On-farm research summaries

The Department of Primary Industries and Regional Development (DPIRD), formerly the Department of Agriculture and Food, Western Australia (DAFWA) ceased mulesing on its research stations in 2008 and since then has been collecting information regarding the management of non mulesed sheep.

# 2010 results

In 2010, sheep were monitored at the Great Southern Agricultural Research Institute (GSARI) in Katanning and Mount Barker research station. This was the first year of monitoring non mulesed maidens during pregnancy at Mount Barker. Overall, there were relatively low levels of strike reported in research flocks due to strategic use of crutching and chemical application combined with a favourable season.

At Mount Barker, the maiden ewes were monitored for strikes and showed no adverse problems during pregnancy or lactation. These ewes were crutched in mid-September to reduce their susceptibility to flystrike. Scouring in this mob was closely monitored with an average dag score of 1.8 just prior to crutching and a worm egg count of 95 eggs per gram. During mid-November there were some heavy rainfalls followed by warm humid weather, which meant optimum conditions for flystrike.

In the maiden ewe flock consisting of 235 ewes, three strikes were recorded, all of which were body strike. Fleece rot is a predisposing factor for body strike, with animals susceptible to fleece rot more likely to be affected by body strike. The moisture and bacterial growth often associated with fleece rot provides an ideal environment for blowflies to lay eggs.

The lambs from the maiden ewes were marked on the August 30 and received a preventative application of Clik® to the breech and body due to entering the highest risk period. Clik® was used as it has one of the longest protection periods available and the lapse of the wool withholding period coincided with shearing.

After weaning, the lambs were run with cross-bred lambs that did not receive a preventative treatment. Two cross-bred lambs were struck during November but no merino lambs were struck, demonstrating the importance of a strategically placed chemical treatment. Shearing of these lambs was planned for early December, to coincide withhold period of Clik® wearing off but was delayed three weeks. The delay in shearing saw two lambs body struck due to fleece rot. The risk of further strikes was high and as a result these lambs were backlined with Extinosad®.

The timing of shearing and crutching plays a vital role in managing flystrike and can give up to six weeks protection from breech flystrike. Shearing or crutching time should be planned to coincide with the start (or just before the usual start) of the fly season, keeping in mind withholding periods and protection periods of chemical preventatives.

The 2009 drop merino hoggets received a preventative chemical application of Vetrazin to the breech in early March after one animal was found to be fly struck and still in the high risk period. Three more breech strikes were observed during June. Three out of the four struck animals had a dag score of four at the time of strike and the fourth animal had a dag score of five at the time of strike. This further highlights the importance of controlling dags to reduce susceptibly to flystrike. A dag score four animal can be up to seven times more susceptible to breech strike than a dag score one animal in the same mob.

# 2009 results

Research on the 2009 drop Merino sheep on the department’s research stations has further highlighted the importance of reviewing management techniques such as shearing, crutching and sheep monitoring.

From our results we found that it is vital for producers to:

* know the pest – understand the blowfly life cycle and predisposing factors needed for strikes
* cull flystruck sheep
* know the chemical options and the lengths of effectiveness
* have sound worm management practices to avoid dags
* think about selection against traits that predisposed to breech strike, including breech wrinkle, body wrinkle, dags and possibly bare breech.

In 2009 sheep were monitored at GSARI/Mount Barker and Esperance Downs research stations. Prior knowledge and experience from 2008 greatly helped in managing the non mulesed flocks. Better management of scouring, appropriate chemical and crutching timing did help as well as more favourable weather conditions.

The 2009 drop lambs on all stations were treated at marking with Vetrazin or Clik which gave good protection until after weaning. Chemical treatment at marking is recommended if strikes are an issue prior to weaning.

Strikes in the 2009 drop lambs were only recorded after the marking treatment had lost its efficacy and before lamb shearing took place, further highlighting the importance of timing of shearing and crutching in preventing strikes.

Overall time taken for monitoring the non mulesed sheep was low compared to 2008 when no chemical applications were carried out.

The 2008 drop non mulesed hoggets recorded strikes of <1% with all of the strikes recorded at Mount Barker where controlling worms and scouring was still a slight issue, once again the importance of controlling dags was highlighted during 2009.

# 2008 results

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In the 2008 drop non mulesed lambs, breech strike incidence without strategic chemical intervention ranged from 3.5 to 11.4%. Body strike in the lambs ranged from 0.7 to 4%. Adult breech strike incidence ranged from 0 to 2% whilst body strike ranged from 0.1 to 6.9%.