PRACTICE NOTES

FRAME, Swift and Partners is a 12-vet mixed practice working from a purpose-built, greenfield site at Carleton, Penrith.

In the Seventies and early Eighties, this was a three-man, predominately farm practice, but it has grown in response to the ever-changing demands on the veterinary profession.

While all the vets pride themselves on being general practitioners, many in the practice now have post-graduate qualifications in subjects as diverse as small animal medicine, cattle fertility, cattle health, sheep health, anaesthesia and equine work.

In addition, due to the facilities available and the good coffee brewed, the practice is extremely fortunate to have specialists in fields such as dog fertility, dermatology and advanced equine surgery visit us regularly. This is important for the area, owing to the great distances and costs incurred in otherwise referring to the university hospitals.

Cutting calving interval will bring many benefits

Vet **Richard Anderton**, of Frame Swift and Partners, looks at some of the issues surrounding fertility in the beef sector

It is calving season for many of our suckler herds. However well managed they are, there will always be a problem or two for us to deal with.

I often facetiously ask whether I am calving a late 'spring calver', a 'summer calver' or even a really early 'autumn calver'. This is because, on many units, the calving periods all merge into one as things have gradually slipped over the years. It's human nature – you have a fit, able cow and you might as well have her in calf as leave her barren for a year or cull her out. But is this an efficient way to run an enterprise?

Studies have shown that, in the English beef sector, the average calving interval is about 415 days – nearly 14 months. Reducing this interval will not only increase the number of calves produced per cow lifetime, but will also produce a tighter calving pattern. This means:

■ Less time for infection to build up in the calving pens/calving areas – hopefully giving rise to healthier calves and fewer post-calving infections, in both the cow and the calf;

■ Efficient use of labour and facilities by concentrating the calvings into a specific period;

■ Closely matched batches of calves that can be managed together – for creep-feeding, dosing and weaning. Post-housing, these groups are at less risk of diseases such as pneumonia when compared to having a wide range of ages in the same shed;

■ Increased calf weights at weaning – meaning bigger, stronger animals at housing time, bigger stores and/or earlier finishing.

But how can this be achieved? Reducing the calving interval is not something that will happen overnight and success depends on getting a number things right. Ideally, the aim should be to have a calf every 365 days – meaning a cow should be pregnant by day 80-85 post-calving. However, once the calving pattern has become extended it can take a number of years or some ruthless decisions to tighten things up.

At the beginning of the breeding season, as many cows as possible should be ready for service. This is dependent on the cow's condition and nutrition before and after calving. The easiest way to monitor this is by regular assessment of the animals' condition score, with the aim (for spring calvers) to have cows average condition score at 2-2.5 at the time of calving and 2.5 at the time of service. Cows in the correct condition are likely to show strong oestrus behaviour and have good conception rates, especially if, at the same time, they are either maintaining or gaining weight at this time.

This may be relatively easy to achieve for well performing mature cows, but for cows under stress, such as heifers that still have some growing to do or later-calving cows feeding hungry calves, this can be a challenge.

Alongside cow condition, recognised mineral deficiencies will need to be addressed to achieve maximum fertility. The most significant of these relates to copper and its interaction with any molybdenum present. This can be difficult to assess fully as blood sampling is an inaccurate method of estimating the available copper levels in an animal; the most accurate method, although unwieldy, is to collect liver biopsies.

To tighten up the breeding season, it is imperative that bulls are in perfect condition to serve the cows put in front of them. Again, bodily condition is of prime importance – 'fit not fat' is what you are aiming for. Unfortunately, with the move to have bull sales in the spring rather than the autumn, it can be difficult to get new bulls into the right condition in time for the coming season.

Efficient: Cutting the calving interval in a suckler herd will increase the number of calves produced per cow lifetime and produce a tighter calving pattern

It is also becoming increasingly common to find sub-fertile bulls when they are examined pre-breeding. This will obviously have a huge effect on the pregnancy rates and is certainly one of the main factors responsible for lengthening calving periods.

It is for this reason that we encourage everyone to consider having their bulls tested – by physical examination and electro-ejaculation – about two months before the start of the breeding season to identify problems. Just because a bull performed well one year does not mean that he will do the same again the next.

The effects of a number of infectious diseases on herd fertility are well recognised. In particular, infection with either bovine viral diarrhoea (BVD) or leptospirosis are known to significantly compromise conception rates and, as such, should always be taken into consideration when considering herd fertility issues. Effective vaccines are available to protect against both these diseases.

And what is the most common cause of extended calving periods? Of course, leaving the bulls running with the cows for too long in the first place! Ideally, the bulls would run with the cows for a nine to 10-week period. With a good conception rate, more than 90 per cent of them will conceive during this time. Any cows that do not become pregnant within this time should be culled out and replaced by incoming heifers the following year. These heifers could be served a little earlier – to calve as a batch before the main herd, giving a little extra time for growth before the next season.

It is often advisable for first lactation heifers (and leaner cows) to have their calves weaned earlier to allow a little more time and energy for growth and weight gain before calving down again.

Hand in hand with all this extra effort should go accurate record-keeping. Only by recording the performance of the individuals can any assessment be made of how things are progressing on a herd basis, and this information can be used in future years. For example, home-bred heifer replacements should come from cows with good calving intervals – not cows that are always difficult to get back in calf.

So, can you make your suckler herd more efficient? Why not start with a critical look at your records? What is your herd-calving interval? How many barren cows have there been as a direct result of fertility problems? You may be surprised what you find…