#### **Farm Animal Practice**

#### **Newsletter**

## May 2021

As we start to see the relaxing of some COVID-19 restrictions, we hope that you and your families continue to keep safe and well at such a busy time for farming. This month David will be refreshing our knowledge about Grass Staggers, Rob describes one of his vet student research projects co-supervised with Neil Sargison to improve control of a neglected external parasite of goats in smallholder communities in Malawi. We will also highlight a new document about calving and calf care produced by the SRUC.

# **Quick Update: Coronavirus and the Farm Animal Practice**

As we see restrictions start to relax, we will be regularly updating the FAP procedures to keep you, our vets, and most importantly Ali, as safe as possible. For the moment we will continue to;

- Not have any students present attending calls.
- Vets will often be working directly from home and the cars and equipment are shared less between the team and disinfected between vets.
- We are continuing to operate a "no-contact" drug order policy: please continue to ring in advance to place your order, which will be put in the "drug pick up zone" in the porch.
- Ali is doing a marvellous job continuing to work from the practice, but there may be times when the phone has to be put through to the answer machine and you will be told to ring the "Out of Hours number". A vet will ring you back as soon as possible. If it is during normal working hours (8:30am-5pm Mon-Fri) you will not be charged an Out of Hours fee.

We may have to maintain social distancing for some time to come. Please continue to contact us: we are still open, just working a little differently. We do, however, need your assistance and understanding to help us all operate in as safe a manner as possible during these uncertain times.



# DISEASE SUMMARY: Hypomagnesaemia (Grass staggers, Grass Tetany)

Hypomagnesaemia is a **VETERINARY EMERGENCY** which can affect beef and dairy cows in the few months after calving when demands for magnesium are at their highest as a result of milk production. Clinical signs can range from subclinical disease (which may go unnoticed), to sudden death. Clinical signs to look out for include high head carriage, aggressive behaviour, staggering, muscle tremors, salivation, separation from the group, collapse and seizure activity.

As cattle cannot store magnesium within their body, they require daily uptakes of magnesium from their diet. Cows producing milk on lush pastures which have received fertiliser and/or slurry applications can be at particular risk due to the effect of potassium (potash) and ammonia which reduce magnesium absorption. It is therefore important that any lactating animals are provided with supplementary magnesium to prevent hypomagnesaemia.

Cattle that show any clinical signs need urgent veterinary attention and it is important not to excite or panic the animal further until help arrives.

Treatment by the farmer can involve administering 400ml of magnesium sulphate (a bottle of Magniject 9 with the black label) **UNDER THE SKIN** until veterinary help arrives.

History and clinical signs are often sufficient to diagnose hypomagnesaemia. However as the condition sometimes presents as sudden death, it will often be necessary to complete a government funded visit to complete an anthrax test. On this visit, the vet can take a sample from the fluid of the eye to confirm magnesium levels through submission to the lab (this cost will not be covered by the government). Hypomagnesaemia is preventable with the correct control measures in place. This involves supplementary feeding of magnesium to "at risk" cows (especially those with rapidly growing calves at foot) in the months after calving and avoiding high risk pastures.

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Most commonly, daily feeding with supplementary minerals containing high levels of magnesium ensures all cattle are getting their daily required dose of magnesium. Intra-ruminal boluses can also be an option providing a slow release of magnesium during high risk periods. Care should be taken with mineral licks as not all cows will use the licks and daily required magnesium intakes cannot be guaranteed. Herd or group magnesium status can be checked through metabolic profiling services offered by DHHPS at the R(D)SVS. If you want any further information about the services offered, then please contact the FAP on 0131 445 4468.

# Flea infestation of peri-urban goats in Malawi: a neglected parasite in an under-appreciated host.

Goats are critical in mixed smallholder tropical agricultural systems in lower and middle income countries such as Malawi. In tropical settings, fleas are important parasites of humans, domestic and wild animals around the world. Heavy flea burdens, especially in young animals, can cause debilitating blood losses. Due to their blood feeding behaviour and ability to move between hosts, flea infestation of animals can also cause potentially severe allergic reactions in people working with infested livestock, and can transmit blood-borne zoonotic diseases. Control of fleas in humans and companion animals usually depends on use of insecticides to kill the adult parasites in association with implementation of hygienic methods to prevent re-infestation from the environment. However, for goats in many developing countries insecticides treatments are usually not licenced, prohibitively expensive or impractical in smallholder systems and drug residues are potentially environmentally damaging. Therefore, there is a need to identify management solutions for the control of fleas in small ruminants, based on understanding of the parasites' transmission within specific agricultural contexts.

In collaboration with Blantyre SPCA and Mission Rabies charities, final year vet student Julia Rose Dahm sampled goats in Malawian peri-urban goat rearing communities around the Blantyre Region of Malawi, with the aim to develop animal husbandry and management-based control strategies. 792 goats were examined in 228 households across 10 peri-urban communities. The prevalence of fleas was 18.3%, 37.1% and 100% at the levels of individual goats, households and communities, respectively, highlighting a neglected human and animal health

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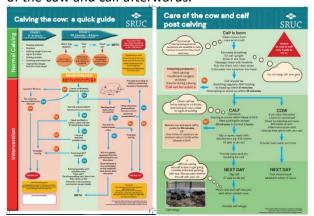
concern. Constant introduction of new livestock coupled to a lack of biosecurity within communities; the common presence of dog and cat hosts for fleas; the frequency and thoroughness of cleaning overnight goat accommodation; and goat age less than 12 months-old, were identified as risk factors for flea infestation. This study highlights the significance of fleas in peri-urban communities and risky management practices. The majority of the peri-urban goat keepers were female, had resided in the same community throughout their whole life, and had primary level education. In addition to the work being published in an international scientific journal, Neil and the team are hoping to develop advice on the planned management of fleas in livestock reared by Malawian small holder communities through development of a mobile health planning app.



Photo: Julia Rose Dahm sampling goats in rural communities in Blantyre, Malawi in July 2019.

#### SRUC: Calving the cow and Post calving care

The SRUC has produced information posters discussing approach to calving cows and also the care of the cow and calf afterwards.



High resolution versions of these can be downloaded from https://drive.google.com/file/d/1Exb7EsfkcU-hFDDYMrtE6mEX105X590h/view