

## 8. WEANER MANAGEMENT

### Introduction

In many flocks, weaner sheep will be a key part of flock rebuilding strategies. Survival rates of 95 per cent from weaning until first year should be achieved in most flocks most years. Obviously, it is not practical to achieve this at any cost, but generally achieving high weaner survival is actually low cost.

Survival rates are not the only key issue. Ewe/weaners must have sufficient growth for the first joining by 18 months. Staple strength needs to be managed to minimise discounts on the finest, and often the most valuable component of the clip.

Managing weaners requires that a few basic principles are followed and it is relatively easy.

The purpose of this section is to address the key issues and in weaner management to provide a guide of the factors.

### Critical weights in summer

The most important concept for managing weaners is to get them to their 'critical' weight at the start of summer. They should be above this weight to have enough fat reserves to reduce deaths and have enough energy intake to grow and develop their immune system.

Body fat is a stored energy source in the weaner. When there is no body fat reserve, anything that causes temporary loss of appetite such as cold, wet weather will place weaners at extreme risk. A 20 kilograms weaner has only one kilogram of fat in reserve. At that liveweight, no weight loss can be tolerated. To ensure good survival rates, they will need to be gaining weight.

Once weaners exceed 23 kilograms, a small weight loss is less critical, provided they are in condition score 2 or more.

The problem with most mobs of weaners is that liveweights vary widely between the heaviest and lightest lambs. Very often, management decisions for the whole mob are based on what is happening to the tailenders. It is better to feed only those that need it, rather than the whole mob. For this reason, a system of drafting and differential management is recommended.

#### SECTION KEY MESSAGES

*The critical weight for Merino weaners is 23 kilograms, and you should aim to exceed this weight at the point of weaning.*

*Draft off weaners less than 23 kilograms, and run these separately, aiming to have them reach 23 kilograms as soon as possible.*

*Introduce milking ewes to weaner feed supplements 2 – 4 weeks prior to weaning, so that the ewe can train the weaner.*

*Wean at 12 weeks, and ensure good internal parasite control is achieved.*

*The most important concept for managing weaners is to get them to their 'critical' weight at the start of summer. They should be above this weight to have enough fat reserves to reduce deaths and have enough energy intake to grow and develop their immune system.*

Weaners less than 23 kilograms or below condition score 2 should be drafted off and run separately. This should be done at weaning, and these lighter weaners should be fed as much as they will eat to get them to 23 kilograms as quickly as possible. This can be done with standing lucerne, summer fodder crops or grain. Weaners over 23 kilograms should be managed to gain around 0.5-1.0 kg/month.

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Small liveweight changes which cannot be detected by eye can be critical, and for this reason, regularly weighing a sample of weaners is essential. The best way to monitor liveweight is to tag a sample mob, record their weights, and re-weigh at 4-6 week intervals. At least 30 sheep should be tagged. Numbered tags are preferred because they allow weight variations of individual sheep to be monitored.

In the more extensive pastoral zones the two critical factors for weaner management are:

- Paddock choice - to provide quality feed and to minimise the risk of grass seed, cork screw, etc.
- Identify and differentiate managing the tail of the mob early. Tail-end merino weaners tend to disappear without a trace. If there is any sort of tail in the mob it is best handled at weaning by drafting them off and managing them accordingly.
- To address critical weight over summer, first look backwards to train weaners while on the ewes and then wean at the optimum time.

## **Train lambs how to eat supplements**

How many times have graziers experienced the ultimate in frustration: light weaners needing grain supplements, but none of the mob eating grain when it is offered? This can be avoided by teaching lambs to eat supplements while still on their mothers.

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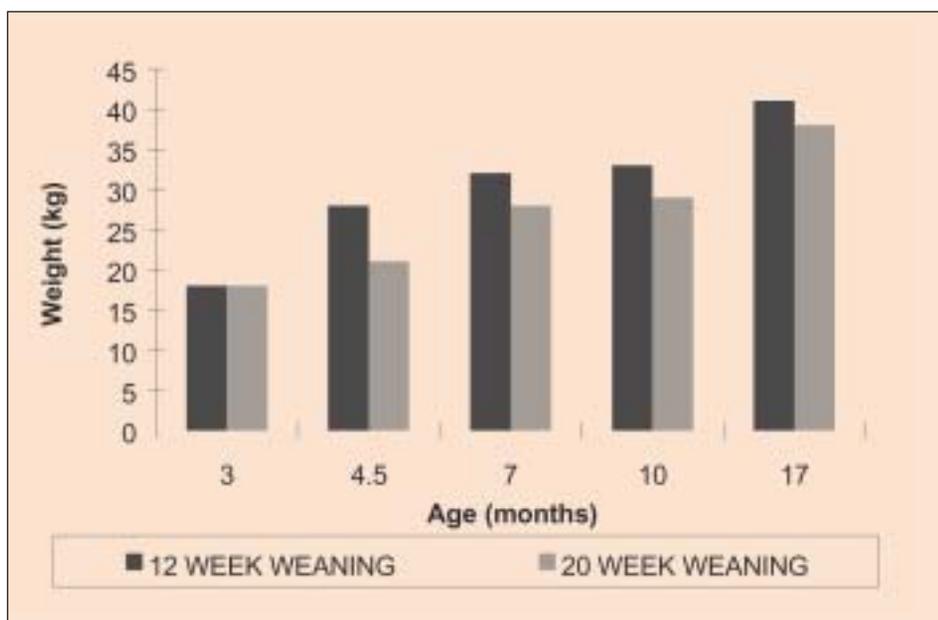
Feeding grain to ewes with adequate pasture may seem to be a waste, but the ewes will eat the grain, and in doing so will teach their lambs how to eat supplements. Introduce feed four times in the two weeks leading up to weaning. If this is done, weaners will eat the grain readily when they are re-introduced to the grain. This will apply, even if feeding occurs years later. Without this teaching process, lambs can take up to three weeks to accept supplements offered to them.

This training process tends to be specific for the grain fed while the lambs are on the ewes. Weaners trained using oats will only recognise oats and they will have to be retrained for wheat or barley. Therefore, it is essential that the grain to be used after weaning be issued for training purposes. Four feeds of one kilogram of grain per ewe per feed is all that is needed to train the lambs. If lupins are to be used at any stage, they should be included with the grain fed to the ewes and lambs.

### Time of weaning

Research in a number of different locations indicates that there are substantial advantages from weaning when lambs are 12 weeks old. The results from one experiment at Kybybolite Research Station are presented in Graph 8.1.

**Graph 8.1: Body weight of weaners weaned at two different weaning times**



Source: Graham Lean & Associates

In addition to the liveweight advantage, the early weaned lambs cut 0.3 kilograms more greasy wool at the lamb shearing and 0.5 kilograms more greasy wool as a hogget. The ewes from which the lambs were weaned cut 0.1 kilograms greasy more wool. Importantly, by 4.5 months of age, when in most cases the lamb was on dry summer pasture, the early weaned lambs were seven kilograms heavier than the later weaned lambs. At 28 kilograms they were well above critical weight. This was not the case for the later weaned lambs.

By 12 weeks of age, milk only provides about 5-10 per cent of the dietary needs of the lamb: pasture provides the rest. Research has shown that the lamb follows its mother and grazes wherever she has grazed. Therefore, the ewe eats the best of the feed and the lamb has to make do with second best while ever the lamb is left with the ewe. Therefore, by 12 weeks of age most of the dietary intake of an unweaned lamb is second best pasture.

By separating the lamb from the ewe, the lamb is able to graze the best of the feed itself. If it has been weaned onto a worm-safe paddock, greater growth rates and wool growth may be expected than by grazing with the ewe.

Lactation requires a large intake of energy by the ewe. By separating the ewe and lamb, the ewe can convert large amounts of spring pasture into bodyweight gain, so that she can join at higher bodyweight and achieve a higher lambing percentage the following winter.

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### **Weaner worm control**

Worms have a devastating effect on weaner profitability. A number of trials have demonstrated the cost of poor worm control. Drenching the lambs at weaning is nearly always warranted. Most of the lambs will be 9-12 weeks of age and they would have accumulated a worm burden likely to cause losses.

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Drenching and shifting to worm 'safe' paddocks is an important way to maximise productivity, while minimising the use of drenches. The system discussed previously of swapping sheep and cattle paddocks every six months, when combined with a drench has been shown to boost weaner sheep productivity by 23 per cent above other control schemes.

## Weaner nutrition

If weaners are not at above critical weights, they will need supplementary feed. The first limiting factor is energy. Usually, grains provide enough energy to allow growth in young weaner sheep. Most roughage, such as hay, does not always have enough energy to allow the weaner to grow at all. A minimum protein level of 12 per cent is required for fast growth, whereas only nine per cent protein is required to maintain liveweight.

All grains or roughages need to be tested for their feed value. They vary so much that it is not possible to guess how they will perform. The exception to this rule is lupin grain, which is usually very high in protein.

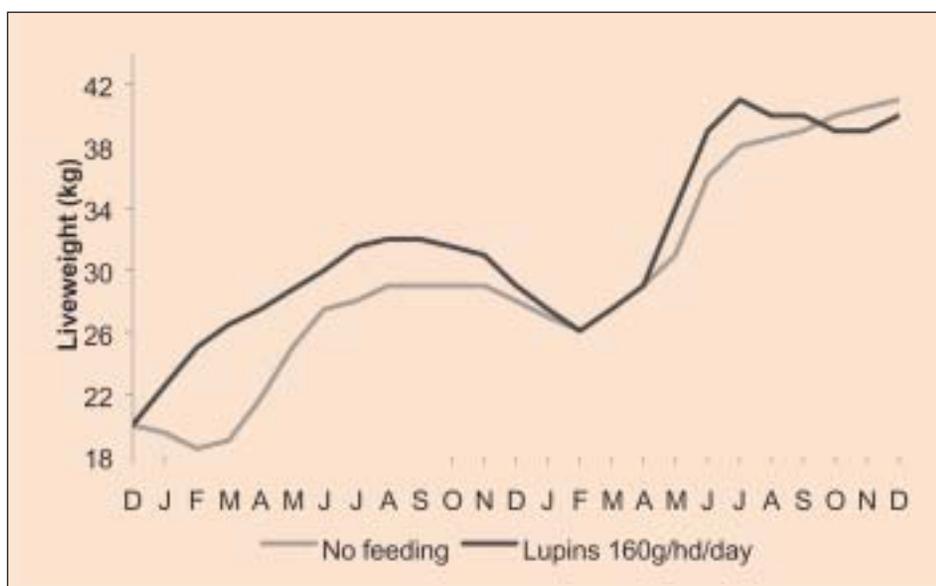
## Supplements

If there is no green feed available, a protein supplement such as lupins or lucerne hay is necessary for those sheep under 23 kilograms. Otherwise the diet will not have enough protein or energy. Lupins can be fed as either the complete ration or as 20 per cent of a cereal grain ration, whichever is cheapest and most convenient.

When feed conditions improve, there will be rapid growth in the weaner. This is known as 'compensatory growth'. This means that weaners fed well will be the same weight at the end of spring as those weaners that get a minimum of supplement (Graph 8.2). Therefore supplementary feeding for maximum weight gain is uneconomic. Expenditure on supplements should be as little as possible and targeted to the group of sheep that require it most, and at the right time.

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**Graph 8.2: Effect of feeding and compensatory gain on weaner sheep**



Source: Graham Lean & Associates

## What to feed

The choices are either silage or cereal grain (oats, barley, wheat, and triticale) and/or lupins if there is only dry feed available in the paddock. The high protein content of the lupins (28 per cent) means they can be fed at approximately half the rate of a cereal grain to achieve the same growth rates.

Lupin feeding is seldom necessary if the pasture contains a reasonable component of green feed. Therefore, if lupins are less than the price of cereals they will be cheaper per head per day while dry feed remains. They also present less risk of grain poisoning.

## How often to feed?

If there has been no feed training, daily trail feeding will be necessary until the entire mob is coming on to the feed. Within 2-3 weeks this can be reduced to twice weekly feeding. Feeding more frequently decreases the efficiency of grain and pasture utilisation because sheep substitute grain for pasture.

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Lupins can be broadcast over the paddock using a superphosphate spreader so that feeding only needs to be done every two weeks. Although most of the grain is consumed by the end of the first week, trials have demonstrated that weight variation is the same with weaners fed twice a week, once a week or once every two weeks. If the weaners have never seen lupins before, the initial broadcasting should be mainly around watering points and sheep camps where there are plenty of opportunities to find the grain. If sheep are slow to come onto lupins, then try feeding them spread on top of hay. Spreading lupins once every two weeks through a super spreader saves a lot of labour.

## How much to feed?

For those weaners 23 kilograms and less, lupins will need to be fed out at least 2.5 kg/head/week, depending on pasture quality. If feeding cereal grains, build up to 3.5 kg/head/week. As liveweights are monitored, feeding rates should be adjusted and mobs may need redrafting.

## Case Study - Weaner management

An August lambing flock (Figure 8.1) had a history of good weaning percentages (90 per cent or better) but then progressively lost lambs over their first summer/autumn. Total losses between lambing and weaning amounted to around 10 per cent in a good year and closer to 20 per cent when things didn't go well.

Given the smaller than normal flock following the drought, and high sheep prices, every weaner was worth a fair bit, particularly as the cost to get them through to weaning had already been incurred.

A reasonable target for weaner survival, from lambing to one year of age was 95 per cent. That meant 5-15% fewer weaner deaths, amounting to an extra 125 - 375 sheep at the end of the year. At \$40 each that adds up to \$5,000 - \$15,000 extra value in livestock.

Until now, weaner management had been pretty casual - wean them, put them on the best feed and hope the wheels don't fall off. Usually there was no single reason for the losses; they tended to occur gradually throughout the year and there always seemed to be a tail of 5-10 per cent in the mob - the few you always see lagging at the back of the mob whenever you get them in.

A review of the whole weaner management program showed up a few key areas:

- The tail of the mob was present at weaning - the later lambs and the twins, so these were starting well behind, weighing 15-20 kilograms, a lot less than the target of 23 kilograms.
- Feeding was only done when necessary but by the time weaners were brought onto feed (a three to four week process), the tail in the mob had become larger and no doubt a few more had died.
- Worm control was based on a drench when they looked like they needed it, apart from weaning when they always received a drench.

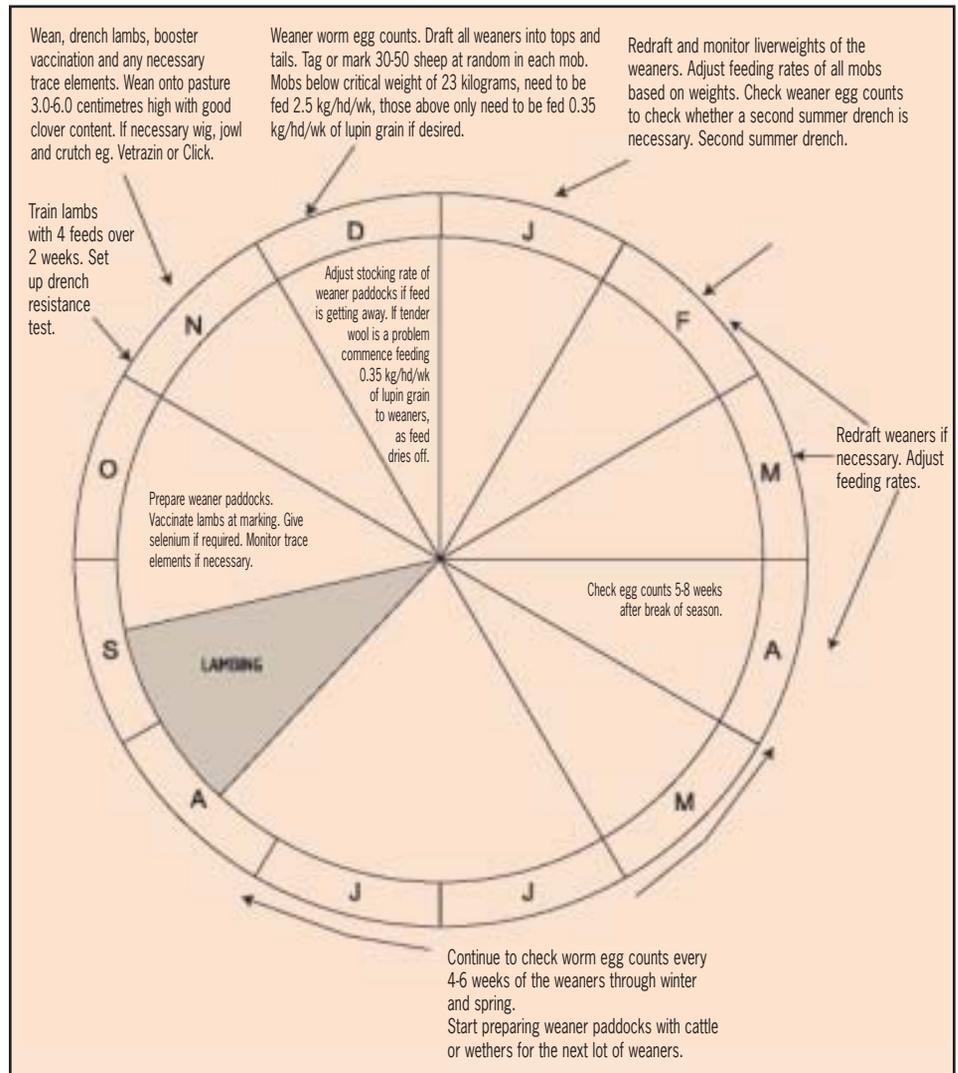
To address these issues, a new weaner management system was drawn up to try to cover all important issues.

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**Figure 8.1: Weaner management for August lambing**

The three factors to get right are:

1. Feed the lambs while still on the ewes to imprint the feeding.
2. Draft the tail from the mob at weaning and give them preference on paddocks.
3. Improve worm control by drenching at weaning, but select the drench brand based on a worm - resistant test to ensure that it is effective.



Of all the strategies overleaf, there were three key factors to get right. These were:

1. Feed the lambs while still on the ewes to imprint the feeding. This will get lambs onto feed much easier. It might look like a waste to feed ewes in the middle of spring, but if it makes it easier later, then it is worth a try.
2. Draft the tail from the mob at weaning and give them preference on paddocks that have better quality pasture, particularly green feed. Start supplementing mid-spring to get them up to 23 kilograms. Keep drafting the tail from the main mob each time they are handled.

3. Improve worm control by drenching at weaning but select the drench brand on a resistance test to ensure it is effective. Then monitor worm burdens regularly (\$20/test) to determine whether or not additional drenches are required. Providing low risk pastures from May onwards would be part of this strategy.

There were other minor factors which could be considered but these addressed in advance the main weaknesses in the program. At the start, it is best to concentrate on those and not get distracted by the other factors which, for this flock, may not have been a problem in the first place.

**Figure 8.2: Weaner management program for May lambing**

