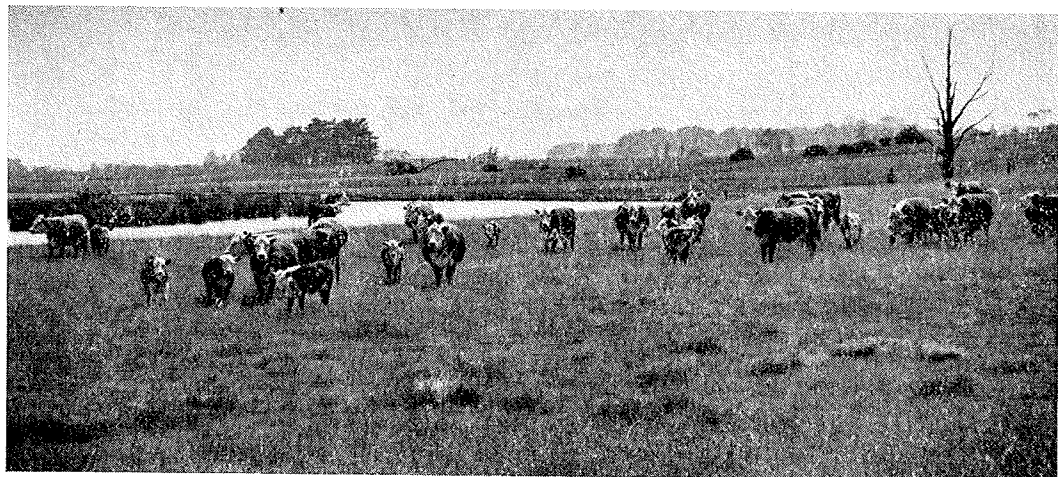


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Lice In Cattle

**by W. H. Stephens, B.V.Sc.,
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Officer**

Will lice stop them thriving this winter?



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by W. H. STEPHENS, B.V.Sc., Dip.Agr.Extn.,
Veterinary Extension Officer

THE INCREASE in beef cattle in Tasmania in the past ten years has seen a rise in the number of herds seriously affected by cattle lice.

The spread of lice to previously unaffected herds has probably occurred as a result of the increased buying and selling of cattle.

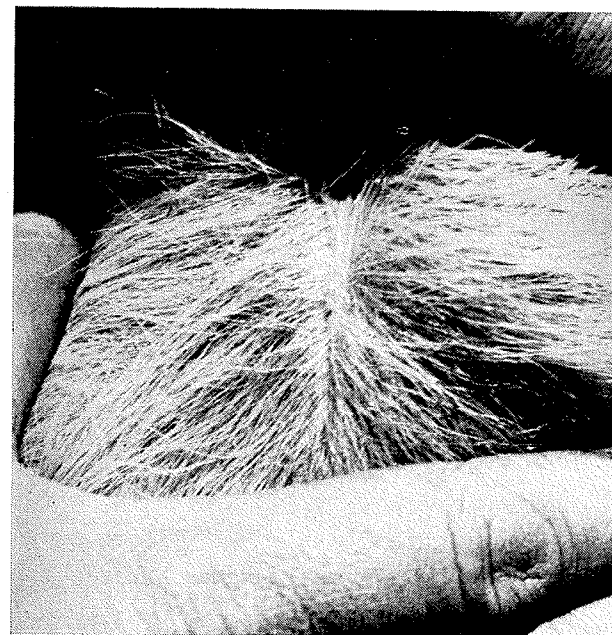
As described in this Journal (August 1971), cattle lice are of two main types depending on their method of feeding.

1. *The Biting Lice* are small and yellow to reddish in colour. They feed on scurf and skin debris and cause intense irritation which the animal tries to relieve by rubbing and scratching.

2. *The Sucking Lice* are larger, 4-5 mm (almost one-fifth of an inch), and are grey blue in colour. These suck blood. Heavy infestations can produce severe anaemia, loss of weight and chronic unthriftiness.

Life Cycle

The main fact to remember is that the eggs



A louse on the skin.

produced by most species of cattle lice take from about ten to fourteen days to hatch. The young lice, after hatching from the eggs, take at least two weeks to mature and produce more eggs.

Since most cattle-lice sprays do not kill the eggs of lice, *it is essential to repeat treatment at somewhere between fourteen days and seventeen days.*

Recommendation to repeat after a three-week interval may be based on European conditions where colder winters prolong the incubation periods of eggs.

A delay of three weeks between treatments can be too long an interval in Tasmania. This is because lice that hatch out from eggs say two days after the first treatment could become adult after two weeks and produce the next batch of eggs before the next treatment. In this way, even two treatments three to four weeks apart in autumn could be followed by a build up of lice in three

months. The cattle would then be seriously infested by July/August, when feed is short and weather severe. Lice survive the summer in the shaded areas under the belly and brisket and on the extremities, e.g. on the tail switch and legs.

Cattle Lice Remedies

Most lice remedies are organic phosphate (O.P.) compounds which vary in their poisonous effects on lice, cattle and humans.

The common names and trade names of some commonly available cattle lice remedies are:—

Coumaphos—'Asuntol' Spray
Chlorpyrifos—'Dursban' Spray
Crotoxyphos—'Giodrin' Spray
Delnav—'Bercotox' Spray
Diazinon—'Nucidol' Spray
Diazinon—'Diazide' Spray
Famphur—'Warbex' Pour-on
Fenthion—'Tiguvon' Pour-on

Some of these are applied as a spray, some of them are applied by pouring relatively

small amounts of a more concentrated liquid on to the animals' backs.

Precautions and Restrictions

Since O.P.s are absorbed by the skin and are retained in body tissues to differing degrees, each product has different restrictions to prevent meat and dairy products, contaminated by O.P.s, from being eaten by humans.

The precautions and restrictions are printed clearly on the labels of all cattle lice remedies.

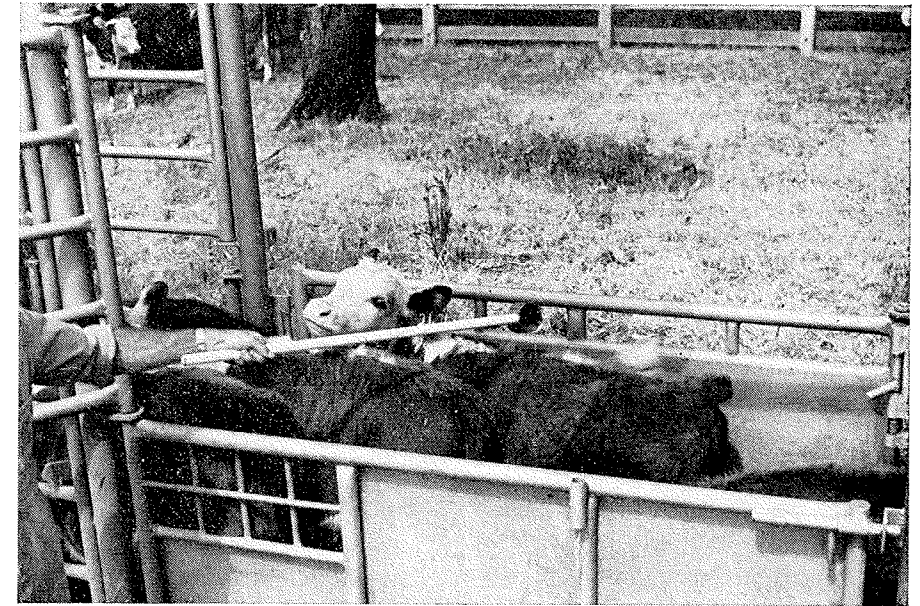
IT IS IMPORTANT THAT CATTLE OWNERS READ THE LABELS AND FOLLOW THE RECOMMENDATIONS.

Here is a summary of the recommended application intervals and the precautions advised for various cattle lice remedies.

Cattle Lice Control Preparations 1973

Name	Active Principle	Application	Restrictions and Precautions		
			Beef Cattle	Dairy Cows	Calves
Asuntol	Coumaphos	Spray. Repeat in 14-21 days	Not later than 7 days before slaughter	....	....
Bercotox	Delnav	Spray. Repeat in 14 days	....	....	....
Clodrin	Crotoxyphos	Spray. Repeat in 14 days	Not later than 2 days before slaughter	....	....
Nucidol 20	Diazinon	Spray. Repeat in 17 days	Do not use closer than 14 days to slaughter. Not on poultry	....	....
Diozide	Diazinon	Spray. Repeat in 17-18 days	Not later than 14 days before slaughter	....	Use half strength on calves under 6 weeks
Tiguvon	Fenthion	Pour on on one spot. Repeat in 14-21 days	Not later than 1 day from slaughter	Treat cows in milk straight after milking	Safe on young calves
Dursban	Chlorpyrifos	Spray. (One application.) Is ovicidal and can kill nymphs and adults for 2 weeks after tip spraying	Not later than 3 weeks before slaughter	Not later than 3 weeks before calving. Not on dairy cows in milk	'Normal care' when spraying young calves is necessary
*Warbex	Famphur	Pour on along back line. (One application.)	Not later than 5 weeks before slaughter	Not later than 3 weeks before calving. Not on dairy cows in milk	Not on calves less than 3 months old, but is OK for cows with calves at foot

* Not on animals stressed from castration, dehorning, transport or ill health. If applied when drenching or vaccinating apply Warbex last, but do not use within 3 days of administering any other O.P. product.



A pour-on lice treatment used on cattle in a race ensures that every animal gets its dose.

Costs of different preparations vary from about 5c per beast to 45c per beast, depending on the size of the animal and the formulation used.

Strategy of Cattle Lice Control

Hot weather always causes a decline in louse populations because the temperature on the skin is too hot for lice to survive.

The cooler weather of autumn provides conditions for lice to begin to multiply and survive once more.

Best Time for Preventive Treatment

To prevent a rapid build up during winter, cattle should be treated for lice in early to mid-autumn while the coat is still short.

This will generally be about the middle of March for the first treatment with two-treatment chemicals.

It is important to treat all the cattle again in fourteen-seventeen days.

If lice have been a problem each winter for the last few years it will be reasonable to spray or apply pour-on liquids as a routine

in March and so *prevent* a build up of lice.

If lice are not a problem every year then treatment could be delayed until the first signs of lice infestation are seen, i.e. cattle rubbing or failing to thrive.

Better still, yard some cattle from each mob and look for lice.

Detecting Lice

On Herefords and Friesians, look on the white skin areas of the neck, withers and sides. They may be difficult to see on black cattle.

If you are not sure what to look for ask your Veterinary Officer or Stock Inspector to check your cattle.

Although there are at least three different species of cattle lice infesting Tasmanian cattle, most are found on the head, neck, shoulders, back or rump. The tail switch is often heavily infested.

Thus, for cattle packed in a race, a close examination along the back line from head to tail and down the shoulders and sides should detect lice if they are present. If possible, check under the chin and throat

area. Sucking lice tend to be found on the underside of cattle.

Calves, both dairy and beef, are sometimes so heavily infested round the head that a normally white face and muzzle may appear grey from hundreds of the dark coloured insects. Calves should be turned over for examination of the belly skin.

There may not always be excessive irritation, but the effects can be judged when improved growth follows successful treatment.

Calves, young stock and old cattle in poor condition show the greatest effects.

WARNING—Make sure that cattle 'licking themselves' are not in fact biting themselves to allay the itching caused by lice.

Even fat cattle can become lousy in winter. Dairy cows in good condition which have shown a decrease in milk production have sometimes been found to be infested with lice which are not always obviously present.

The spread of lice in a dairy herd can be rapid because of the twice-daily muster. As soon as cattle are found to be lousy in winter they should be treated. If two treatments are recommended, apply them at fourteen-seventeen days apart.

Mode of Application

1. Sprays

For individual animals a stirrup pump and hand spray may be satisfactory but a high pressure motor-driven pump is needed to apply a spray that can soak the skin. Using any hand-held spray, it is difficult to obtain complete coverage, i.e. head, ears, between the legs, under the belly and legs. The tail switch should be immersed in a bucket of the insecticide if spray liquids are used.

2. Spray Rings

These can be built into a race and should provide a more uniform coverage of the beast. Jets must all be operating and pump pressure must be as recommended by the maker.

It is difficult to ensure a thorough wetting if cattle jump rapidly through a single spray ring. Try to force them along slowly or use a two or three-hoop sprayer.

3. Pour-on

Some chemicals, e.g. Tiguvon, Warbex, are formulated so that the active principle in a small volume poured on an animal's back is absorbed from the skin and is then excreted through the skin over the whole body.

Note the precautions from Table 1 for the safety period between application and slaughter for the long acting formulations.

WARNING

Cattle of *Bos indicus* species, e.g. Brahman, or with Brahman blood in them, e.g. Santa Gertrudis, Brangus, Braford, Droughtmaster, are more susceptible to poisoning by organic phosphate compounds than are European breeds which belong to the *Bos taurus* species. Seek veterinary advice about the precautions that need to be taken in the treatment of Brahman or Brahman-cross cattle for lice.

IMPORTANT

As with sheep dipping, for best results against lice treat all cattle in a herd on the same day. Make sure of a full muster especially for the preventive treatment in March/April. If two treatments are recommended, apply them at an interval of between fourteen and seventeen days.

**ABOVE ALL, READ THE DIRECTIONS
ON THE LABELS.**

And don't forget to read the small print too.