



NEW SHEEP OWNER INFORMATION

Owning a flock of sheep can be full of challenges however we hope the notes below may be of some help in maintaining a healthy flock, whatever the size!

Sourcing

It is important to try to see the animals on their farm of origin if possible – the state of the farm and flock surroundings can tell you a lot about the flock's probable disease status. When on the farm ask for as much information as possible about the health and disease history of the flock making notes on any vaccination history and previous parasite control programmes. When you get your new stock home it is important to quarantine them before adding them to your existing flock– in other words keep them in a separate building or field with no nose-nose contact for at least 4 weeks, with worming and treatment for fluke, any blood tests and/or vaccinations to be completed in this time.

Housing

Sheep are generally very hardy and in a lowground area such as Worcestershire can live out all year round. Many people however may choose to house ewes in the months running up to lambing to enable easy feeding before and then close monitoring during this time. Having small pens to put a ewe and her lambs for the 24hours after lambing allows lambs health and their ability to feed to be assessed during this crucial time and to enable the ewe to bond with her offspring.

Nutrition

Sheep, like other ruminants depend on a healthy population of microbes in their rumen for good health – most of their nutrients come from the chemical reactions these bugs produce. Thus when considering what you feed your sheep you need to ensure it is good for these bugs, as well as for the sheep. The main constituent of a sheep diet should be plant cell walls – in other words fibrous plant material, mainly fresh grass. In a UK winter when grazing is limited then this is usually substituted or supplemented with conserved forage (e.g. silage or hay). Sheep also need a high water intake for these bugs to work optimally, so access to clean water is very important. Bear in mind if you are feeding silage/hay that they will need much more water than when grazing due to the lower water content of such feeds.

In hot weather when grass is scarce sheep are more likely to browse trees and shrubs which may be poisonous. Yew, acorns, and rhododendron are common poisons.

Silage and hay can vary a lot in their quality due to the variation in weather during the growing and harvesting stages. Once cut silage needs to be stored in an airtight manner, to allow anaerobic fermentation which preserves the crop at an acid pH. Badly stored silage which has had contact with air during storage will become more alkaline and contain more ammonia, the sheep will turn their noses up at it and it is more likely to contain *Listeria* bacteria, which cause (usually fatal) encephalitis and meningitis.

Sometimes the forage may be supplemented with other foods such as root crops or cereals, particularly if it is thought to be low in nutritional value. Sheep are often supplemented in the 6 weeks before lambing to meet the increased demands of pregnancy and lambs are often introduced to creep feed from a few weeks of age to ensure optimum finishing weights. Get used to assessing the body condition (amount of fat coverage) of your sheep as this is a good rough guide to whether they are getting enough energy.

You need to be aware that feeding cereals to a ruminant suddenly or in large quantities will cause rapid fermentation of the starches in the rumen, dropping the pH of the rumen fluid and killing a lot of the bacteria – this is known as rumen acidosis and signs can be severe including watery scour, dehydration, shock and death. This is a veterinary emergency, and can be avoided by introducing cereal feeds very gradually and making sure your stores are secure and cannot be broken into by greedy sheep!

Foot Care

Lameness is a big problem in many flocks and can lead to poor condition in ewes and lambs due to reduced feeding activity. Any lame sheep should be caught and their feet examined and any overgrown horn trimmed. If you are unsure of how to do this please ask for advice as trimming too short will cause bleeding and further lameness.

Routine trimming of ewes' feet before tupping or at lambing will help keep lameness to a minimum. If large numbers of animals are affected then running them through a footbath may be easier if this option is available.

Lambing

Sheep are pregnant for approximately 5 months so for a March lambing period, tups need to mix with ewes in October. One ram can generally serve 30-50 ewes. Ewes need to be in good condition before tupping to ensure good conception rates so are often put onto good grazing approximately 3-4 weeks before the rams are introduced.

Remember to make sure your tups are free from lameness and other health problems and are fit enough to work to ensure maximum fertility at mating time. They need to be included in all routine vaccination and worming protocols.

During pregnancy ewes will need to be fed according to the stage of pregnancy and ideally the number of lambs they are carrying. Large commercial flocks often get their ewes scanned 6-8 weeks after tupping to determine lamb numbers.

In the run up to lambing ewes will need extra feed in the form of concentrates to help meet their requirements and hay/silage should be freely available. However it is important that ewes are not fed so well that they produce lambs that are too large and cause problems lambing. They will also need a permanent plentiful supply of fresh clean water especially at lambing when milk production is at peak.

Lambing problems

Due to sheep having sometimes up to 4 lambs the jumble of limbs and heads can often lead to problems lambing! If you are going to assist plenty of lubricant and strict cleanliness should be observed. Gloves and Lube gel can be bought from the practice.

If you are having problems or are unsure how to deal with the problem please call the surgery for advice or assistance, the sooner the problem is corrected the less stress is placed on both ewe and lambs and the quicker they will recover.

Ewes should be assisted if:

Lambing exceeds 120 mins

The head alone appears

When fluids escape with no further progress

When a tail alone appears or with one/both legs

After assisting with a birth ensure the lamb is breathing, clear any mucus from its nose and mouth and place by the ewe's head so she can lick it and bond with her lamb

Lamb care

Colostrum (the first milk a ewe produces) is essential in giving the lamb a good start in life as it contains antibodies that will protect the lamb from infections during its first few weeks of life. If a lamb is not sucking then you will need to milk the ewe or using commercially produced colostrum to top them up.

Lambs need 50mls/kg/feed and it is important to give them 3-4 feeds in the first 24 hours when the antibodies can still be absorbed by the gut. After this the lamb can move onto milk, again commercial or milked from the ewe at the same rate. As a ewe is only designed to have two lambs (she only has two teats) triplets or quadruplets will need extra help and the third or fourth lamb may need to be hand-reared completely.

Lambs can be fed from baby's bottles but if they are too weak to suck may need to be stomach tubed. If you are unsure how to do this please ask for assistance from the practice or an experienced friend as there is a risk of pneumonia or drowning if done incorrectly.

Very weak lambs at risk of hypothermia may require more urgent veterinary attention. If warmed while glucose levels are low they will not have any reserves to support an increase in metabolism and may die. Giving glucose by injection into the abdomen is required before warming and feeding. All lambs should have their navels treated with iodine as soon as possible after birth to prevent infection. Docking and castration with rubber rings can only occur within the first 7 days. Remember to leave tails long enough to cover the anus in ram lambs and vulva in ewe lambs to prevent further problems.

Watery mouth is a common problem seen in young lambs caused by E.Coli overgrowth. Lambs become weak, fail to feed, are often bloated and have saliva stains around the mouth. The prognosis is poor. To prevent this becoming a problem strict hygiene in lambing pens is required with pens being cleaned out/disinfected between ewes. Prophylactic antibiotics are available as a preventative measure to be given as soon as possible after birth.

Vaccinations:

Bluetongue

The threat of Bluetongue is still very much present and vaccinating your flock in the Spring before the peak transmission period will help protect your flock in the event of another outbreak. Sheep need one dose of 1ml injected under the skin.

Clostridial Disease

Clostridial diseases include tetanus and are often a cause of sudden death in both adults and lambs. The bacteria live in the soil so can easily be picked up in wounds, often from castration/docking. Vaccinating the ewes 4-6 weeks before lambing will confer protection to the lambs for the first few weeks of life. Lambs should then receive a course of 2 injections 4-6 weeks apart from 3 weeks to ensure adequate protection until weaning. Ewes will need two injections 4-6 weeks apart the first year and then yearly boosters.

Abortion

There are many causes of abortion in sheep. In the event of an outbreak:

1. Isolate any aborting ewes
2. Observe strict hygiene when dealing with aborting animals/abortion products

MANY OF THE CAUSES OF ABORTION CAN AFFECT PEOPLE – PREGNANT WOMEN ESPECIALLY SHOULD HAVE NO CONTACT WITH LAMBING EWES.

3. Contact the surgery regarding investigation. We will need aborted foetuses complete with placenta to be sent to VLA Luddington for analysis so keep any fresh samples. Dispose of any other abortion products by incineration

4. Take appropriate action if a specific agent is identified.

Both Toxoplasmosis and Enzootic Abortion of Ewes, two of the most common causes of abortion can be vaccinated for. Vaccination needs to be completed at least 3 weeks before mating.

Orf

Orf is a bacterial infection that affects the skin around the mouth and nose of young lambs which prevents them sucking due to discomfort. It can also be transferred to the teats of the ewe. This disease is also zoonotic so care must be taken when handling infected animals. Vaccination with Scabivax can be used to control the disease if it is a problem on the farm

Footrot

There is a vaccine available however it is only effective for one of the strains of footrot. If routine care and treatment is not curing lame sheep please speak to the practice regarding this option.

Parasite control

Worm resistance is becoming a large problem in sheep flocks so the responsible use of the wormers we have available is essential. Faecal worm egg counts can be used throughout the year to guide when treatment is required. This can usually be done at the surgery and allows you to treat only when needed to minimise the use of wormers and to prevent the spread of resistant worms. The type of drug used to worm the flock if required should also be rotated yearly to minimise resistance problems.

However to control worm egg output from ewes they should always be wormed at lambing time when their immunity levels drop and the level of faecal egg output increases. It is also advisable to check the condition score of ewes at tugging and worm any animals with weight loss/scour as required.

Lambs will need monitoring for Nematodirus, a worm that can seriously affect young lambs and in severe cases result in sudden death during May and June depending on weather conditions. They should also be monitored for coccidiosis, another type of parasite that affects the intestinal tract leading to scour and again in extreme cases sudden death. Disease is seen where egg numbers have built up over years, often when paddocks are not rested and are mostly seen in lambs 4-8 weeks old. Worm egg counts monthly during the grazing season will help identify when treatment is required.

Liver fluke is another parasite that can cause severe disease. This disease presents in different ways depending on which stage of fluke is present. Immature fluke migrating through the liver in the Autumn can cause fatal haemorrhage whereas the presence of adult fluke in the bile ducts in Spring can lead to poor body condition. Treatment needs to be targeted to the stage present with different drugs being effective against the different stages. Treatment in the Autumn should be followed up by egg counts especially in wet years as the lifecycle relies on water living snails.

Ectoparasites

As well as gut parasites there are a range of parasites that live on the skin which require monitoring and treating.

Flystrike is a summer problem caused when blowflies lay eggs in faecal matter on sheep. These then hatch and maggots begin to digest the faecal matter and tissue beneath it. To prevent this dirty areas of fleece need clipping. It is also advisable to use a product designed to prevent fly-strike. Making sure sheep are free of footrot and worms will prevent fleeces providing a site for maggots to survive.

Itchy sheep is a common presentation with many possible causes. Lice are common and easily treated but other more serious conditions can present in the same way. The most concerning of these is sheep scab. Sheep scab is caused by mites that live on the surface of the skin. They can cause severe disease due to intense itching and a loss of proteins through the exudates the mites cause the skin to produce. Sheep scab can easily be bought in on replacement animals and once of the farm are very difficult to clear as they live in the environment for up to 17d. Treatment is through dipping or injecting. ALL replacements should be treated and once yearly treatment of all sheep is recommended in autumn/early winter. Any itchy sheep should be investigated for this disease to prevent its spread so please contact the surgery if you suspect a case.

Health Schemes

The Scottish Agricultural Centre (SAC) run a Premium Health Scheme covering Maedi Visna, Enzootic Abortion of Ewes, Scrapie and Caseous Lymphadenitis. The Scheme allows the certification through testing that your flock is free from these disease allowing better returns on breeding stock and ensuring high health status amongst your own animals. It also allows you to buy in from accredited free flocks to prevent disease entering your own. For more information about joining the scheme and testing requirements contact the surgery or visit the SAC's website <http://www.sac.ac.uk/consulting/services/i-r/sghs/>

For any further information regarding your flock please contact us. The practice is always happy to produce flock health plans tailored to your own system or to provide further information on any aspect of flock health.