

MANAGING LICE

For strong wool sheep, lice infection is a nuisance more than a significant financial cost. However, for fine wool sheep, the financial toll is much greater, due to the impact on wool quality and yield and the pelt.

There are also animal welfare issues associated with lice infection, which are covered in New Zealand's Animal Welfare Act 1999 and health and safety requirements around handling and disposing of lice treatments and containers.

This factsheet provides a practical guide to:

- understanding the lice lifecycle and optimal times to target them
- treatment options – chemical and non-chemical – available.

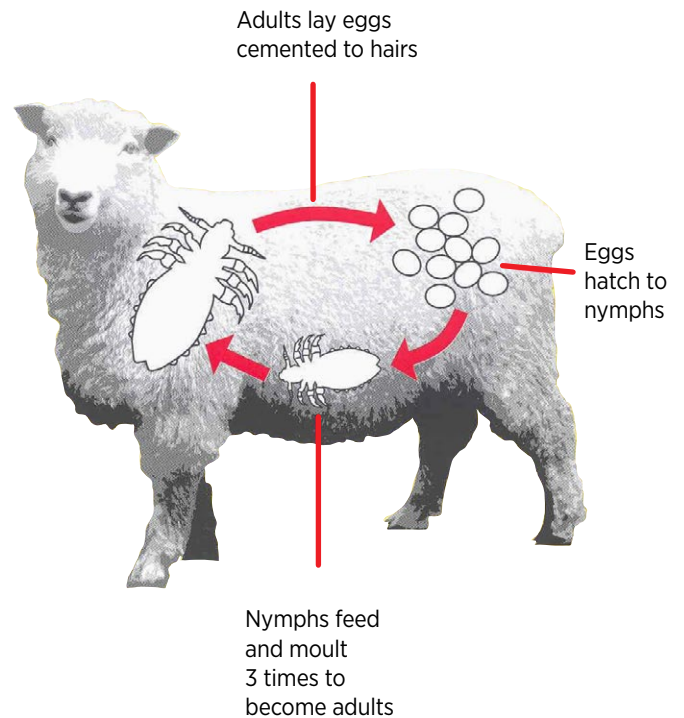
AN INTRODUCTION TO LICE

Known as the sheep body louse, biting louse or chewing louse, *Bovicola ovis* is a 1.5-2.00mm long, yellowish-brown wingless insect. They do not fly or jump; they only walk.

The female lives an average of 4-6 weeks and lays about 30 eggs in her lifetime. Eggs are laid on wool fibres, within 12mm of the skin surface. Lice prefer temperatures around 35-40°C and, while eggs can tolerate the dry, they don't survive high humidity or saturation.

After 9-11 days, the eggs hatch into nymphs and another 21 days later, they become adults. The complete egg-to-egg lifecycle takes 34-36 days and is spent entirely on the sheep.

LIFE CYCLE OF LICE



SEASONAL BEHAVIOUR OF LICE

Lice populations are generally highest in autumn through to late winter and decline in summer.

Transmission

Lice are transferred by very close contact between sheep.

Within a flock: Lice spread slowly, except when sheep are in poor condition. Well-fed and well-conditioned sheep are less susceptible to lice than undernourished poor-conditioned sheep.

Ewe to lamb: A lice-infested ewe will infest her lamb within the first 24 hours. It's therefore important to ensure ewes are lice-free before lambing. If infested ewes cannot be treated for any reason, then it is imperative lambs are dipped as soon as practical – be that weaning or shearing.

LICE PREVENTION AND TREATMENT

Do you have a lice problem?

Ask yourself:

- 1) Have signs of lousiness been obvious over winter?
- 2) Are lice treatments being applied for peace of mind or are you treating an actual problem?

Every summer and/or autumn just before shearing, select and inspect at least 10 of the lightest sheep in your flock, or those sheep showing obvious signs of rubbing their fleeces. Pay extra attention to the midline of the back and shoulders, and under the neck.

The importance of shearing

Shearing can remove up to 80% of lice, depending on the closeness of the cut. A high lice kill at shearing can be further enhanced by off-shears lice dipping.

Using chemicals to treat lice

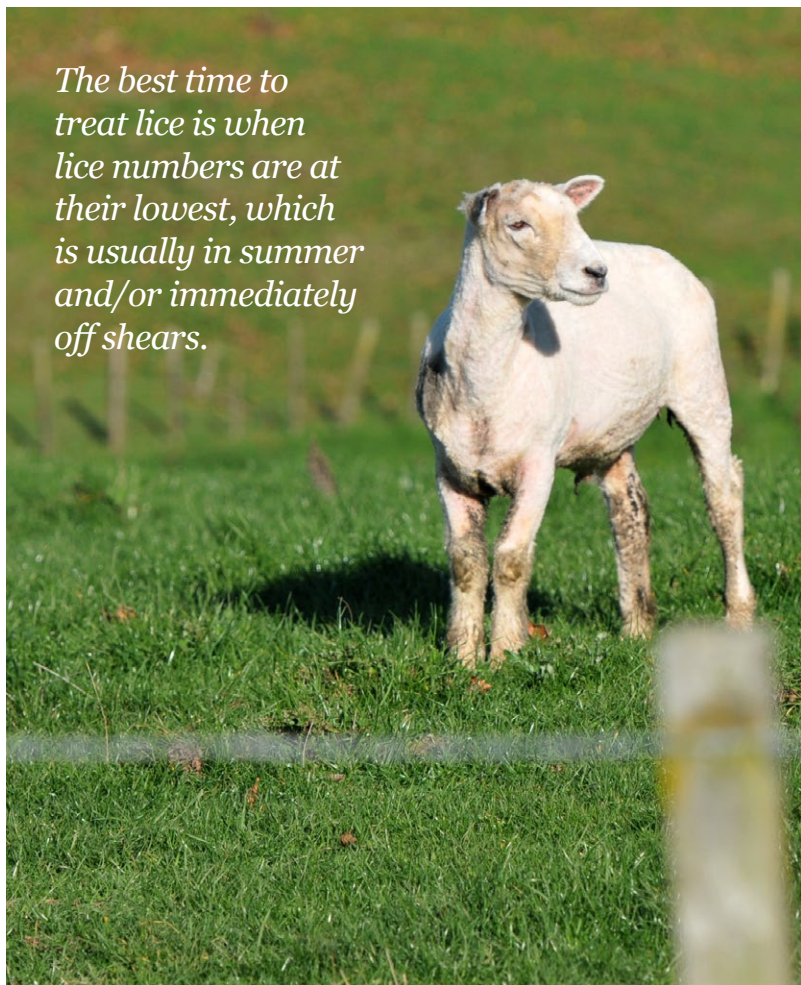
Dipping provides the most effective, persistent protection against on-going lice challenge and the best time to treat is when lice numbers are at their lowest – usually in summer and/or immediately off shears.

See Lice Prevention Treatment Decision Tree on back page for recommended treatment scenarios, based on level of lice infestation and wool length.

Tips for chemical use

- Use effective chemicals and do not use the same chemical year after year.
- There may be benefit in lice control by using two actives together where the actives target different stages of the life cycle.
- Where complete saturation is achieved in a plunge or shower dip, there is no advantage in using more than one active.
- To reduce selection for resistance, do not use two actives that both target the same life cycle stage at the same time.
- Apply all products strictly as per label.
- If treatment for flystrike prevention and lice control is required at the same time, use chemicals from different chemical groups.
- Maintain accurate records regarding all treatments.
- Dip each mob at the most appropriate wool length and time for that mob. Focus on on-farm eradication of lice.
- Do not mix treated sheep with untreated sheep.

The best time to treat lice is when lice numbers are at their lowest, which is usually in summer and/or immediately off shears.



Long wool emergency treatments

Large lice burdens invariably show up at the worst time for treatment – in ewe flocks with more than 6 months' wool growth, just prior to lambing.

You have two options:

- 1) Do nothing. Further wool damage will occur and lambs will become lousy.
- 2) Apply a long-wool lice knockdown treatment to the ewes. (See back page.)

No long wool treatment will eradicate lice, rather it will simply prevent further fleece damage and reduce the numbers of lice available to transfer to lambs. Both ewes and lambs should still be considered lousy and should be treated when next shorn. Use a product from a different chemical group to that used as the long wool treatment.

A review of previous lice control measures should also be carried out and improvements made.



DISPOSAL OF DIP CONCENTRATES, CONTAINERS AND USED WASH

Apply and dispose of all products strictly as per label. Disposal must comply with the Resource Management Act 1991 and regional council regulations.

Disposal of containers and unwanted concentrate

The Agrecovery Rural Recycling Programme is a free nationwide collection and disposal system for unwanted and expired agrichemicals.

Visit www.agrecovery.co.nz for contact details.



RELATED RESOURCES

- Managing flystrike and lice resource book www.beeflambnz.com/knowledge-hub/PDF/managing-flystrike-and-lice
- See separate fact sheet for information on Flystrike www.beeflambnz.com/knowledge-hub/PDF/managing-flystrike

More information

For further information freephone Beef + Lamb New Zealand on 0800 BEEFLAMB (0800 233 352) or email enquiries@beeflambnz.com or visit www.beeflambnz.com

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Checking for lice



Assessing lice numbers



Sheep and Beef Cattle Veterinarians
Branch of the NZVA

Lice Prevention & Treatment Decision Tree

This decision tree is designed as a guide only. We recommend you get specialist advice from your vet or a qualified advisor.

