Dry Cow Therapy
Why should I treat low SCC cows?

If you follow the Samm plan you will note that they recommend that if more than 40% of the herd qualifies for DCT or 10% or more of the herd has had mastitis in the previous dry period or the first month of lactation they recommend that you treat the whole herd with DCT. Fair enough - and that's the advice we give after reviewing your herd test and bulk cell count data at the end of the season.

However we do get asked quite a reasonable question about this fairly often - *"why, if I am treating all cows above the Samm plan threshold, do I need to do cows that have never had mastitis and are always below the line on herd tests? Can't I leave them untreated?"*

Well, yes you can and if you have a herd with a consistently low bulk cell count, it's quite reasonable for you to just treat individually based on accepted criteria. Of course by treating all your cows you do significantly reduce the risk of new infection during the dry period, giving peace of mind and lower rates of new infection at calving time.

However, if you have a herd with a high level of clinical mastitis all season, a bulk count that is consistently high (above 250,000 regularly or higher) and more than 40% of the herd qualify under the Samm plan guidelines you really are running the gauntlet by leaving your 'good' cows untreated. It's all about risk management.

Scott McDougall put it this way:

"The issue is about misclassification and risk management. Most herds have a gap between the last herd test and dry off and even if we have 4 herd tests and good clinical data there will be some cows that are low SCC at herd tests with no clinical mastitis history, but that may well be carrying Staphs or become infected between the last herd test and drying off because they are being milked with high risk cows. Also some Staph cows can have somatic cell counts below 150,000 at herd tests because Staph is an 'intermittent shedder' of bacteria and don't pump bacteria out into the milk at a consistent rate all season so can fly under the radar. The higher the average bulk count, the higher the risk of infection within the herd."

Also leaving some cows untreated increases the dry period risk of (subclinical + clinical) mastitis.

He suggests that if you're still not convinced and would prefer not to use an antibiotic on these cows that they still deserve protection over the dry period and recommends use of a teat sealant.

Teresa's Guide to Drying off

Every year we hear stories of how people have dried their cows off and ended up with high levels of Dry Cow mastitis. Stories such as "we milked them once daily, then skip a day, then skip 2 days then Dry-cowed them", or "we had to put the Drycow in hot water to get it to work".

Ideally, restrict the cows to maintenance for 3-5 days before planned dry off. Include high levels of hay as part of maintenance and make water freely available. Milk once daily. The message you are giving the cows by taking these steps is that it's time to slow down. Avoid the temptation to skip a day. The cows may look tight but they will develop a plug faster if left. If you bring them in and milk them again the initial plug will disappear and you are telling the cows to start milking again. Drycow therapy is made to go into an udder that is milking, not an udder that is starting to involute or dry off. Incorrect use of Drycow therapy increases the chance of inhibitory substance grades at the start of the next season.

On the last day, bring the cows in and milk them. Teat spray using spray mixed up at the highest concentration recommended on the drum. Draft the cows requiring Drycow into a clean yard then bring them back into a clean shed at the end of milking. Have clean dry hands. If it is cold, put the Drycow in one bucket that is clean and dry. Put hot water into a different bucket and place the bucket of Drycow into the bucket of hot water. This way you are warming up the tubes while keeping them dry. Once the tubes and your hands get wet bacteria spreads very easily. If you put the tubes directly into water you will end up with a bacterial soup with the tubes floating in it, even if you add disinfectant. You could put the dry cow into the hot water cupboard the night before you need it.

Wipe the teat ends until clean with a 70% meths based wipe, usually provided with your Drycow. Wipe the cow's two front teats first, then her back two. This way you are not wiping bacteria back onto the cleaned teats with your hands. Wiping cleans the teat well and is much better than just spraying with meths. Take the 4 tubes and put them in your pocket. Take the lid off one tube and treat one quarter, starting with a back teat. Use one whole tube, not less or more. Treat both the cows' back teats, then the front two. Teat spray the cow. Mark the cow if you still have some of the herd milking so that you can easily identify the treated cows so they cannot be accidently milked.

Allow plenty of time to treat a large mob, have something to eat before you start. Try not to rush as it will make the job worse.

Keep the dried off cows on maintenance feed for 5-7 days including plenty of hay. The less mud and poo in the area they are grazing the better, so larger areas of short pasture are better than small areas with long grass. I know this will play havoc with your round but it's only for a short time. Avoid the cowshed for at least 10 days as many cows will let their milk down even if they come into the yard.

The Bovine Teenager - nothing but trouble?

Food for thought from Bas Schouten

Recently I was lucky enough to hear renowned calf expert Bas Schouten talk on a number of topics. Among them was a talk he gave about juvenile stock – those ones you wean at 100 kg and often send away before Xmas not to be seen again until just before they return home to calve.

This is what he had to say:

What do we know about them?

- We know how to rear them to weaning and we know how important it is to fully develop the rumen
- We know the Target Weight goals required to get them to the herd in 2 years' time:
    - They need to grow from 40 kg to 500 kg in 730 days, that's 0.65 kg/day every day
- They need to be 30% of their adult weight by Xmas
- They need to be 60% of their adult weight by mating
- They need to get pregnant with less than 8% empty rate
- They need to be 90% of their mature adult weight at calving
- They need to compete with the adult cows and get in calf again

He then went on to lament that only about half of these calves make it to their 3rd lactation. That seems a very low number but I'm not going to argue with Bas as I assume he has the stats to back that up.

He then went on to say (to us vets) "you all know how great a part the weight and maturity of the heifer plays in the success or failure of the "In-Calf" program"

"We know the energy and feed requirements. Like the adult, this young ruminant requires 3% of its bodyweight in DM/day. So by Xmas this means 3kg DM, at mating 9kg DM and by calving 12-15 kg/DM"

We know about the importance of Trace Elements

We know about the importance of Pasture Quality

We know about the importance of Disease Control

"So why is it that so often these animals are placed on the poorest pasture, monitored infrequently, and seldom fed to capacity?"

Bas is involved in a trial where he is attempting to develop the best possible ration for the 100-250 kg weaner so that where animals are monitored and it is found that some or all of the group are lagging behind, a farmer can step in and offer a ration designed to grow them quickly back to target weights.

The 'strategic ration' he is working on will be a pellet or nut formulation that can be fed straight onto pasture and will contain ideally:

Protein 16%	3 cereal grains
Molasses 6%	Fibre 15%
Rumenal Buffers	Vitamins and Minerals

Mycosorb (to absorb fungal toxins and the like that cause things such as Ryegrass staggers etc)

Growth promoter	Energy 12 MJ ME/kg DM

That is his ideal ration, and he compares that to something like PKE, which is commonly fed to try and achieve rapid growth:

PKE:	Energy -12 MJ ME/kg DM	Fat – High
	Protein - High	Carbohydrates - Nil

He concedes that his ration will cost a bit more than cheaper alternatives such as PKE but believes that the more balanced and sophisticated ingredients in his ration will allow for better Rumenal health and improved weight gain per kg of feed; plus it can be fed straight on to the pasture rather than in troughs, making it more convenient and cheaper to feed out.

The take home message from Bas was that this class of stock is probably the most neglected class of animal yet they are vital to the future success of your herd. They need regular monitoring, drenching, full vaccination, trace elements and so on, and if you find some or all are falling below crucial target weights, you need to step in and act quickly to remedy whatever is holding them back rather than try and put weight on undersized animals three weeks out from their first mating.

Interesting stuff from a man committed to NZ farmers doing better with their young stock. He also had some fascinating things to say about calves which I will hold onto for now and put in a pre-spring newsletter.