# **Sheep Lice**

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Sheep lice are a frequent and challenging issue for producers. The sheep body louse (*Bovicola ovis*) is responsible for most infestations in Australian sheep.

As indicated through detections by PIRSA Animal Health staff, there has been an increasing prevalence over the past three years with increases in lice detections particularly prevalent in wool-shedding sheep breeds.

In the 2024–25 financial year, 43% of all lice detections in SA saleyards involved wool-shedding breeds—despite these breeds not representing that same proportion of total sheep sold through the saleyards.

# Check for sheep lice

Detecting and treating lice early can save time and money by minimising infestations and preventing wool damage. Lice are typically found near the skin, feeding on skin fragments, and can be seen by parting the wool. They may move up into the wool staple when the fleece is shaded or when sheep are closely yarded or camped together. Adult lice are less than 2 mm long—about the size of a match head—with a broad reddish head and reddish-brown stripes across the body. Nymphs are smaller and have pale, creamy bodies.

When checking for lice, select sheep that are rubbing, biting or have pulled wool as this is a sign of lice. Follow these steps to effectively check for lice:

- inspect sheep in a well-lit area (lice move away from sunlight)
- part a 10 cm length of wool and look closely for lice
- check 10 parts of wool down the side of each sheep
- check areas where the sheep has pulled wool
- check as many sheep as possible.

The presence of a single louse means the mob is infested and treatment must be considered. Finding a louse in each 10 cm parting of wool indicates 3,000 to 4,000 lice per sheep. A heavily infested sheep can have more than 10,000 lice.

When the wool is parted in the sunlight, the lice will move to bury themselves back into the wool away from the direct sunlight. When sheep are shorn this removes a vast amount of the sheep lice, however, if sheep are not cleanly shorn with long tufts on wool remaining, the sheep lice will be harbouring in these and the infestation will continue.

#### Causes

Lice can be easily introduced to a property via infested purchased or stray sheep. It is always advisable to inspect stray sheep for lice before returning them to their owner. Remember that lice could be introduced through introductions of rams, ewes and trade lambs. It is always advisable to either keep them separate until they can be shorn and treated or to undertake shearing and treatment as soon as they arrive.

## **Control**

Traditionally, the most effective way to eradicate lice was to treat sheep immediately after shearing with a backline product – taking advantage of the short window when treatment is more effective. Alternatively, dipping products could be used several weeks after shearing, once any shearing wounds had healed. A new oral drench treatment is now available, offering producers greater flexibility to manage lice at different times of the year.

Only a limited number of chemical treatments remain effective without documented lice resistance. To preserve their effectiveness, it is important to rotate chemical groups used on your property. The website <a href="www.liceboss.com.au">www.liceboss.com.au</a> offers a helpful product and application selector tool to assist in choosing the most suitable lice control option for your situation. In addition to chemical resistance, other common causes of poor lice control include split shearing, failure to treat lambs at foot, mis-mustering, and inadequate internal or boundary fencing.

Lice spread primarily through direct contact between sheep, as they rarely survive for long in the environment without a host.

#### **Consequences**

Depending upon the level of infestation, sheep lice can significantly impact productivity. They can reduce fleece weight and lead to wool defects such as yellowing and cotting, which result in discounts at sale. Lousy sheep also tend to perform poorly due to the irritation caused by lice bites – spending more time itching than eating – which can lead to lower body condition scores. Furthermore, ewes with lice can pass them onto their lambs, which may also suffer reduced performance. Affected lambs spend more time scratching than feeding, and their growth may be further compromised by reduced milk supply from their underperforming mothers.

#### 5 key reasons why sheep get lice

Reason	How to minimise impact
Buying in sheep	Check that the National Sheep Health Declaration states the sheep are free of lice     Inspect sheep
	<ul> <li>Keep newly-purchased mobs separate from the rest of your sheep and monitor to see if lice develop (especially if purchasing freshly shorn sheep)</li> </ul>
Stray sheep	<ul> <li>Remove stray sheep from your mobs</li> <li>Inspect the stray sheep</li> <li>Contact the stray owner, is possible, to inform them that the sheep strayed onto your property – PIRSA Animal Biosecurity can assist in identifying the stray sheep owner, provided that the stray sheep are yarded</li> <li>Quarantine any mobs that were in contact with stray sheep and monitor to see if lice develop</li> </ul>
	Ensure stock-proof internal and boundary fences
Lice treatment application	<ul> <li>Rotate chemical groups around to minimise lice resistance: treatment options include a new oral drench, backline or dipping. The website www.liceboss.com.au offers a helpful product and application selector tool</li> </ul>
	<ul> <li>Follow the label recommendations, especially for dose rate to body weight</li> <li>Check that the application equipment is working correctly</li> </ul>
	• Ensure that lice treatment applied to all ewes is also applied to lambs, if still on the ewe at treatment time
Mis-mustering	Ensure all sheep are mustered for shearing and treated for lice

Shearing	Ensure that sheep are cleanly shorn, with no long tufts remaining. If using a backline treatment this will influence how the product moves across the sheep, as the wool tufts become harbouring sites for the lice.
	<ul> <li>Keep shorn and treated sheep separate from unshorn and non-treated sheep.</li> </ul>

## **Offences**

It's against the law to have sheep with lice in public places, including markets and saleyards—even if the sheep are just in transit. It's also illegal to let lice-infested sheep stray onto other properties. If this happens, both the owner and anyone responsible for managing the sheep can be fined. The maximum penalty is \$5,000, with an on-the-spot fine of \$315 (per *Livestock Regulations 2013* – Sheep Lice – Part 6 – 26).

To avoid breaking the law, check your sheep for lice before selling or moving them. Sheep without lice are healthier and perform better than those with lice.

If you're unsure whether your sheep have lice or want to report stray sheep with lice, contact your local Animal Health Officer. Their contact details are available on the PIRSA website: <a href="https://pir.sa.gov.au/biosecurity/animal\_health/contact\_us">https://pir.sa.gov.au/biosecurity/animal\_health/contact\_us</a>

# **Sheep Lice Infographic**





