



## **Lice management**



## **Lice eradication groups – Reducing chemical dependence by eradicating lice on a district basis**

E.C. Scarlett  
State Coordinator Ectoparasite Control.  
NSW Agriculture  
PO Box 49  
Albury, NSW, 2640.  
Email [ted.scarlett@agric.nsw.gov.au](mailto:ted.scarlett@agric.nsw.gov.au).

### ***Philosophical position***

*The use of chemicals to treat sheep infested with lice is expensive, can be dangerous and if used incorrectly will soon jeopardise access to European markets and very likely the other wool processing countries soon after. To treat sheep that are not infested is all of the above but also a waste of money.*

### ***Solution***

*If there are no lice and lice can be kept out, there is no need for chemicals.*

### **Keywords**

Sheep lice, farmer groups, lice eradication

### **Introduction**

This glib solution has to take into account history (“...I didn’t dip last year and now I have lice....”), fact, (“...my neighbour has lice...”), culture/self perception (“...I am a good farmer, I dip for lice....”), tradition (the auctioneer “...We have on offer here, a nice mob of ewes, mulesed, vaccinated, dipped....”).

Thus we not only have to have workable, achievable lice eradication technology/protocols, we have to understand and overcome many of the above if we wish to reduce and/or eliminate the use of chemicals.

The days of being prepared to live with lice are rapidly drawing to a close. There has always been a very sound economic case to aim for eradication. Now with field resistance to some chemicals, accurate testing for the presence of lice, and the threat of the loss of access to European markets for Australian wool, the problem needs to be revisited.

Cost of lice damage is one issue, the practice of using chemicals when no lice are present is another. However, few producers will be prepared to give up dipping while ever there is a possibility (beyond their control) of lice infestation.

Only by convincing producers that there is no likelihood of lice invasion, can we expect them to take the risk of giving up the “insurance mentality” of dipping.

By working with neighbours and forming groups the chances of pushing and keeping lice out of an area becomes a reality.

This paper does not deal with material presented at group meetings, it is a commentary on the mechanics of how groups were formed in three different locations in NSW.

### **An Overview of the Groups**

The concept of achieving eradication of a disease or pest, in this instance lice, only works if all producers or the vast majority, are involved at all levels and stages, and have confidence in the system.

In retrospect with the NSW groups, initial surveys and meetings were critical in establishing benchmarks, defining and setting achievable targets, establishing consensus and involvement and sorting misconceptions.

The type of information collected will vary, but the main material gathered was history of lice infestation, chemicals used, method of application, time of shearing and lambing. Known or suspected mode of infestation can provide very valuable discussion material and the beginning of the extension program with some specific targets.

There is a precise protocol prepared by NSW Agriculture for applying for and registering control and protected status areas.

In NSW the Rural Lands Protection Boards (RLPB's) and producers are made aware of the full implications of achieving lice free (protected) status; restriction of trade, buying complications, trader disadvantages, internal stock movement disruption etc. The Boards must be in a position to accommodate a substantial increase in demand on finances and manpower.

How other states organise inspections and monitoring will not be as simple.

There are common elements in the three group clusters; the main difference is the process of formation of each.

### **Murray RLPB (Corowa, Jerilderie)**

The approach by the Murray RLPB was the most intense of the three and aimed directly from the outset at establishing nothing less than lice free zones.

A more modest approach; reduce the number of properties with lice, was not countenanced. The reduction only approach may have achieved low lice prevalence, but may not have achieved the objective of having no need for chemical use. Even so, when no lice has been detected for say two seasons, the big leap (for some) of no treatment, is more acceptable.

Certainly the Murray Board had a flying start; they had runs on the board with a very successful Footrot Eradication campaign, thus a structure was in place and they had staff with credibility.

The impetus came partially from members within the existing Footrot groups, suggesting that the next target could be lice, and partly from the enthusiasm and ability of the incumbent Footrot Officer. (David Honybun<sup>a</sup>). Equally important, the program had the full support of the District Veterinarian and the Board.

#### ***To Start a Group***

1. Broach the concept during the last few meetings of the Footrot groups.
2. Visit all producers, arrange meeting by phone such that neither party is rushed, allow for side tracking to answer questions and deal with concerns/reservations on the spot. Not too many per day. Arrange tentative date for first group meetings.
3. Prepare the people to come to the meeting to hear a more in-depth discussion on the concept and benefit of forming Lice Eradication Groups.
4. Collect data during the one on one visit along the lines of sheep numbers, shearing time, lice history, practices etc.
5. At the first group meeting, present a convincing case for tackling the problem through groups and instil confidence through new technology, products, data analysis etc.
6. Shift ownership to the Group (choose coordinator, group name, set realistic targets).
7. Program a calendar of activities (dipping displays,) based on outcome of survey.
8. Develop with the group, a checklist to follow to ensure eradication.
9. Formal signing of agreement.

#### ***Advantages perceived for the Murray Groups.***

- Previous Footrot Eradication Groups had in place, defined boundaries, pattern for meetings established and working lines of communication.
- Identified capable group coordinators.

- Members were aware of the advantages and downside to being a protected area.
- Members felt no threat from surveys or disclosure of problems.

At the series of meetings (point 5 above) it was established that there was general approval for the existing Footrot Groups to be registered as Lice Voluntary Eradication Groups.

Three distinct but consequential objectives for the groups were defined:

- Lice eradication from all flocks.
- Cessation of routine treatment for lice.
- Achieve Protected Status for the district.

### ***Follow Up***

Registration of the 18 Voluntary Lice Eradication Groups and notify members by mail to seal the commitment by the producers and Board.

Complete a second survey of all sheep owners. Results to be reviewed, discussed and action agreed upon. A time frame for lice freedom and area/district status established.

The second survey will use the same parameters as the first plus information on the method of treatment, origin of infestation (requires careful handling of this question) and for those who do not treat, for how long and why.

### ***Advisory Program***

- The first priority will be directed to the flocks that have been identified as being infested, having a recent history of infestation or having a history of a re-occurring problem.
- Arranging meetings for small numbers from this group according to their distribution.
- From the survey, arrange demonstrations where problems are occurring with equipment and application.
- Consider how to utilise the group identified in the survey, as not treating for lice.

### **Condobolin RLPB (Craig Ridley<sup>b</sup>, RLPB Ranger)**

Condobolin RLPB is a semi arid area with relatively low stocking rates and large properties and flocks.

The Condobolin Board at the moment has formed 24 groups involving 300 landholders and approximately 500,000 sheep. Three of these groups have been declared Provisionally Free with over a dozen farmers not dipping for lice. The ultimate goal of the Board is for members to have confidence in not treating, if they don't have lice. The selling point of these groups is that it will cost the farmers nothing and they have a lot to gain.

The Board also offers a 10% discount to landholders on rates if a group is declared Provisionally Free.

These groups range from being very active to just being registered on paper. The success or failure of the groups depends on the district and the people in it. Some landholders still don't see lice as a huge problem or one that can be fixed; others appear to resent the presence of board staff and/or group leaders on their properties.

With the wool residue issue becoming more relevant it is anticipated that groups would have more acceptance. Wool prices will have a bearing on landholder attitude and may determine where their energies are channelled. Once again this depends on the district involved.

### ***Problems facing group formation in the Condobolin Board:***

- Sheep not the main income, other farming operations take precedence at times.
- Don't want to upset or offend neighbours.
- Clash of personalities.

- Members forget to notify coordinators of stock movements.
- No perceived benefits from participating.
- General apathy.

Positive for groups:

- Reduced chance of infestations.
- Quality assurance for surplus stock.
- Savings in time and money by not having to treat.
- Greater access to information through Board Staff.

### ***To Start a Group***

#### ***Progressive Farmer***

A number of progressive farmers were approached in a targeted area and were encouraged to canvas their neighbours for level of interest. Enough interest was shown (about 70% attendance at meeting), and subsequently a meeting was set up to develop guidelines and objectives and register groups.

#### ***Farmer Initiated***

An opportunity presented itself when farmers rang, wanting to form a group. Maps were circulated with proposed boundaries, and the initiators were commissioned to establish level of interest and organise a meeting (70% attendance at least).

#### ***Existing Groups***

A lot of these groups were based originally on footrot but have moved on to lice, ovine brucellosis and worms with lice being the priority at this time.

#### ***Comment on Condobolin Situation***

The groups must be farmer driven as staffing levels won't allow the Board to run them. To this end local coordinators are very important, as they keep the group interested and moving forward.

Some groups have adopted the approach of changing coordinators every 12 months so that workloads don't become high and everybody gets a change to be involved in the running of the group. Other groups have operated very successfully with the same coordinators since inception.

The groups should be self-inspecting with every group member doing inspections at some stage, to share the workload and involvement. Board staff are available to settle any doubts or disputes and to give advice on chemicals and applications.

Annual meetings and get togethers seem to be the best way to update group members on the group's progress, problems and the latest developments in lice and fly control.

Size of the groups can vary with probably 12-15 members being the optimum but more or less is acceptable depending on the area involved and obvious natural physical and social boundaries.

By preference, inspections are organised for crutching or shearing time as it is more convenient, however when properties are approaching 'Provisional Freedom' a special yarding may be required (*or subjection to a Lice Presence Test?*).

The group also provides a vehicle for specialists to present specific technology to members on chemicals and their application.

Although the spread of these groups has slowed at the moment, the people feel the foundation has been laid to enable the groups to "kick on" as wool prices pick up or residue limits become more stringent.

## **Western Division RLPB (Bill Elliot<sup>c</sup>)**

The Western Division is, in the main, arid with extensive properties and large numbers of medium to strong merino sheep. Similar to much of WA and SA and nothing at all like Tasmania.

The problems; communication, stock movement, access and husbandry practices are in keeping with extensive properties in other areas.

While the campaign must start on individual farms the big picture/long term view must progress from neighbourhood, to district (RLPB divisions) then the whole Board and finally State.

The similarities with eastern groups are pretty much confined to the overall philosophy however the same approach has to be taken with the rest of the State. The Boards and in particular the Rangers are the front line that has the contact with the woolgrowers.

The benefits of groups comes about by osmosis and the relationship and trust established over the years by the Rangers.

### ***To Start a Group***

- The groups (loose use of the term), have in the main, come about in two ways; as a response to approaches to the Rangers by producers and secondly by a deliberate approach by Rangers to very carefully chosen influential landholders. This is possible because of the intimate knowledge of the people and the district, with subsequent understanding of the way things work out there.
- Get owners in key areas to stop dipping and to discuss it with their neighbours, with the Ranger in the background.
- A process of one-on-one, pushing the (wasteful) cost of dipping and using local examples of long term non-dipping success stories, has a ripple effect on neighbours.

The unchallenged situation in the Western Division is that the “Groups” are self-motivating and self running.

Therefore it is critical that at an early stage in the groups' development, (if they have a vision or expectation of becoming a control/protected area) that all parties know the requirements and costs and avoid going down a wrong path.

The cost of shearing inspections in travel and time is becoming a deterrent. The saviour is obviously the Lice Presence Tests.

### ***Why Rangers (or equivalent in other states?)***

#### ***Advantages:***

- They have the knowledge and the ability to get through to the growers.
- They have a network in place.
- They will know most of the people and be able to communicate with them.

#### ***Disadvantages:***

- They may have a lot on their plate; OJD, footrot.
- They have a Board to answer to.
- Many of the Boards have older directors who are loath to change.
- Directors may have a lice problem themselves, therefore don't want the boat rocked.

There needs to be an incentive system for those who do the right thing, this in turn will bring about some peer pressure.

To eradicate lice an education campaign for the majority of growers is essential.

Many Growers don't know:

- the different chemical groups.
- where each fit into an eradication program.
- whether they are mixing them at the right strength.
- the capacity of the containers they are using.

The Western Division has the added problem of no money in wool (*medium/strong*) so loathe to spend money.

## Conclusion

Areas that have attempted to establish groups in the past and have lost momentum can now be reinvigorated using the new circumstances, some very positive, some threatening, all combining to make a very convincing argument for eradicating lice and not treating clean flocks.

While the feasibility of eradicating lice from all flocks was generally accepted the abandonment of treatment of clean flocks caused some anxious moments. Some properties may take a few years of no visible lice to give up the “insurance concept”

In the minds of many sheep owners, treatment for lice off-shears still equates with “good” sheep husbandry. This suggests there may be some difficulty in getting acceptance of ceasing to treat and may only come when it is clearly demonstrated over time, that the area is lice free, supported by neighbours and group members who do not treat.

The temptation to take a more overt role in the groups needs to be tempered. The chances of success are much higher if the group has clear ownership. Thus the ability/attitude of people running the action (coordinators) are very critical and must not be just nice figureheads.

The reality of the universal dwindling of available resources must be recognised. This has implications for ongoing maintenance of control/protected areas. It may require a rethink of the protocols for establishing such areas without weakening or jeopardise a State campaign and dictates strongly, the need for self supporting groups.

## Acknowledgments

<sup>a</sup>David Honybun, Footrot Ranger, Murray PLPR (03 5886 1203)

<sup>b</sup>Craig Ridley, Footrot Ranger, Condobolin RLPB (02 6895 2152)

<sup>c</sup>Bill Elliot,

Former Western District Representative, Standing Committee on Ectoparasite Control (08 80919467)