

## August 2013

We have been praying for some good weather and it has finally arrived. As in the farming world nothing is ever straight forward. The very high temperatures have been triggering heat stress in our cattle.

**What is heat stress and how does it manifest?** A cow functions best between 5 – 25 °C, when the temperature gets above this she needs to start regulating her temperature, she does this 2 ways.

1. By **trying to lose heat through** drooling, panting and diverting blood supply to her external regions ie skin.
2. She **limits her own heat production** which includes eating up to 30% less dry matter, reducing her forage intake, and reducing the number of ruminations.

**What does this mean?** A drop in milk yield, an increase in embryonic death (so reduced fertility) and an increase in mastitis.

### How do we mitigate?

- 1) Provide as **much shade as possible**, cows like to congregate in cool areas such as collecting yards, under trees etc.
  - If this is out in the field and the cows are all lying down in the same spot this will **lead to an increase in mastitis** and so make sure **you have a good quality post teat dip** ideally a **barrier dip** which coats the teat acting as an extra layer against infection. Make sure the **cows have a good fly repellent** as well.
- 2) **Water** is critical, a cow will drink up to **100 litres of water / day**. She will not walk far to the water so make sure there are plenty of water troughs near by.
- 3) Try to **encourage cows to eat at night** when it is cooler. Freshen the feed after evening milking and then push the feed up before bed!!!!
- 4) **Improve your ventilation** in the sheds whether this is through adapting your roof and inlets or putting in fans.
- 5) A **sprinkler system** would be ideal but there may be economic considerations here???

We are starting to see coughing cows. Be wary of lung worm as these have been ideal weather conditions for it. If in doubt talk to us at the vets and we will discuss the best course of treatment.

**What is ketosis?** When a cow's energy demands exceed her input, she then has to compensate by using up body reserves. If this all happens too quickly she goes into ketosis.

**In beef animals** this happens **late on in pregnancy** when her food input is reduced and the rapidly growing calf needs the extra energy.

**In the dairy cow** this happens early on in lactation when her milk yield is outstripping her energy intake.

### What clinical signs do we see?

- 1) Reduced milk yield: Initially a moderate decline, eventually a sudden drop
- 2) Body condition and weight loss
- 3) Reduction in appetite (initially non-forage feeds)
- 4) Dull, stary coat
- 5) Firm, 'waxy' dung
- 6) Acetone (pear drop) smell of breath or milk - not always detectable
- 7) Recumbent cows that are too exhausted to get on with calving.
- 8) A few develop nervous signs including excess salivation, licking, incoordination, aggression.

### What is subclinical ketosis?

This is where the signs are non specific and we do not get outright ketosis but it is bumbling along in the back ground.

Typically these cows: Don't milk as well as they should.

They are more prone to mastitis, metritis and LDAs.

They take longer to get in calf.

### What are the risk factors?

1. Calving down fat (greater than BCS 3.5) or thin (less than 1) cows.
2. Poor dry cow diets.
3. Calving problems including twins!
4. Older cows and stressed out heifers!!!
5. Milk fever and other diseases around calving time.

**Prevention is far better than cure**..... address the above issues.

There is also a new product called **kexxtone**. This is a bolus which should be administered to the dry cow 3 weeks prior to calving. We are having some very good results with this. Talk to us about the typical cows to use it on.