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Current Blowfly Control Practices in Victoria

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The planned phase-out of mulesing by 2010 has forced the development of alternative methods to control blowfly strike. At the Mackinnon Project we have taken on the challenge to optimize control strategies for blowfly strike. In order to do this, we firstly need to understand how producers manage flystrike nowadays. The last major survey on blowfly strike in south-eastern Australia was done in 1982, so there was a need to determine the current blowfly control practices in this region.

This article gives some preliminary results of a major mail out survey conducted in July 2005 by the Mackinnon Project.

Survey

A questionnaire was posted to 1,120 producers including Mackinnon clients and members of the BESTWOOL/BESTLAMB network. The total number of useable responses was 566 or 50.5%. Wool production was the main enterprise on 466 farms (82%). Following is a summary of current management strategies regarding blowfly strike on these wool enterprises.

Farm profile

The average number of sheep on the farm was 5,172 (range: 261 to 78,000). Half of the farmers only had Merino sheep. The other half of farmers had several breeds of sheep, being involved in prime lamb and wool production. A third of the wool producers had both sheep and beef cattle. The average size of property was 1,065 ha. Two thirds of the respondents used some of their farm for cropping. The average annual rainfall was 588 mm and the average for 2004 was 520 mm. The average age of farmers was 51 and the average time in farming was 30 years. The average number of full-time labour units per farm was 1.8.

Shearing and crutching

Across all the farms, shearing and crutching took place every month of the year. Crutching took place primarily in February and March or in October and November. A slightly higher proportion of sheep were shorn in March and April and in September and October compared with the other months of the year. The three main reasons given for shearing at that time of the year were: a) to suit lambing or joining, b) to improve the quality of the wool and c) the availability of shearers. An average of 100 bales was produced at the most recent shearing and the average fibre diameter of the main wool line was 19.3 micron.

Marking and weaning

In 2004, the average marking percentage (i.e. the number of lambs marked / ewes joined) for Merino ewes joined to a Merino ram and for Merino ewes joined to a meat ram was 79% and 85%, respectively. Half of the respondents weaned the pure Merino lambs at 12 to 14 weeks after the start of lambing whereas first-cross lambs were more often weaned at an older age. Fifty percent of those first-cross lambs were weaned at 15 to 20 weeks after the start of lambing. This is very late given the poor lactation performance of Merino ewes after 12 weeks.

Three quarters of the farmers docked lamb’s tails at the recommended third palpable joint of the tail, which is at the tip of the vulva in ewes. This is a big improvement since 1982 where only 30% of producers had adopted the three-joint tail. However, one quarter of the farmers still dock tails at the first or second joint of the tail. This increases the risk of breech soiling and therefore increases the risk of breech strike in these sheep. There is a very simple and cheap strategy for one quarter of sheep producers to reduce the risk of breech strike – dock tails at the correct length!

In 1982, only 64% of breeders mulesed lambs. Our survey showed that in 2005, 97% of farmers mulesed all or most of their Merino lambs; only 2%...
claimed not to mules Merino lambs. Over two thirds of respondents who ran Merinos as well as first-cross ewes said they mules all or some of the first-cross ewes. Sixty percent of farmers employed a contractor to perform the mules operation whereas 32% of respondents said the mules operation was done by themselves or by a member of their staff. The majority of lambs (87%) were mulesed at marking time. The recommended mules operation (one breech cut either side of the vulva, leaving a ‘V’ of wool bearing skin on the tail) was adopted by almost two third of farmers. However, over a third of farmers performed a more radical mules operation. When asked if farmers were prepared to pay more for alternative measures to replace mulesing, 40% of respondents were willing to pay twice the current cost of mulesing.

Blowfly control
Half of the farmers jet their weaners routinely at about the same time each year for the prevention of breech and body strike. Only 37% and 29% of farmers routinely jetted their ewes for breech and body strike, respectively. These figures are similar for wethers; about 31% and 26% of farmers treat wethers routinely for breech or body strike, respectively.

Over 80% of farmers use an insect growth regulator (IGR) product, either Vetrazin or Clik, for their routine jetting. All classes of sheep, with the exception of weaners, were preferably jetted in November, whereas weaners were more often jetted in December. Weaners, ewe and wether hoggets were generally jetted on breech and body. Adult ewes were more often only jetted on the breech, whereas rams were generally only jetted on the head. The extensive use of IGR’s has implications for the development of resistance in future, even if there are no problems detectable now.

Ewe replacement
The majority of wool producers culled sheep with the following faults when selecting ewes for breeding: fleece factors, such as lumpy wool or fleece rot (98%), body strike (86%) and the presence of severe dags (71%). Half the farmers culled ewes if body or breech wrinkles were present or if they had been struck on the breech previously.

Conclusions
The objective of this survey was to get an overview of the current control practices for blowfly strike in southeastern Australia. This information will help to identify gaps in the information needed to implement an integrated parasite management system to control flystrike. Integrated parasite management (IPM) is a systematic approach to control pests which considers the biological characteristics of the pest, and includes management practices that are practical and financially beneficial for farmers.

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Key points:
- 75% of wool producers dock at third palpable joint of the tail, which means 25% can reduce the risk of breech strike by docking at the correct length
- 98% of farmers mules Merino lambs
- Half of the wool producers jet weaners routinely for breech and body strike
- Over 80% of wool producers use an IGR for routine prevention of blowfly strike

Free fly traps available
Bayer Australia is no longer distributing Lucitraps™ and have donated their warehouse stock to the AWI IPM sheep project. Consequently, we now have 2 pallet loads of Lucitraps™ at Werribee. These are available free to Mackinnon Project clients. The main use of the traps is to monitor the emergence of fly populations in spring and summer by placing them in the most 'high-risk' fly paddocks in early September. The traps will also reduce fly populations (mainly Lucilia, but some other flies) around yards. The lures last 6 months, and so would last until the end of February if placed out in Sep. ‘Whole farm’ trapping may also reduce fly populations, and so could possibly reduce strike incidence if you are isolated from other sheep properties. However, the only evidence of a reduction in strike through trapping came from pastoral areas of Queensland where sheep stocking rates are low and fly populations are congregated around sites like dams.

You will have to pick up the Lucitraps™ from either Ballarat or Werribee yourself; the cost of commercial freight is quite pricey because the lures are classed as dangerous goods. If you would like some traps, please call our new Admin. Manager, Pam Leslie, on 9731 2225. If you want to discuss the use of the traps then contact John Larsen (0408-534 361) or speak to your consultant.