

# NANDEWAR ANIMAL HEALTH SERVICES NEWSLETTER

## **Bulls and Summer Vacation**

If you had calves born since October 1<sup>st</sup>, then chances are you've had some nasty calf scours recently. Hence all bulls should have a mandatory summer vacation of celibacy! This problem of late calves has always been known, but was really exacerbated by the drought causing lots of late-calvers, then compounded by a lush spring and an epidemic of flies. And this problem was not confined to our region. Across all southeastern Australia, surveys by MLA (conducted by Alison Gunn ex Barraba vet) have shown a marked rise in significance of scours in beef calves. MLA has also produced a number of fact sheets to assist with scour management. In brief, the age of the calf at onset of scours will help decide the causal agent, which will assist with treatment and future prevention programmes. The particular problems this year seem to be the secondary infections/septicaemias, making systemic antibiotics essential, in addition to re-hydration. BUT the best prevention of all is to avoid the spring/summer calf. Interestingly, calves born in February (which is still hotter than November) are far less likely to suffer severe scours, probably due to different feed (affects milk production) and far less flies. So even if you are persisting with these late calvers rather than culling, give the bulls a break over summer/autumn. On a positive, despite the severe flies the incidence pinkeye this season so far has been low. Flies will certainly act as a mechanical vector for the *Moraxella bovis* bacteria, but without the dust to create some micro damage to allow the bacteria to invade, fewer calves suffer the disease.

It's often commented that "you get more dead ones in a good season than a bad season". Certainly with the scours this is probably true, and no doubt with diseases such as bloat. But the bloat season didn't go nearly as crazy this spring as predicted? Some mitigating factors include a better mix of pasture species (less monoclonal Lucerne paddocks) and probably better grazing management. Another disease that has manifest in this "good" season is **selenium deficiency**. This trace element is often deficient in southern Australia and NZ but not as common in our area. Factors that contribute to deficiency include higher rainfall, acidic soils and use of fertilisers and interaction with other trace elements such as

molybdenum. This year we have diagnosed a number of herds. Symptoms range from ill thrift, especially in growing calves but also cows. Fertility can also be affected. On one farm we also found marginal copper levels. Diagnosis can be confirmed by taking about 10 blood samples from a suspect mob and testing for an enzyme linked to selenium metabolism. Treatment is not terribly expensive but requires careful planning as excessive selenium is toxic, and there are many ways of delivery from bullets, drenches, injections and pour-ons. I recently attended a meeting in South Australia and while flying across it seemed the whole of southern Australia was having a good season. However, on talking with my colleagues who had just about finished pregnancy testing for their autumn-calving herds, large numbers of cows were empty due to the desperately poor conditions earlier in the year. I've been wondering what their strategies will be – spring calvers? Cull? Or carryover and miss a year. I know many commercial producers spend many years selecting their own "style" or line of cattle, so making a decision to cull large numbers of breeding cattle due to non-pregnancy can really hurt. However, cows only produce income by yielding a weaner and by their own cull value. Therefore, carrying preg tested empty cows any longer than to fatten to add cull value is costly. It would take an exceptional cow that yields 6 weaners in 9 years of life, to earn more than another yielding 7 weaners. In our farming systems all cows should yield one weaner per year or lose their place in the herd. I am a strong advocate of over joining maiden heifers to buffer against any poor preg test result in the cows with our variable seasons. In fact all bar obvious cull heifers can be mated and with the use an early preg test (as early as 28 days with ultrasound), total numbers desired to calve out can still be attained. If surplus heifers are in calf, these can still be fattened for fat market since they are only early in calf, so feed goes to finishing, (not pregnancy), or alternatively put a PD tag on them and sell as PTIC to all the south Australians! However, while an advocate of joining excess heifers, this is a risk strategy, not a preferred option. Cows generate a better weaner and genetic gain will be better if only fewer better heifers are selected. Having said that, the biggest single determinant of good ovulation rates in cows is

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body condition at calving. If cows fail to calve in decent body condition (3+) then almost no amount of feed after calving will enable them to gain weight, cycle and conceive in the average of 90 days to achieve a 12 month inter-calving interval. This is largely due to a change in partition coefficient of utilisation of feed. After onset of lactation (calving) increases in feed will largely be channelled to increased milk production rather than body condition and ovarian activity. Even when lactation peaks at around 40 – 50 days post calving, after which cows may be able to gain some body condition on high quality feed, the impact on the ovarian activity has been shown to lag by around 50 days. So while we know individual animals may be so fertile as to beat the average and conceive in poorer condition, this information indicates the average of the herd will be >90 days post-calving before creating good quality eggs, and so the median calving date for the herd drifts later. This is no more apparent than in 1<sup>st</sup> lactation heifers, often preg tested empty before they've even weaned their first calf (generated their 1<sup>st</sup> income).

So what can we do to achieve ideal body condition score at calving? Obviously we can supply more feed or reduce herd demand. More feed can be achieved through improved pasture species, fertiliser, irrigation, improved grazing management, balanced supplements, forage harvesting and storage. Reduction in demand can be achieved through decreased herd size, alteration of herd structure (e.g. sell weaners), selection for improved feed conversion efficiency or early weaning. In dairy herds calves are taken from cows almost immediately after they have ingested sufficient colostrum and reared on milk replacers for varying periods but almost always weaned by 6 weeks. Of course we are not milking beef cows so they may as well just provide the calves their milk, but for how long? There is an inherent inefficiency in feeding quality feed to cows with maximum feed conversion efficiencies of say 6:1, to generate milk which is then ingested by calves and another loss of feed conversion occurs. During the recent drought many people were confronted with the necessity of very early weaning and although hugely expensive at drought feed prices, some producers did it very successfully. The key to weaning is to promote the development of the rumen and thus its capacity through microbial

fermentation to digest complex carbohydrates such as cellulose. I was recently presented with an award, which involves a study tour of enterprises in North America. During this trip I hope to investigate some of these options more thoroughly. I can't personally imagine how a very early weaning strategy will suit our systems, but a 6 month wean may provide some definite benefits not only to finishing weights but also to cow body condition score at calving. Professor Albert Barth, who recently lectured at the vet workshop in Barraba, has many clients who yield 92%+ pregnancy rates over a 63 day (3 cycle) mating period, and many of these producers wean at 6 months. I can't see the value in removing the bulls at 63 days with our variable seasons, but suitable timing of preg testing with foetal aging can enable a tight calving pattern if so desired but retains the pregnancy rate should the rate of conception be slow.