sheep

Thin ewe study

If ewes are not thriving despite adequate nutrition, they may be suffering from iceberg diseases.

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Teagasc and ourselves at the Regional Veterinary Laboratories (RVL) are currently undertaking a 'Thin Ewe' study. The study aims to provide information on the causes of ill thrift/poor body condition score in ewes.

We are investigating ewes from flocks where thin ewes are a substantial problem, despite receiving adequate nutrition. In particular, our aim is to investigate whether iceberg diseases are playing a significant role or whether more common issues such as broken mouths/poor teeth and parasites are the major contributors to lack of thrive.

What are iceberg diseases?

Iceberg diseases are diseases which result in sick sheep (clinical disease) or perhaps more frequently, sub-clinical disease, where the only visible signs are poor performance and ill-thrift.

The five main iceberg diseases are Maedi-Visna (MVV), Caseous Lymphadenitis (CLA), Border Disease (BD), Ovine Pulmonary Adenocarcinoma/Jaagsiekte (OPA) and Johne's Disease (JD).

It is believed that the impact of these diseases is low, but this study aims to establish their role, if any, in ill-thrift in sheep.

Farmers with these diseases in their flocks frequently describe disappointment in the performance of their flocks, despite good husbandry and breeding and good nutrition.

Thickened and inflamed intestines in a sheep with Johne's Disease.

They describe a 'long tail' to their flock, i.e a large number of slow/poor doers at the back of their flock.

MVV can produce two forms of the disease, the maedi form (which is most common) can cause chronic pneumonia and chronic mastitis. The visna form produces a disease that affects the brain. In this case, the sheep can display signs of nervous disease.

CLA causes abscess-like lesions that can be seen under the skin, sometimes with a discharge. About 25% of affected sheep may also develop these abscess-like lesions internally.

Border disease is quite similar to BVD in cattle. Timing of infection is important and will determine the signs seen in the infected sheep. Infection of ewes during pregnancy can result in abortion, early death of newborn lambs or the birth of a persistently infected animal that can then infect other animals.

Surviving lambs are weak and fail to thrive, they can also be particularly hairy and may have a tremor.

OPA infection results in a chronic pneumonia. This will result in respiratory distress. A feature of the disease is that a lot of fluid is produced in the lungs. Most clinically affected sheep are aged between two and four years. Lambs are most likely to pick up the disease.

Johne's Disease causes a contagious bacterial disease of the intestine, which results in poor nutrient absorption and reduced metabolic efficiency. Progressive weight loss and infertility are the main signs.

In contrast to the disease in cattle, diarrhoea is not a common feature. Clinical disease is typically seen in two to three year olds and young animals less than six months are most susceptible to infection.

If an iceberg disease is diagnosed on your farm, it will allow you, in conjunction with your vet and Teagasc advisor, to devise a control programme to minimise the impact of the disease in your flock. This will improve the health and welfare of your flock and also its productivity.

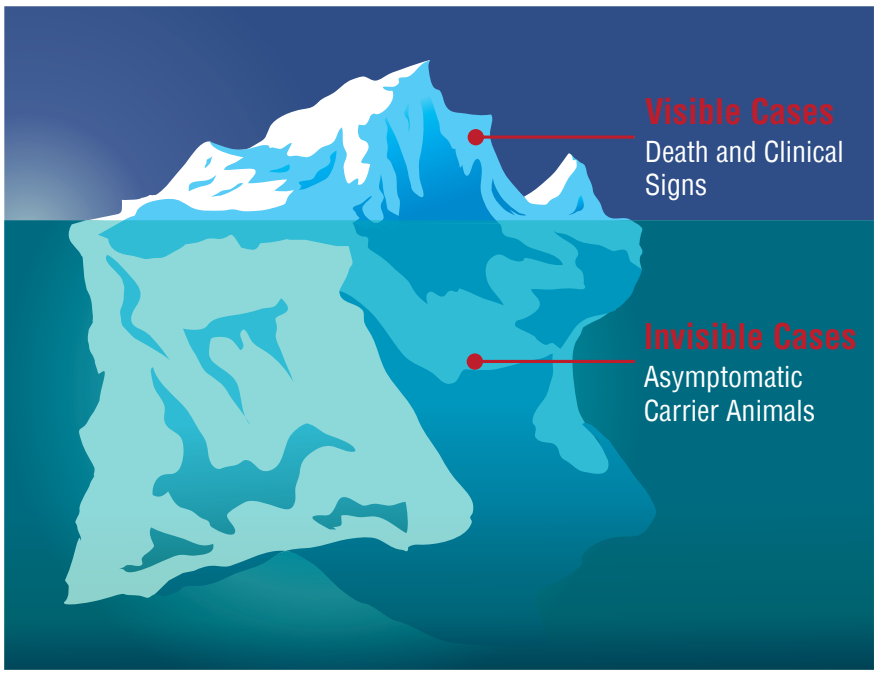
Pre-breeding is a suitable time to assess the body condition score of sheep.

Other causes of ill-thrift in sheep

It should also prove very useful for flock owners if parasitism or poor teeth are identified as likely causes of ill-thrift in their flocks. Husbandry and control programmes dealing with these problems should have a very positive effect on sheep health and productivity.

Sheep farmers are increasingly aware of the negative impact of having a population of parasites on their farms that are resistant to the three common classes of wormers. It may be useful here to remind sheep farmers of the four key actions that all sheep farmers should be using to minimise the build-up of resistant stomach worms;

- Do not dose mature animals unless there is a demonstrated need.
- Use white drenches/benzimadazoles to treat for Nematodirus.
- Quarantine stock coming onto the farm to avoid buying in resistant worms.
- Regularly monitor faecal egg count to ensure treatments are timed appropriately.



How you can take part in this study

If you consider ill thrift a problem in your ewes/flock, please contact your Teagasc advisor. Flock 'recruitment' will be co-ordinated by Teagasc in the main. Your Teagasc advisor will ask you to contact your local RVL directly to book in your sheep.

Flock owners will undertake to send up to three live thin ewes to their local RVL for euthanasia and examination, with a view to reaching a possible diagnosis on what is causing the problem in their flocks.

The target is three thin ewes per flock. All ewes to be included in this study must be pre-booked into the RVL – your RVL will give you an agreed appointment time and any additional information you require. You will be asked to fill in a form and bring it with you to the RVL.

Please note there will be no charge/cost for the flock owners who submit ewes for this study.

As with all animals examined at RVLs, the report will be sent to the vet you nominate. Your vet will share this information with the flock owner, who can then share it with their Teagasc advisor and discuss it with both their vet and Teagasc advisors.

RVL vets will be in regular contact with Teagasc advisors throughout the study to communicate any significant results with them.

Outcomes/outputs

- For individual sheep flock owners – provide them with information on possible causes of ill-thrift on their farms. This should enable them to put measures in place to reduce the impact of the causes of ill thrift. This will result in better sheep health and welfare and improved productivity.
- For the national sheep flock – provide information on the possible causes of ill thrift in the national flock and particularly on any possible role of iceberg diseases. This may inform future decisions impacting flock health.

The project will run from 1 September 2022 to 1 September 2023. The sheep can be booked in by the farmer directly by ringing their local RVL.

REGIONAL VETERINARY LABORATORY CONTACT DETAILS

- Athlone RVL: 0906 475 514.
- Cork RVL: 021 454 3931.
- Dublin RVL: 01 615 7115.
- Kilkenny RVL: 056 772 1688.
- Limerick RVL: 061 452 911.
- Sligo RVL: 071 914 2191.