



Ill Thrift in Ewes

There are any number of reasons for a ewe to be in poor condition. Some may be related to the demands of production, some due to old age and some due to disease. There are a number of insidious diseases of sheep that have recently come to be referred to as “iceberg diseases”, as the clinical case that is seen is merely the tip of the iceberg and the problem runs much deeper.

Correct Body Condition

Body condition scoring (BCS) is a quick, simple and useful tool for assessing the health of your flock. Body condition scoring is commonly done on a scale of 1 to 5 in steps of 0.5. A body condition score of 3 is a good target for most breeds throughout the production cycle. Early research has shown that BCS at lambing can have a significant impact on lamb weaning weights. Ewes in better body condition ovulate more than thin ewes, however ewes that are over condition suffer higher rates of embryonic loss, making managing body condition a difficult balancing act.

Score 1

The spinous and transverse processes are prominent and sharp. The fingers can be pushed easily below the transverse bone and each process can be felt. The loin is thin with no fat cover.



Score 2

The spinous processes are prominent but smooth, individual processes being felt only as corrugations. The transverse processes are smooth and rounded, but it is still possible to press fingers underneath. The loin muscle is a moderate depth but with little fat cover.



Score 3

The spinous processes are smooth and rounded; the bone is only felt with pressure. The transverse processes are also smooth and well-covered, hard pressure is required with the fingers to find the ends. The loin muscle is full and with moderate fat cover.



Score 4

The spinous processes are only detectable as a line. The ends of the transverse processes cannot be felt. The loin muscles are full and rounded and have a thick covering of fat.



Score 5

The spinous and transverse processes cannot be detected even with pressure; there is a dimple in the fat layers where the processes should be. The loin muscles are very full and covered with very thick fat.



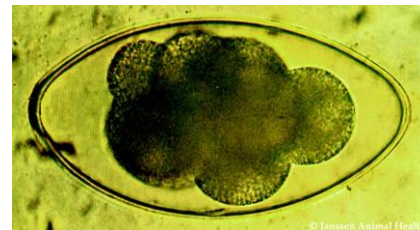
(Body Condition in sheep. Source: AHDB)

Production Demands

The energy demand on the ewe increases in late pregnancy and throughout lactation. Ewes rearing more lambs will also experience a greater energy demand. Some of this difference can be mitigated by grouping ewes by number of lambs expected based on scanning and then adjusting feeding accordingly. Weaning lambs from thin ewes earlier than planned can also be helpful in restoring them to good body condition.

Age Related Issues

Much like ourselves, our sheep experience wear and tear on their bodies over their productive lives. The most significant age-related change in the context of body condition is the loss of teeth; a broken-mouthed ewe will struggle to feed herself adequately. Similarly, a chronic lameness will make ewes struggle to compete with other animals for feed and predispose them to losing body condition.



(Typical Nematodirus worm egg)

Parasitism

Parasites are a very common condition of sheep. The main group of worms of relevance to adult sheep are trichostrongyle species, though nematodirus and haemonchus are also commonly seen. Whilst clinical disease is rare in adults, a high worm burden may lead to subclinical signs, notably loss of body condition. Worm distribution within the sheep population is such that 20% of the animals carry 80% of the worm burden so certain animals can be disproportionately affected by a high worm population. Damage to the liver caused by liver fluke can also contribute to an animal in poor body condition.

Ovine Pulmonary Adenocarcinoma

Ovine pulmonary adenocarcinoma (OPA), also known as Jaagsiekte is a viral disease of sheep resulting in growth of tumours in the lungs. It is a chronic condition, with animals often not showing clinical signs until the end stages of its progression and so older animals are more likely to be seen to be affected. The major sign is long term wasting, with animals consistently losing body condition, though difficulty breathing and a clear nasal discharge may also be visible. In affected flocks OPA can be responsible for anywhere between 1% and 20% mortality per year in adults, as well as having an adverse impact on fertility. One test used to diagnose OPA is the “wheelbarrow” test, where an animal is held up by its back legs to see if the fluid will drain from the nose.



(Typical OPA nasal discharge. Source: NADIS)

Any animal showing a positive wheelbarrow test should be culled immediately for its own welfare. Approximately one third of affected animals will never produce a nasal discharge so alternatively a diagnosis can be made using ultrasound to look for signs of the tumours in the lungs. OPA is thought to be common in the UK but rarely reported as affected animals are often culled for poor performance before a diagnosis is made. We will be launching a flock scanning service for OPA diagnosis in the New Year.

Maedi Visna

Maedi Visna (MV) is an Icelandic name for a viral respiratory disease of sheep. The literal translation of “Maedi” is “air hunger” and “visna” is “wasting” which are accurate descriptions of the clinical signs this virus can cause. MV is very contagious and invariably fatal and as such a very costly disease. Whilst typical signs seen are pneumonia and wasting, an increased prevalence of mastitis and arthritis is also common. Like other diseases of this nature there is a long period between infection and clinical signs so by the time any clinical cases are noticed, the infection is often widespread as much as 50% prevalence. Diagnosis of MV is generally made on blood testing, at both the flock and individual animal level. To avoid buying in Maedi Visna, replacements should ideally be sourced from flocks accredited free of the disease.

Johnes Disease

Johnes disease is a bacterial condition affecting the gut caused by *Mycobacterium avium* subspecies *paratuberculosis* (MAP). Whilst this is primarily an issue of cattle, MAP is increasingly being recognized as an issue of sheep as well. It is another chronic condition with a long period between infection and signs being seen. The bacteria colonise the intestine where they progressively cause damage to the intestinal lining and prevent the animal from absorbing the nutrients of the food it has digested. Consequently, animals with MAP will become progressively thinner irrespective of how they are fed. Young animals are most susceptible to infection but the disease often does not manifest until they are much older. As well as poor body condition infected animals can sometimes have a “bottlejaw” type appearance, with a large pocket of fluid gathering under the chin. Testing is best performed on pooled samples of faeces from suspect animals. Due to the risks presented, it is best not to co-graze sheep with cattle or, ideally, on any pasture that has had cattle on in the past 12 months as the organism persists for long periods.

If you suspect you may have issues with any of the above then please contact us for advice on investigation and management.

Wishing you all a

Merry Christmas! Nick

