

NEMATODIRUS IN LAMBS

The Disease

Nematodirosis is a particularly nasty disease in lambs, causing a high number of mortalities and stunting the growth of many others. It is caused by the worm *Nematodirus battus*, which has a different life-cycle to other sheep worms and under certain climatic conditions can strike very quickly, with little or no warning. This means that sheep farmers have to be on their guard.

The main difference in the life cycle of *Nematodirus battus* compared with other parasitic worms, is that development to an infective larvae takes place within the egg and infection passes from one lamb crop to the next years crop. Before they can hatch, the eggs have to undergo a period of cold weather followed by warmer temperatures of 10°C or more. If these conditions occur over a short period of time, triggering a mass hatch, and it coincides with the time when lambs are starting to take in significant amounts of grass, the result can be devastating.

Host stage 14 days Adults lay eggs Free-living stages (May take 8-0 months) Development slower and usually too cold before L3% are ready so they sit dormant until following spring Tat stage larvae develop in the eggs 2nd stage larvae develop in the eggs

Because this disease strikes so quickly and the damage is done by large numbers of immature larvae that are not producing eggs, we can't afford to have a 'wait and see' policy with Nematodirus. Farmers have to act on the basis of risk assessment and advice on the level of challenge in their area.

How do we know if the risk is high?

The main risk factors to consider are:

- Lambs grazing pasture that carried lambs the previous spring
- A sudden, late cold snap which is followed by a period of warm weather
- ➤ Lambs that are old enough to be eating significant amounts of grass (6–12 weeks old)
- Groups where there is also likely to be a challenge from coccidiosis
- ➤ Lambs that are under other stresses e.g. triplets, fostered, on young or older ewes.

The timing of a potential problem will vary from region to region. In the south of England for example, it is likely to occur earlier in April/May; in northern England and Scotland it may be early June.

Watch out for Warnings

Sheep farmers need to assess these risk factors and then watch carefully for warnings given by experts that will be issued for various parts of the country. They will be looking at reports from farms and the climatic conditions and issuing guidance on if, and when farmers should treat.

Treatment

If farmers feel their lambs are at risk and they need to treat for Nematodirus, then SCOPS advises farmers to use a white (1-BZ) drench. These are normally# highly effective against this parasite and suitable for young lambs.

The first confirmed case of Nematodirus resistant to the 1-BZ group was reported in 2011. Farmers are advised to follow the SCOPS guidelines on correct drenching technique and dose carefully to the correct weight of the lambs. In addition, an FEC count 7-10days after the lambs were treated to check that the treatment has been fully effective. If in doubt consult your Veterinary Surgeon or adviser.