



FACT SHEET

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FLYSTRIKE FACTSHEET

Flystrike causes significant production losses in sheep. Controlling the problem requires attention to many factors. Dipping is often used as a preventative treatment, but an emphasis on good animal husbandry and breeding is also important.

WHAT IS FLYSTRIKE?

Flystrike results from the invasion of live animal body tissues by larvae (maggots)—mainly those of four species of blowflies (*Calliphoridae*). Flystrike affects about 5% of the national flock annually. Losses associated with flystrike are due to deaths, production loss in wool and meat, damage to pelts, and labour and chemical costs to contain the disease.

WHAT DOES IT LOOK LIKE?

Blowflies are attracted to sheep by a variety of odours associated with sheep, such as urine, faeces and fleece rot. The female blowfly lays her eggs in the fleece. Within a few hours, the maggots hatch and start feeding. The mouthparts of the maggots abrade the skin of the sheep and produce enzymes that liquefy the flesh.

Maggots grow to full size within three to four days. The odours produced by these first invaders attract further flies and, if the infested animal is not treated, the combined assault will cause so much tissue damage that maggots may break through the skin within a few days. Death of the animal usually follows. Before that happens, the afflicted animal will have provided nourishment for up to half a million blowfly maggots.

WHAT CAN BE DONE ABOUT FLYSTRIKE?

Successful flystrike prevention in a sheep flock requires knowledge and awareness, plus attention to animal and environment management.

KNOWLEDGE AND AWARENESS

Local knowledge of the area and farm provides a background to decision making. Some areas of a farm may be more fly-prone than others. Familiarity with seasonal weather patterns helps decision making as fly activity and strike are closely associated with warm wet weather.

Monitoring fly activity with traps (can be purchased or made quite simply) ensures early detection of flies. Regular examination of the flock will ensure timely action against flystrike.

ANIMAL MANAGEMENT

To reduce flystrike attention should be paid to:

- Dagging and crutching
- Appropriate docking length—not too long or too short
- Wound care—especially after docking
- Treatment of strikes—these attract more flies
- Dermatophilosis (lumpy wool) attracts flies—consider a zinc sulphate treatment
- Fleece length—manage shearing date to ensure short, clean wool during critical periods
- Footrot—encourages flies to strike the foot and surrounding wool when the sheep lies down
- Grazing management—to reduce worm intake
- Drenching
- Culling—those with mushy wool, breech wrinkles, tendency to fleece rot or frequent strike
- Breeding for bare breeches and fewer dags
- Shearing regime (if appropriate).

ENVIRONMENT

Dispose of sheep and cattle carcasses by burning or burying. Small mammal and bird carcasses can also be breeding sites and should be disposed of as well.

Record dates and mobs of dipped animals in your farm diary to determine meat withholding periods. Read the chemical label for more details.

Large-scale trapping (bait bins) can reduce fly numbers by attracting them away from stock. However, these are more useful in alerting shepherds to the presence of flies than controlling flystrike. Using a trap for green blowflies is a good predictor of high flystrike risk.

Paddocks with scrub and thistles attract flies so try to avoid them where possible.

When fly pressure is high avoid 'hot spots' where flies congregate such as sheep camps, scrubby gullies and bush margins. Use more exposed, windy spots for grazing if possible.

Forages with more fibre may reduce scouring. Sheep that have diarrhoea are more prone to flystrike.

DIPPING

Research findings and on-farm experience show that total saturation of sheep in shower or plunge dips is not necessary for protection against flystrike. About 90% of all strikes are on the backline, rump and breech areas.

Concentrate preventative measures on these areas. The means of achieving this are:

- Hand-jetting
- Automatic jetting races
- Proprietary applicator and associated dip formulations.

You should aim to provide maximum protection with minimum risk to the operator, environment and chemical residues in wool.

Dipping Preparation

- Calibrate hand-jetting pump and applicator so that flow rate is known
- Know the exact volume of the supply tank
- Select appropriate chemical (length of protection; safety to operator; flies not resistant to it)
- Read label (dilution and safety)
- Wear protective clothing (overalls, leggings, rubber boots and gloves; eye protection may be required with some operations)
- Follow manufacturers' instructions for jetting races, applicators and formulations.

Technique

- Ensure sheep are firmly held in a race no wider than two animals when hand-jetting
- Operate pump at 40-70 psi (280-490 kPa), the higher pressure for longer wool
- Draw applicator through wool, do not drag along skin. More than one pass may be needed
- Administer enough dip wash to achieve soaking of treated areas but minimum run-off (Squeeze wool with a gloved hand and if dip wash can be forced out under gentle pressure, fleece is wet enough)
- Automatic jetting races require a steady flow of sheep to achieve maximum efficiency.

Allow a minimum of 60 days between dipping and shearing. Experience has shown that a longer period of 90 days is preferable, in fine and mid-micron breeds, to ensure acceptable chemical residues in the fleece. Successive treatments close together can lead to unacceptably-high chemical residues in the fleece.

MORE INFORMATION

Beef + Lamb New Zealand would like to acknowledge the contribution from AgResearch in compiling this factsheet. For further information freephone Beef + Lamb New Zealand on 0800 BEEFLAMB (0800 233 352) or email enquiries@beeflambnz.com or visit www.beeflambnz.com

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