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FACT SHEET

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Sheep lice facts

The sheep body louse or chewing louse *(Bovicola ovis)* is the species responsible for most infestations of lice on sheep in Australia.

It is a small insect, less than 2 mm in length, with a broad reddish head. Adult lice have reddish-brown stripes across the body whereas young lice (nymphs) are smaller with cream bodies.

Adult lice, nymphs and egg.

Where do lice come from?

Most new infestations start from contact with other infested sheep and can be Sourced two ways:

Stray sheep - Good fences are the most effective method of preventing lice. Lice do not cross fencelines but stray sheep do. Even if the neighbouring property's sheep have lice, it is unlikely that they will spread to your property if fences are sheep proof.

Purchased sheep - Even if lice cannot be found, these sheep could still be infested. All purchased sheep should be kept isolated for a minimum of six months and treatment should be considered if lice are detected. Take note of the period expected for a complete kill of lice when selecting your chemical treatment.

Can lice live away from sheep or on other animals?

Lice are very sensitive to changes in temperature and humidity and most die soon after being removed from sheep. However, under favourable conditions some lice can survive for up to a month. Sheep can become infested if held in facilities where lousy sheep have recently been penned, but the risk is low.

Sheep lice will reproduce only on sheep and possibly sometimes on goats, but it is unlikely that goats act as a source of infestation under paddock conditions. Sheep lice will not breed on birds, people, cattle, kangaroos or other animals.

Lice infestations are more common in scrubby areas, not because lice breed on kangaroos or other animals as is sometimes thought, but because infested sheep are missed at muster and not treated.

Although lice cannot breed on humans, they can transfer onto clothing or footwear when shearers or stock handlers are in close contact with sheep. Precautions should be taken to prevent lice being spread between infested and clean mobs by this means.

How do lice move from sheep to sheep?

When sheep rub against each other, lice move to the tip of the fleece and quickly transfer between sheep. This usually occurs during yarding, in sheep camps, or at any time when sheep are in close contact. Transfer takes place most quickly when sheep have short wool.

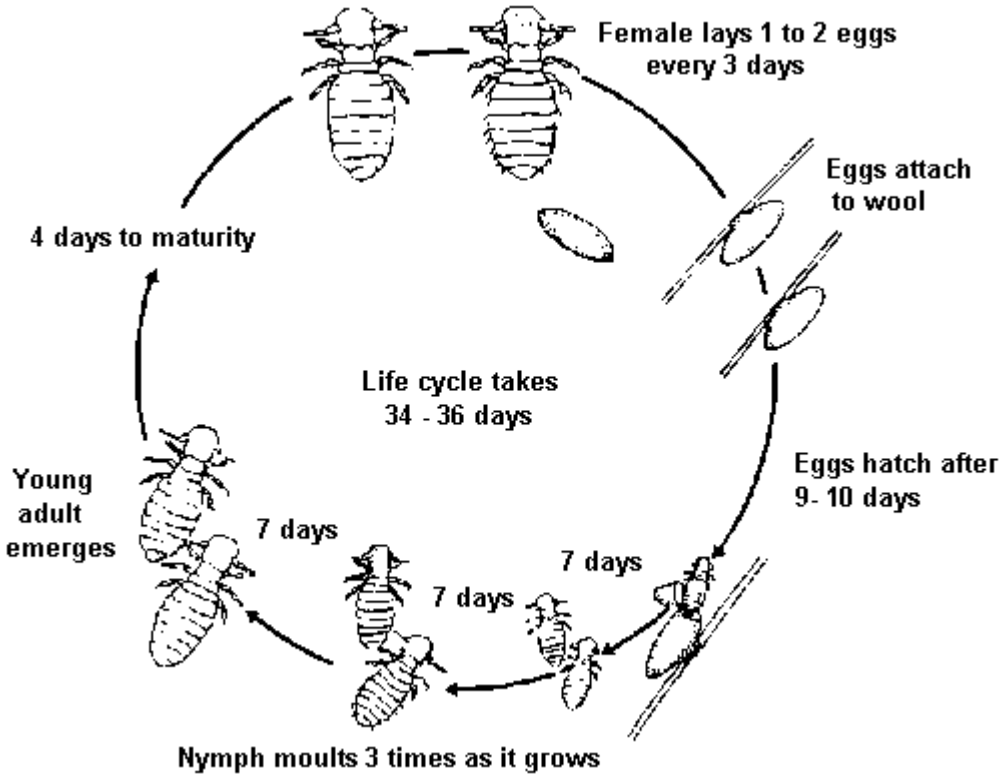
Lice freely transfer between ewes and lambs and can spread from rams to ewes during mating.

How do lice breed?

The average period for completion of the cycle is 34 days.

Female lice lay one or two eggs every three days, and live for about 30 days.

Figure 1: Sheep lice life cycle



How quickly do lice build up?

It is difficult to find lice on infested sheep any earlier than three months after shearing or contact with a lousy sheep, even if sheep have not been treated. If shorn sheep are not wetted thoroughly at dipping, or backline treatments are not correctly applied, it could be more than six months before lice can be easily found.

Lice spread slowly among sheep in the early stages of an infestation, but once signs of lice are seen in the mob the infestation can develop rapidly.

What factors influence lice build-up?

Temperature and humidity

All stages of sheep lice, including the eggs, are sensitive to extremes of temperature and humidity. This is why most lice die quickly once removed from sheep.

Wool length

Shearing removes up to 60 per cent of lice and exposes the remaining lice to unfavourable weather conditions. Thus, control measures are most effective when applied soon after shearing.

Rainfall

Large numbers of nymphs, adults and hatching eggs can be killed when the fleece becomes saturated by heavy rainfall.

Season

Lice tend to breed quickest in autumn and winter, and remain in low numbers during summer. However, louse numbers can continue to increase through summer on sheep that have not recently been shorn.

How many lice does a sheep have?

If an average of one louse per 10 cm fleece parting is found, then the sheep is carrying about 3,000 to 4,000 lice. A very heavily infested sheep can have more than 100,000 lice.

In the early stages of an infestation even an extremely close examination may fail to find lice.

Where are lice found?

Most lice are found near the sheep's skin where they feed on scurf and wool yolk.

After shearing, lice will be found in poorly shorn patches where the longer wool provides protection - most commonly under the neck and on the flanks.

In longer woolled sheep lice are most common along the sides and on the shoulders.

How far do lice move?

Lice move up and down the wool fibres but do not move far across the sheep's body. Therefore, when treating sheep for lice it is important to use the correct application technique so that all wool covered sites on the sheep get a lethal dose of chemical.

What damage do lice cause?

Reduce fleece weight. A light infestation (less than an average of one louse per 10 cm fleece parting) can reduce clean fleece weight by 0.2 kg/head. A heavy infestation (more than an average of five lice per parting) can reduce fleece weight by 1 kg clean.

Reduce fleece quality. Lice cause cotted, yellow wool, which will suffer a price discount when sold because of its poor performance during processing.

Increase susceptibility to flystrike.

Lice do not cause reduction of body weight but sheep in poor condition are more susceptible to lice and may develop heavier infestations.

What about other species of lice?

Two other species of lice infest sheep in Australia, the face louse, *Linognathus ovillus,* and the foot louse, *Linognathus pedalis.*

They are larger and darker in colour than the chewing louse. They are found most commonly on the haired skin of the face, legs and scrotum of rams and near the wool-hair junction. They are not usually found in the fleece wool where the chewing louse is most common.

These species are only of minor importance and seldom require treatment.

Other Fact Sheets in the LICECHECK series discuss treatment options.

More information: www.liceboss.com.au

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