Improving lamb profits from Merino ewes

by John Milton, UNIVERSITY OF WESTERN AUSTRALIA

Producing late winter to spring born lambs in temperate Australia that are weaned and finished for sale as carry-over stock can be profitable.

For profitable prime lamb production it is essential to maximise returns when lambs are marketed. The price for prime lambs is often high during November and December particularly in Western Australia when these late lambs are ready for slaughter as opposed to the common practice of selling spring sucker lambs from August to October when prices can be depressed.

Apart from being the favoured prime lamb mother in WA, accounting for 95 per cent of the prime lambs being either first-cross or Merinos, the Merino ewe has the often under-rated attribute that she can be induced to cycle and mate from about October to December which is earlier than the normal breeding season of late January to July.

These early matings are achieved by the ‘ram effect’ of using teasers (wethers treated with testosterone). The ram effect can shorten joining to 30 days and lambing will be concentrated to well-defined periods during autumn. This provides an opportunity to lift lambing percentages by strategically supplementing at joining and again just before lambing.

Market demands

To market prime lambs producers need to supply the consumer with the product they want — lamb meat that provides a pleasant eating experience.

Modern consumers want safe meat from large, lean, well-muscled lambs.

Carcass requirements in WA are:

- More than 16.1 kilograms.
- Not overfat — fat score 2-3 and 6-15 millimetres at GR site.
- Free of grass seeds (skins), bruises, dog bites and vaccination marks (carcass blemish).

The meat must be:

- Of desirable eating quality, light in colour, tender, juicy and tasty. Eating quality is affected by stress so consign lambs direct to slaughter, minimise transport stress and control working dogs around sheep.
- Microbiologically safe. A void faeces on fleeces; scour from green feed, worms, feedlots or grazing crops; bung-hole crutch to clean-up dogs and ‘empty out’ lambs before trucking.
- Free of chemical contaminants. Adhere to withholding periods for drenches, dips, vaccines and antibiotics.

Ensure lambs meet market specifications before they leave the farm by weighing and fat scoring lambs regularly. In particular watch female lambs as they tend to fatten at a lighter weight. A sess carcass weights from the liveweight and dressing percentage as it can be affected by feed quality, length of wool, time off feed and water, degree of fatness and transport stress.

Producing profitable lambs

It is reasonable to expect good framed well-managed Merino ewes to produce 100% prime lambs and respectable wool cuts.

The main profit driver in prime lamb production is the kilograms of lambs slaughtered of desirable carcass characteristics per hectare.

There is no place for dry ewes and culling them can increase lambing percentages. A pregnant ewe that loses her lambs further reduces profits since she produces less wool and eats more during pregnancy than a dry ewe. The loss will be even greater if the lamb dies after the ewe has lactated for some time.

Most lamb losses occur at birth, sometimes due to foxes. Fox control is essential for good lambing percentages.

A University of Western Australia study on Merino ewes selected for calm or nervous temperament at weaning found ewe temperament influenced maternal behaviour and lamb survival.

The lambs from the calm flock were also heavier at weaning and the ewe hoggets from the calm flock produced more wool of similar quality to those in the nervous flock. Since temperament may also have important implications for meat quality further research is being carried out at the University of Western Australia.

Studies carried out by the Agriculture WA have shown strategies are available to lift the reproduction rate of Merino ewes.

For example, if the condition score of ewes is maintained throughout pregnancy at about 3-3.5 instead of 2-2.5, it can be expected that:

- The ewe flock will produce 10-20% more lambs at lamb marking.
- Lambs will reach market weights about two weeks earlier.
- Ewes can produce an extra 0.5kg of clean wool that is more sound but probably broader.

For high reproduction rates to further improve profits match the ewe’s period of highest nutrient demand (late pregnancy and lactation) with peaks in feed supply. This can be achieved with a late winter-spring lambing and profits should rise as the ewes will require less supplementary feed during late autumn and winter if conditions are tough.

Merino ewes can be used to produce out of season prime lambs. Apart from a Merino ewe’s ability to produce prime lambs they can be induced to mate from October to December, outside the normal breeding season.

GLANCE

- Prime lamb producers need to supply the consumer with safe meat from large, lean, well-muscled lambs.
- Merinos are well-placed in WA to meet the market including the ability to produce lambs during autumn.
- Out of season lambs can achieve higher prices both for domestic and overseas markets.
Consumers are demanding safe meat from large, lean and well-muscled lambs. Merino ewes are well-placed to supply the market with prime lambs.

A late winter-spring lambing means a late summer mating which coincides with peak fertility of the Merino ewe. The ewes can be mated on crop stubbles but to ensure high fertility supplementary winter cereal stubbles especially after most of the grain has been eaten.

Gradually introduce ewes to cereal and grain legume stubbles other than lupins to avoid digestive upsets.

With prime lamb production more grain is likely to be consumed so ensure both ewes and lambs are vaccinated against clostridial diseases such as pulpy kidney.

In WA for example, most weaned first-cross lambs are sold from December to April after being finished on special standing crops, grain stubbles or in feedlots. But due to their slower growth rate Merino lambs are well-suited to fill the shortage of prime lambs during autumn and early winter.

Quality Merino lambs are required at this time if the industry is to grow by supplying a consistent quality product all year-round.

To reliably turn-off Merino lambs during autumn and early winter, special provisions are required to ensure their feed demands can be met. Feedstuffs may include quality conserved fodders such as silage or hay with supplements of grain or specialist feedlot rations.

Management practices

Feed options are being investigated and management practices developed to overcome the adverse effects of the weather to ensure Merino lambs can be profitably finished for marketing during autumn and early winter.

To sell a lamb with a carcass weight more than 16kg at less than 12 months an animal’s growth rate needs to be more than 100 grams per day. To achieve this the lamb must not suffer a set-back especially a spring-born lamb that may only grow at a maximum rate while it is on green feed.

It is crucial the lamb does not experience a set-back at weaning and continues to grow throughout summer and autumn. To avoid a set-back at weaning especially if the pasture is declining in nutritive value feed a supplement to supply both soluble protein and energy as these will be the major nutrients deficient in the senescent pasture.

If the dry pasture is rained on, major minerals may be leached and important trace elements can be diluted in the bulk of dry feed. A complete mineral supplement may need to be fed.

To avoid weaners losing condition while learning to eat a supplement train them to eat the supplement with their mothers before weaning.

Unless paddocks are free of grass seeds shear lambs to avoid contamination and discounts when the lambs are sold.

With more farms under crop there will be a large supply of crop stubbles available for summer and autumn feed. Controlled use of these stubbles with supplements can improve weaner growth for finishing during summer and autumn.

Prime wool

There are concerns that well-fed Merino weaners will lead to micron blow-out. If this occurs cull the weaners with micron blow-out as they are less likely to be genetically fine.

Studies by the Wool Co-operative Research Centre have shown weaners of high bodyweight at the start of summer produce more wool of higher staple strength and only slightly higher fibre diameter than weaners of lower bodyweights. In addition, weaners that lose bodyweight, especially during autumn, have weaker wool than those that maintain or gain weight.

At current wool prices a higher early weight gain is more cost-effective than supplementary feeding to maintain weaner weights. Better nutrition after spring will help maintain a uniform diameter along the fibre and this may also help minimise a reduction in staple strength.

There are a number of win-win outcomes for producing both quality meat and wool by feeding Merino weaners well after the green feed has disappeared.

But supplementary feeding must be cost-effective, for example the supplement must supply those nutrients that limit production through a deficiency in a feed such as a dry pasture, crop stubble or a conserved forage.

Selecting rams

Whether breeding Merino or first-cross prime lambs the sires need to produce lambs that are fast growing, well-framed, well-muscled and relatively lean.

Leanness is less of a problem with Merino prime lambs than first and second cross lambs.

Considerable progress has been made through Lambplan and Central Progeny Testing to help identify terminal meat sires that produce large, lean, well-muscled and fast-growing lambs.

Most prime lamb producers opt to produce spring first-cross sucker lambs to be marketed from August to October. But prices can be depressed due to the large numbers sold at this time.

Profits may be even further reduced if the effective break-of-season rains are late and the ewes need to be supplemented during late pregnancy and early lactation.

First-cross sucker lambs

Studies in WA show that feeding lupins just before lambing doubles colostrum production and increases milk production without an increase in lamb birthweights.

In early sucker lamb production this can reduce lamb mortalities by ensuring a strong maternal bond, increasing the lamb’s intake of immunoglobulins and improving lamb growth from the extra milk produced.

The extra expense to feed lupins and the cost to supplementary feed ewes during autumn can often be compensated in WA by the higher prices for early sucker lambs.

Early sucker lamb profitability will be sensitive to when the break-of-season rains occur as this determines how far into lactation the ewes will need to be supplemented.

Risks are reduced if quality conserved fodders are available with grain for cost-effective supplementary feeding.

For information contact John Milton on phone (08) 9242 5876, fax (08) 9444 5574.