



Finally, we have some sunshine, and our livestock are enjoying the growing grass in the fields. However, with the UK weather becoming less and less predictable due to climate change, patterns of infection and disease, particularly worm burdens, are changing. This month's newsletter focuses on worming and anthelmintic resistance.

What are worms?

Sheep are affected by various worms at different periods throughout the year:

- **Nematodirus** – these worms affect lambs in the Spring when weather conditions are consistently above $>10^{\circ}\text{C}$. It is so important to look at the SCOPS Nematodirus forecast regularly to check current risk. Risk is increased by grazing on pasture previously grazed by young lambs
- **Teladorsagia** and **Trichostrongylus** – these worms affect sheep all year round. Adult sheep have good immunity and rarely show signs of infection but lambs in their first grazing season will not be immune and suffer from scour and/or weight loss when burden is high
- **Haemonchus contortus** – this worm affects adult sheep as well as lambs as immunity is not as well developed. This causes anaemia, weight loss and bottle jaw.



When should we worm sheep?

Previous approaches to worming sheep took a calendar-based approach, worming at regular intervals throughout the year. However, with the incidence of anthelmintic (wormer) resistance widespread, it is so important that we adopt worming strategies so that we are only **worming when necessary**. Resistance is a growing problem in the UK, with some studies showing resistance is present on 98% of farms! Worming sheep too often is also expensive, time consuming and detrimental to the environment. Sheep treated with anthelmintics excrete the products through their faeces, killing insects, such as dung beetles, which are paramount in keeping soil healthy.

LAMB WORMING PROTOCOLS:

SPRING = Check **Nematodirus forecasts** for risk period. If high risk, worm lambs in the risk age (5-10 weeks old) with **white wormer** (Benzimidazole)



GRAZING SEASON/EARLY AUTUMN = perform **6 weekly faecal egg counts**. Decisions on whether to worm and what with will be based on a discussion with the vet about the WEC result, what pasture availability you have as well as known resistance profiles.

ADULT WORMING PROTOCOLS:

BEFORE LAMBING = Adult ewes generally have good immunity to worms so rarely need worming. However, **at lambing** this **immunity decreases** and more eggs are shed. Worming **only worm thin ewes/triplets** at lambing helps to target the rise in shedding while treating less than 10% of your adult flock.



PRE-MATING = NOT A BLANKET TREATMENT. Only worm **thin/scouring** ewes. Ideally WEC first to establish if true parasite burden

SIGNS OF BOTTLE JAW/ANAEMIA = call us to discuss Haemonchus risk. FAMACHA test ewes – again if a burden is found then we can discuss product type to suit housing/seasonal age of fluke present

Faecal egg counts

Faecal samples should be taken every 4-6 weeks throughout the grazing season to monitor worm burden and evaluate whether worming is necessary or not:

- Faecal worm egg counts should start 4 weeks post-turnout
- Make sure you take samples from EACH management group (different fields/age groups)
Don't mix ewe and lamb samples



- Take fresh samples – ideally, watch and wait for animals to pass muck or take samples within 24hr after moving to fresh pasture when you know all the samples will be fresh.
- You will require 40g of faeces. If doing a pooled sample, ensure to include faeces from at least 10 individuals

	Growth Rate Target
Pre-weaning	>300g/day
Post weaning until winter	>200-300g/day
Winter	>150g/day

We offer faecal egg sampling as part of our **vet tech service**. Please get in touch to book in an appointment to sample your sheep!

Growth rates should also be monitored and if targets are not being met, egg counts should be performed more frequently.

How can we prevent wormer resistance when we do have to worm?

- **Don't worm everyone** - Body condition score and leave 10% of those with the highest scores untreated
- **Rotate wormers**
- **Only use white wormer** on Nematodirus in lambs
- **Dose accurately** - dose to the individual weight of each sheep but if not possible, dose to heaviest in group to ensure underdosing does not occur. Ensure that dosing guns are well maintained and calibrated
- **Ensure product used is in date and has been stored correctly**
- **After dosing, keep on same field 3-5 days before moving**
The first worm eggs shed after worming are the ones that are resistant to the wormer. We do not want these being the first eggs shed on clean pasture leading to a population of resistance worms. After 4-5 days, the worm eggs the sheep produce are not all resistant and so the population of resistant worms is 'diluted'.
- **Treat incoming stock with an orange (Monepental e.g. Zolvix) wormer and a purple/clear wormer**
Yard these sheep for 48 hours after dosing to give time for products to work and then move onto 'dirty' pasture that has previously been grazed to dilute resistant worms. Use two drenching guns – do NOT mix the products in one.
- **Worm only when necessary** – see protocols above
- **Use Zolvix as a 'clear up' drench at the end of the grazing season** -This helps lambs reach their full growth potential by removing worms that have survived previous doses.
- **Drench correctly** - Make sure the sheep are properly restrained so they swallow the whole amount and don't suffer a drenching injury. Place a hand under the head, slot the nozzle in the gap between molar and incisor teeth and then over the back of the tongue. If the wormer is just put into the mouth, it will by-pass the rumen as it escapes down the oesophageal groove.
- **Restrict feed for a short period before administering white and clear drenches** as this has been shown to increase their efficacy
- **Mix grazing with cattle** – cattle and sheep are not affected by the same worms so grazing together helps to dilute eggs on the pasture.
- **Use crops with anthelmintic chemical properties such as high tannins – eg chicory and sain**

Make the most of the Animal Health and Welfare Pathway!
This is a government initiative providing funding for on-farm veterinary consultations. With regards to sheep, the pathway focuses on worm egg counts and resistance testing.
Testing MUST be used within a six month window of application so this is the perfect time of year to apply for the funding as worm egg counts are most useful in grazing lambs!
Applications close 15th June!



Parasite control provides a new challenge every year as despite some recurring issues, most farms parasite load is significantly affected by the weather and by grazing rotations – speak to your vet about how best to get ahead of parasites this summer

REMINDERS

Vasectomies

It's vasectomy season – look out for more information in next week's newsletter and call us to book in!

Barren ewe check

MSD's barren ewe check scheme is only available until the 30th of June. If you did experience a >2% abortion rate or had more than 2-3 ewes abort over a couple of days, we advise using the scheme to blood sample of 6-8 unvaccinated ewes which aborted or had weakly lambs to investigate enzootic abortion and toxoplasmosis within the flock.

Toxovax and Enzovax Orders

With the recent vaccine shortages, make sure to get your orders for Toxovax and Enzovax ASAP. Toxovax has a 7-10 day expiry date so make sure to plan when you would like it for. Call us to forward book orders so you can get it sorted in advance.