

Health Management of Beef cattle and Small stock in winter

The cold weather has arrived in Zimbabwe and in the next few months we will notice further effects of the dry winter weather which should be followed by warm wet weather. The following tips highlight management procedures which will reduce disease incidence and unnecessary loss in profits.

Winter Nutrition

Current drought and cold conditions reduce the carrying capacity of veld grass and supplementary feed including urea and molasses, crop residues, winter maintenance blocks are essential to maintain body condition score and support breeding cows and heifers at calving.

Many farmers incorporate poultry litter as a protein source in supplementary feed and/or veld grass. Be aware that litter can be a source of botulism infection in large and small ruminants. **Vaccinate all stock against botulism before the winter months even if litter is not fed to stock as phosphate deficiency in winter months can induce stock to eat bones lying in the veld which are a source of botulism infection.**

Poultry litter can also cause urinary bladder stones leading to urinary blockages and death. **Cattle must not be fed more than 1kg of litter per day and small stock not more than 200 g per day. Be warned.** Ruminants will consume browse on trees and bushes which often leads to the release of tannins by the browsed plants leading to gut irritation, sickness and death. **Always use BROWSE PLUS added to the drinking water at a rate of 1-3 g per 20-30 Litres of drinking water daily.** Browse Plus may also be included in a block.

A lack of green fibre in winter leads to a vitamin ADE3 deficiency which affects the immune system amongst others leading to more eye disease such as keratitis and bone deficiencies. **Supplementing all stock with injectable Vit ADE (Vitol ADE3)** also improves response of stock to vaccines. Thin animals do not always respond fully to immunisations. In sandveld selenium needs to be supplemented especially in sheep preferably using an injectable containing selenium and vitamin E.

Winter feeding needs to be monitored as animals are hungry and efforts must be made to ensure smaller and weaker animals are receiving adequate feed especially those about to calve down. Rubber tyre troughs are very useful but ensure adequate numbers are available to avoid bullying.

Cows calving down must be separated and given extra feed to allow for increased milk requirements by the calf.

It is essential to ensure that calves, lambs and kids consume adequate amounts of **colostrum within 6 hours of birth.** Colostrum is the only means by which immunity to vaccinations can be transferred to offspring. A lack of colostrum leads to poor growth, scours and bacterial infections and death. Do not hesitate to dose weaker animals with colostrum **manually drawn** from the dam.

Parasite Control

Worms and fluke are parasites of hot wet weather and over winter in the host animals without always causing damage.

Control is based on treating stock with a **long acting flukicide such as Fluconix** which also controls wireworm **and an anthelmintic such as Ivermectin** as we enter cooler autumn months. Thereafter it is not necessary to deworm stock until warmer temperatures occur from September onwards. Check faeces for worm infestation at the FIVET diagnostic lab if you are unsure when to treat at the beginning and/or end of winter months. Fluke become active in spring as daytime temperatures rise and a single treatment with Fluconix will effectively reduce liver fluke challenge early in summer. Ideally treat stock for fluke three times during summer starting from the beginning, mid and end of summer.

Ticks may overwinter off the hosts depending on the tick species.

It is important for stock owners to understand the life cycle of ticks and recognise the stage and species of ticks infesting cattle and small stock as a basis for deciding when to treat for tick infestation.

The blue tick which is easy to recognise by their blue grey colour is a one host tick and newly hatched larvae feed and moult on the cattle for about 3 weeks until the fully engorged adult female blue tick drops off to lay her eggs on the ground. **All farmers know this tick species which transmits redwater and gallsickness** mostly during wet summer months. The blue tick often appears in June/July and may infest cattle into the spring and farmers need to watch for this. The tick is easy to recognise on cattle and small stock infesting the back, sides, dewlap, neck and upper legs. Larvae are very small and farmers must look carefully for these parasites when deciding when to dip.

A very useful tip is to avoid **dipping calves to control blue tick for up to 4-6 months** of age during these cooler months as 4-5 month old calves are resistant to redwater and gallsickness and allowing them to be exposed during this period will induce a resistance to these two tick transmitted diseases.

Brown ear ticks are well known to farmers. The life cycle is year long with **larvae and nymphs active in winter** and adults active in summer around **January, February and March.** The adults can cause severe damage to the ears, head, neck and areas under the tail leading to **skin damage and screw worm infestation.** The adult tick also transmits theileriosis causing high mortality in cattle. Tactical dipping during the winter months does reduce larval and nymphal numbers thereby reducing challenge by adult brown ear tick thereby reducing the risk of theileriosis. **Be aware that calves are very susceptible to theileriosis** and ALL ages of cattle must be free of adult brown ear ticks during the critical hot wet months.

Bont ticks are easy to recognise and have very robust mouth parts and are coppery, orange in colour. They have a life cycle similar to brown ear ticks but **immature bont tick larvae feed preferentially on hares and Guinea fowl which can be a source of heartwater to stock.** The adult bont tick infests cattle, small stock and wild animals and very importantly transmits heartwater to ruminants. Adult and nymphal Bont tick feed on the feet, legs, under the tail and neck and can be easily missed when checking for infestation. **The mouth parts can cause skin damage and lameness due to skin abscesses.** Look for Bont ticks in between the hooves when animals show lameness. Adults **are active in hot wet months as with brown ear ticks.** Be aware that adult bont ticks do not occur in treeless open grassland which is a **way of controlling heartwater on a farm.**

Vaccines are a key method of preventing disease in stock but be aware of essential **do's and don't's** Vaccines **MUST** be kept in the fridge at 2-7 degrees C. Thawing due to powercuts etc destroys vaccines. Read instructions carefully before starting to vaccinate stock. **Do not vaccinate just before or just after transporting, dipping, castration and dehorning to save time and effort.** Stress neutralises vaccination. Be warned.

Winter Vaccination programme for cattle and small stock. Some key points

Some vaccines must be administered in winter well before the onset of wet weather which heralds the arrival of flies, mosquitoes and midges. In cattle these diseases **include lumpy skin disease (LSD), Rift valley fever (RVF) and Three day stiff sickness (Ephemeral fever).** Do not wait to vaccinate when rains begin. Order and book your vaccines with FIVET in winter, well before the summer months as vaccines may not be available when urgently required. Be warned **that LSD and RVF can cause massive abortions and udder damage respectively which can bankrupt** a farming operation. Bulls can be rendered unable to serve cows for weeks and sometimes months **after contracting Three day stiff sickness.** It is notable that although anthrax can infect livestock anytime of the year most **outbreaks of disease have occurred in the early winter period as water levels in dams subside.** Vaccinate against anthrax well before the winter months especially in the lowveld of Zimbabwe.

Sheep require vaccination against **Blue tongue (BT) out of breeding season and well before wet weather.** Do not be afraid of vaccinating in winter 3 months before breeding as the vaccine can last for up to 2 years.

Summary of vaccinations required by cattle and small stock

- Breeding cows and heifers QE (Quarter Evil), anthrax, RVF, LSD, Vibrio, and BVD/IBR
- Bulls require all above as boosters and young breeding bulls require two Vibrio vaccinations 6 weeks apart before the breeding season starts.
- Do not omit Three Day Stiff sickness in bulls before the wet weather. Cows optional.
- Weaners QE, LSD, RVF, anthrax, botulism, tetanus.
- Weaner heifers require CA (Contagious Abortion) additionally between 3 and 8 months of age.
- Sheep at weaning; Blue tongue, pulpy kidney, pasteurella tetanus, Cheesy gland, Brucella Rev 1 for rams only and male and female goats.
- All these vaccines are available from FIVET in various combinations.

Pregnancy testing in cattle should be carried out by a veterinarian who will use the opportunity to review current disease situation and threats, cull infertile cows/heifers and check bulls for fertility and breeding soundness before breeding.



FIVET TECHNICAL DEPARTMENT
June 2016

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