



WELCOME TO
Flock Health

September
2016

2016 NEWS



Preparing Tups for Breeding

by Jennie Lomas BSc (Hons) BVSc MRCVS

It's crucial that rams are in top condition prior to tugging. It takes seven weeks for sperm to mature & three weeks for their rumen to adjust to a new diet. Performing a ram MOT 10 weeks before tugging starts leaves enough time to vaccinate, remedy any problems and, if replacement rams are required, time to source & quarantine them.

When performing a ram exam, carry out the five T's:

Toes – Lameness affects the ability to serve. Inspect all feet, check locomotion and for signs of arthritis.

Teeth – check for under or over-shot teeth (these are often heritable traits), gaps and molar abscesses. If body condition is not maintained, performance may suffer.

Testicles – measure and check firmness. They should feel like a human's flexed bicep, with no lumps or bumps. Feel for any adhesions, large differences in size, and any discomfort. A good physical examination of the testicles can identify more than 90% of the problems responsible for reduced ram performance. Mature rams should have a scrotal circumference of more than 36cm and ram lambs more than 34cm. Large, firm testicles produce 80% more semen each day than medium-sized, soft ones.

Tone – aim for body condition score 3.5 – 4.0 as tugging starts. Good condition is vital as 15% of bodyweight can be lost in six weeks of tugging. Too much loss of condition will affect performance.

Treat – vaccinate against clostridial diseases and Pasturella. Treat for parasites and check any lameness issues.

A fully fertile mature ram should be able to inseminate 85% of a batch of 60 ewes in their first reproductive cycle. Ram lambs should be able to get 85% of 40 ewes pregnant after one mating. By meeting these targets, the lambing period is

compact, and the ram cost per lamb optimized, in addition to reducing the build-up of disease which occurs with a long lambing period. The average lowland ewe:ram ratio is 40:1, but can be as high as 80:1 and up to 100:1 in some systems.

Heat stress affects sperm viability. Hot sheep usually lie down to transfer heat away from their bodies through their abdomen. By doing this, rams are lying on their testicles and 'cooking' them. To help avoid this you should ensure rams are shorn, have adequate shade, plenty of water and are not over-fat.



Purchasing a new ram

Looks can be deceptive! Despite the importance often placed on the look of a ram, the only influence he can possibly have upon the performance of his progeny is through his genes. Estimated Breeding Values (EBVs) are a way of assessing his genetic merit. By using selective breeding we can raise flock profitability. Efficient animals require less input (e.g. feed), yet have increased output (e.g. more kg of meat). Research trials have reported that by using rams with superior breeding, profitability can rise by £3/lamb. This is worth over £800

over the working lifetime of a ram. So while recorded rams may cost more to buy, they will more than repay the initial investment.

EBVs provide a useful guide to:

- How a ram's lambs will perform
- Whether a ram is suited to a particular production system
- How a ram compares to the rest of the breed

The best way to put a set of EBVs into context is to compare them to the Breed Benchmark. This identifies the range of values that exist for a given trait and ranks them from best to worst. Signet publishes breed benchmarks for 30 sheep breeds. These are updated each year and available to view on the website www.signetfbc.co.uk.

The use of high performance recorded rams is a proven way to:

- Increase lamb liveweights and deadweights
- Reduce the number of days to slaughter
- Improve carcase conformation

And, in self-replacing flocks, can:

- Improve the milking ability of ewes, prolificacy and longevity
- Enhance the number of lambs successfully reared per ewe - including ease of birth and vigour
- Improve disease resistance

Fun fact - In the Charollais breed, the top 10% (with regards to performance) in 1990 would now find themselves in the bottom 5% of the breed today.

Scarsdale Vets
Farm

www.scarsdalevets.com

The University of
Nottingham
UNITED KINGDOM • CHINA • MALAYSIA

XL Vets Farm

RCVS
ACCREDITED
PRACTICE
FARM ANIMAL PRACTICE

Markeaton Lane,
Derby DE22 4NH
Tel: (01332) 294929

farmandequine@scarsdalevets.com

Please note that telephone calls are recorded for quality and monitoring purposes.

Blowfly Strike by Jennie Lomas BSc (Hons) BVSc MRCVS

Blowfly strike is the most widespread external parasite and affects 80% of flocks in the UK. It is caused by the larvae (or maggots), of greenbottle, bluebottle or black blowflies that feed directly on the skin of infected animals. The larvae are able to excrete ammonia, which is absorbed through the skin, directly affecting the heart, lungs and brain. Left unchecked, sheep die an agonizing death – thus strike poses a serious welfare challenge. Strike is most likely to occur during periods of high humidity or warm periods after heavy rain, typically from March to November; however the blowfly season is starting earlier and lasting longer than before.

Life cycle

Pregnant females are able to fly several miles in search of a host, and if conditions are right, are able to lay up to 3000 eggs in ten batches over a 3 week period. The blowflies attack in waves. The first wave of flies are attracted by the odour of decomposing matter such as wounds, soiled fleece or dead animals and lay their eggs on the affected area. The eggs hatch within 10 – 12 hours and over three days the larvae enter the skin using digestive enzymes and hooked mouthparts to break the flesh. The strike lesion appears as a foul-smelling area of moist, brown wool, often with early stage maggots visible. Secondary flies are attracted by the odour of the primary lesion. When the populations of larvae become overcrowded they will attack the healthy, living tissue of the sheep. The third wave of flies are attracted by the increasing lesion and secondary bacterial infection.

Larvae leave the sheep to pupate in soil, where they can remain for two to four weeks in the summer. They then emerge from the pupae as flies and are able to lay eggs within 5 – 9 days. They are also able to overwinter as pupae remaining inactive until the soil temperature rises above 9°C.

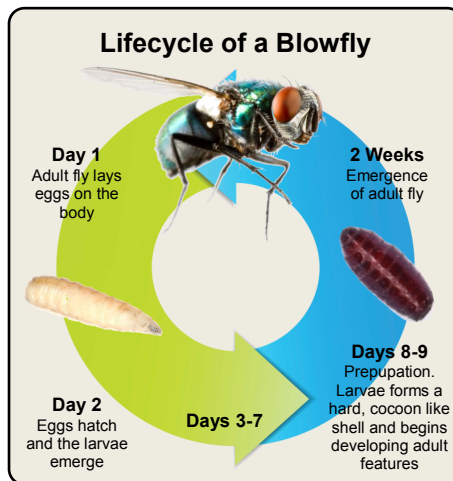
Types of strike

The most common area for infection is around the breech or tail, this accounts for 70% of strikes. Flies are attracted to the fleece contaminated with urine and/or faeces and are particularly associated with scouring. This type of strike is less dependent on weather. Another prime

site is around the neck, shoulders and back, attracted by the odours of 'excessive sweating' and in the feet, attracted by footrot lesions. Strike can also occur in the wool around the prepuce, also known as pizzle strike and at the horn base in horned breeds (head strike).

Clinical signs

- Agitation, foot stamping, vigorous shaking, gnawing and rubbing.
- High temperature, high respiratory rate, weight loss and inappetence.
- Wool shedding and foul smelling lesions with maggots visible.



Prevention

Good management and planning can help to reduce the risk of strike occurring. A substantial key to prevent blowfly strike is to diminish sheep attractiveness to blowflies. Prevention is the best form of control:-

- **Shearing** temporarily reduces flystrike incidence by 95% because it suppresses the humid microclimate in the fleece that favors maggot development.
- **Routine crutching and dagging** – reduces the amount of wool soiled with urine and faeces, which makes it less attractive for flies. This is best done before the fly season starts and repeated every 4 – 6 weeks.
- **Avoid scours** – have a worm control strategy and avoid nutritional upsets.
- **Dock tails**
- **Treat footrot quickly** and reduce the incidence of infectious lameness.
- **Dispose of carcasses quickly**
- **Cull** rams and ewes that have been affected several times in a season. Evidence suggests that hereditary factors may exist, such as confirmation predisposing them to soiling or increased susceptibility to footrot.
- **Chemical control** (Pour on treatments) – these provide a varying length of protection. The product best suited will depend on meat withdrawals and shearing dates. A common regime to use is to give a short-acting product pre-shearing, followed by a long acting post shearing to ewes. Lambs are often giving a long-acting product at the start of the season, which will protect them for the majority of the summer.

Treatment

The best way to approach a fly struck sheep or lamb is to clip and clean the affected area, remove the larger maggots and then apply a topical treatment to kill any smaller maggots. Veterinary intervention may be required in severe cases. Systemic antibiotics and anti-inflammatories may also be necessary.

Table shows some licenced products for the prevention and/or treatment of blowfly strike.

| Chemical | Trade Name(s) | Blowfly Prevention Period | Blowfly Treatment | Other Ectoparasites Covered | Meat Withdrawal Period (days) |
|----------------------|---------------|---|-------------------|--------------------------------------|-------------------------------|
| Dicyclanil (IGR) | Clik | 16 weeks | X | X | 40 |
| | Clikzin | 8 weeks | X | X | 7 |
| Cyromazine (IGR) | Vetrazin | 8 - 10 weeks | X | X | 28 |
| Cypermethrin pour-on | Crovect | 6 - 8 weeks | ✓ | Lice (existing) Ticks and headfly | 8 |
| | Ectofly | 6 - 8 weeks | ✓ | Lice (existing) Ticks and headfly | 8 |
| Deltamethrin | Spotinor | X Note: Prevents blowfly strike in cattle, but NOT in sheep, | ✓ | Lice, ticks and keds | 35 |

Note: Pour-ons which contain insect growth regulators (IGRs) (e.g. CLiK) do not stop the fly laying her eggs but prevent larvae from fully developing, thus preventing the strike. However, IGR's will **not treat** established infection.



Jennie qualified from Liverpool Vet School in July 2015 and has joined the practice as the new intern. Her parents have a beef and sheep farm in Cheshire. Before heading to vet school she worked as a scientist in a pathology laboratory.

Jennie enjoys all aspects of being a farm vet but is particularly looking forward to working with the sheep farmers in the area.

In her spare time she enjoys cycling, netball and walking with her scruffy border collie, Lucky.