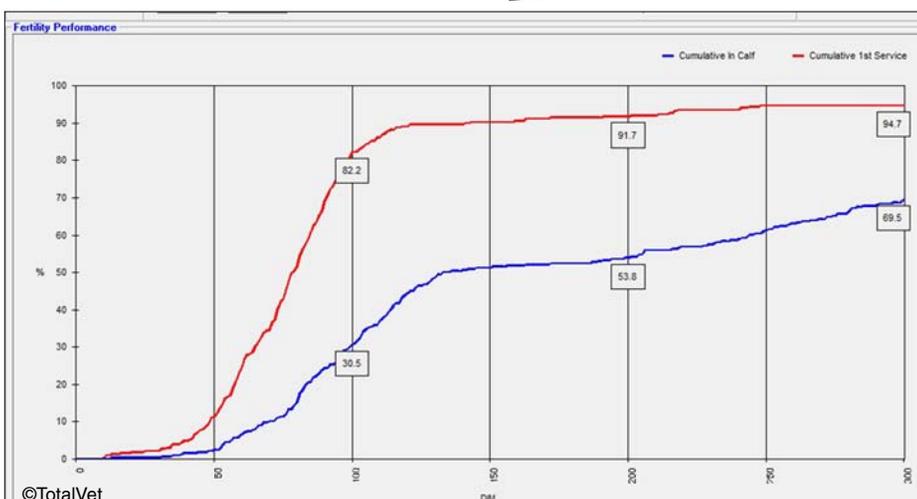


or so of lactation. So they are in negative energy balance and can be effected by vitamin and trace element deficiencies, neither of which are conducive to good conception rates.

### To resolve this imbalance:

- Pay careful attention to detail when managing cows' condition scores from late lactation through the transition period to calving.
- Carefully formulate the diet to accommodate any poor silage.
- Blood profiles may also be a useful way to monitor the situation.

**Periparturient infections** like Endometritis and Metritis should be diagnosed and treated quickly to avoid increased calving interval losses and continuous reproduction failure.



Keeping accurate breeding records is fundamental to having a successful herd and identifying issues early. Information such as when a cow should show heat, how long since she's calved, projected calving date, heat dates, service dates, pregnancy diagnosis, projected drying off date, culling dates (and reason), vet treatments, service intervals, health events etc. all aid in the management of cows with fertility problems.

**Talk to your vet about the many recording systems available as every farm is different.**

### Infertility Investigations



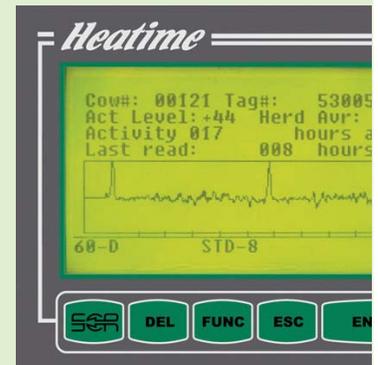
#### Heat Detection

One of the most important parts of getting cows in calf is heat detection. This needs to be accurate and sensitive. Investments made in improving your heat detection are well worth it.

Modern day dairy cows have reduced length of heat periods and weaker signs of heat, so to avoid sitting out all night with your cows, take a long

look at heat mount detectors, activity meters, the Genus RMS programme, and, soon to be available, in-line progesterone measurement. Consider the use of teaser bulls. Talk with your vet about all the options available.

*It is common knowledge that it's easier to improve heat detection than conception rates, so give yourselves, and your cowman a chance and look for help.*



#### Key To Success...

- Disease control
- Effective ration
- Early first service
- Good submission rates (consider synchronisation programmes to maximise submission rate)
- Good conception rates
- Early pregnancy diagnosis
- Early action on non seen bulling and anoestrus cows
- Correct A.I. semen handling
- Correct A.I. gun positioning
- Correct A.I. training
- Good general management of cows to reduce non infectious causes of early embryonic death (EED)
- Reduced stress levels i.e. heat stress
- Bull fertility
- Regular fertility visits

#### Single Thaw Embryos (Cow Stoppers)

**What do you do if, having treated the cow, fed her well and accurately spotted her on heat every three weeks for the last ten cycles, she still won't get in calf?**

**You could:**

- Dry her off, turn her out with the bull and check before culling
- or just cull her now
- or you could consider using single thaw embryos

Using a single thaw embryo is a way of bypassing the cow's need to get her egg fertilised to conceive because it has already been done for her.

The principle is that you serve the cow when she comes bulling and seven days later your vet implants an embryo under an epidural anaesthetic. So ultimately she conceives, sometimes surprisingly to the AI.

#### FINAL WORD

With cows potentially now worth more, can you afford not to try techniques such as disease control, nutrition, heat detection and single thaw embryo transfer to avoid infertile cows?

Please discuss these methods with your vet.

For further information contact your local XLVets practice:

