Scab, Lice and Blowflies
Protecting sheep and profit lines from external parasites

Scab
Scab is caused by a parasitic mite, Psoroptes ovis. They have piercing and chomping mouthparts that cause severe damage to the skin. Since dissemination of scab control in 1985, the disease has become endemic and represents a massive economic and welfare problem to the sheep industry.

Sheep with scab are incredibly itchy – this is due to an allergic reaction to the faeces of the scab mite. Early cases only have small numbers of mites and may not show scratching behaviour. As the disease advances sheep become restless and start rubbing on any available object. The wool develops grey discolouration and eventually falls out, revealing typical scabby and raw areas, most frequently on the sides of the body. Sheep rapidly lose condition and may progress to fit and death.

Treatment options can be challenging (especially if you have scab in fattening lambs) as the shortest possible withdrawal time from first treatment is 44 days – see table 1. Remember, the injectable treatments will also worm the sheep – whether they need it at the time or not.

As there is no longer compulsory annual treatment of scab in the UK it is very difficult to eradicate scab from an area. Control can be helped by:

- Letting your neighbours know if you have scab in your flock, as this will allow them to be extra vigilant and treat their own sheep if necessary.
- Establishing a stock-proof boundary between your flock and any neighbouring sheep. Consider double fencing if possible.
- Treating all in-contact sheep if you have an outbreak of scab. Treating only obviously affected animals is false economy as there will be others in the group that are in the early stages of infection, and it will take much longer to clear infection from the group.
- Remembering scab can survive for up to 17 days off the host, so beware the potential for re-infection if sheep are returned to the same area after treatment.
- Carefully managing bought-in stock to avoid introducing infection into your flock. New sheep should ideally be treated on arrival, or at least kept isolated for at least 3-4 weeks.

In Scotland the Sheep Scab (Scotland) Order 2010 requires anyone who knows or suspects that sheep or carcasses in their charge have sheep scab to notify the Veterinary Manager as soon as possible.

Lice
There are two types of lice that affect sheep – biting lice and sucking lice. Biting lice are usually restricted to the head and legs and are not considered to cause a big problem, but the biting louse (Dermanyssus ovis) is very active in the wool over the whole body and causes great irritation. Sheep are restless and scratch and rub against any available object. In severe cases, wool loss will occur. This is easily confused with the early stages of sheep scab.

Lice can be seen with the naked eye, appearing as slender dark brown or black specks 1mm long in parted wool. Close body contact is usually required for transmission between sheep, as lice do not seem to survive for long on scratching posts etc.

Louse infestations are easily treated with pour on synthetic pyrethroids – see table 2 – but it is important to rule out sheep scab if you have licey sheep.

Blowfly strike
Fly strikes (Dysacia) is a major welfare issue for the sheep farmer, causing severe suffering and losses during the summer months. The major species causing strikes in the UK are greenbottles (Lucilia) and bluebottles (Calliphora). Pregnant female flies are attracted to sheep carcasses, laying eggs in the wounds, scalded fleece or dead animals and lay clusters of yellowish cream eggs. In warm weather the eggs will hatch within 12 hours and the maggots will feed on the skin and tissue of the animal, rapidly creating a large wound.

Affected sheep are dull, stop feeding and stand away from the flock. The fleece may be discarded, but the problem may not be visible until you part the fleece to reveal a foul odouring wound with maggots. Strike causes severe debilitation, disease and irritation, and death may result due to secondary bacterial infection.

Treatment of struck sheep requires a combination of insecticides applied to the affected area to kill the maggots – see table 2. Healing of the area will take some time and antibiotics may well be required against secondary infection.

Prevention is better than cure, so all sheep should have protective treatments applied during the high risk time of year (June-September). There are many types of prophylactic treatments – see table 3 – and choice of product depends on a number of factors including witholding time, length of protection required, facilities on the farm and if control of other parasites (i.e. lice or scab) is required.

Laura Smith is a vet with the Cairn Veterinary Centre in Perth, part of the XL Vet group. She prepared this article using literature from Moredun, the SCOPS website, Veterinary Parasitology and the NOAH Compendium. Trade names and formulations used were correct at the time of writing.