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### **Lice – the biosecurity barometer of sheep**

Reports from most states point to a resurgence of sheep lice in the national flock, despite all the effort over all the years to eliminate them.

Sheep lice have been estimated to cost between \$170 and \$350 million annually. Yet these figures can be cut significantly if flock owners and managers elevate lice control to a 'must do' rather than an 'ad hoc' operation.

Australian Wool Innovation's Animal Health Project Manager, Dr Jane Littlejohn, says there are clear and proven steps to effective lice control.



"It's about monitoring – looking for lice all the time, and if they're found, approaching control in a well planned and thorough way.

"I know of some producers who go for years without lice issues, yet everyone has heard of someone who has a regular lice problem.

"In many ways, lice are a perfect barometer for effective farm biosecurity – if they get in to a flock, there's every chance of some other pest or disease incursion."

She says all the reports of a growing lice population highlight two issues.

"One is that we have spreading chemical resistance, which is a major problem, though we have the knowledge and new products to step around it.

"The other issue is the acceptance that it is easier to treat every year off-shears, let lice come back during the year, then treat again the following shearing.

"This just creates an endless infestation pool and it can be costly if the lice are resistant to the backline treatments of the 80s and 90s."

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For more information on Farm Biosecurity visit [www.farmbiosecurity.com.au](http://www.farmbiosecurity.com.au)



AWI has published and distributed over 5,000 copies of its LiceSense booklet, which provides a 'blow by blow' account of the best ways to approach lice management. The other key industry resource is LiceBoss.

- [http://images.wool.com/pub/LiceSense\\_Booklet\\_021009\\_modified.pdf](http://images.wool.com/pub/LiceSense_Booklet_021009_modified.pdf)
- [http://www.wool.com/Grow\\_LiceBoss.htm](http://www.wool.com/Grow_LiceBoss.htm)

A key section on lice biology in LiceBoss is: <http://images.wool.com/pub/Biology.pdf>

Dr Littlejohn says it only takes one louse to start an infestation.

"Female lice lay one or two eggs every three days, and live for about 30 days. If there is one louse found per every 10cm fleece-parting, then the sheep can be carrying 3-4,000 lice.

"Sheep start rubbing with 100 lice and you have a 60% chance of finding lice if you do 20 partings.

"A heavily infested animal has 100,000 or more."



## When to look for lice

Lice mostly spread from sheep to sheep. Bought-in stock, travelling mobs and stray sheep are key suspects.

- All mobs should be checked at least twice per year; any sheep seen rubbing or biting at any time should be checked
- Any sheep selected for purchase should be checked, and their lice control background checked with the owner
- Purchased sheep should be isolated, monitored and treated if necessary
- Stray and neighbours sheep and should be checked carefully prior to return
- Lice are difficult to find soon after shearing, even in untreated animals. Once lice are seen in the mob, infestation develops rapidly

Fleece weight can be reduced by 200grams/head for a light infestation, and up to 1kg/head for a heavy infestation.



## **What to look for**

Lice are small: less than 2mm in length with a broad reddish head; young lice have cream coloured bodies whereas adults have red-brown stripes across their abdomen.

If you need glasses to read a telephone book, you will need them to see lice. A magnifying glass might help.

After shearing, lice tend to be found under the neck and on lower flanks; in sheep with longer wool, lice are most common along the sheep's side.

Once infection is identified, there are a number of treatment options available. Farmers are urged to consult LiceBoss to identify effective treatment options and implement a biosecurity plan for the future: [http://www.wool.com/Grow\\_LiceBoss.htm](http://www.wool.com/Grow_LiceBoss.htm)

Farm biosecurity information can be obtained at [www.farmbiosecurity.com.au](http://www.farmbiosecurity.com.au)

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