

Early weaning and feedlotting Merino lambs boosts ewe survival at Bollon

- Bob and Amy Brown early weaned 1300 lambs into an on-farm feedlot for eight weeks.
- Benefits of early weaning included better survival rate of ewes in drought conditions and time to recover before joining.
- Feeding lambs on-farm prevented significant drought related losses that would have been likely if the lambs had been left in the paddock.
- The lambs are now set for life and will be more fertile and have better staple length.

Background

During the drought in December 2013 Bob and Amy Brown made the decision to early wean their Merino lambs as young as five weeks old. They built a feedlot on their property and fed 1300 lambs for eight weeks until February 2014.

“Due to the drought we had few options, and in hindsight we know if the lambs hadn’t been early weaned into the feedlot most of them would have died,” Mr Brown said.

“We made the decision after attending Leading Sheep’s John Milton workshop ‘Nutritional Management of Merino’s for Optimum Reproduction’ in Bollon in August 2013.

“The early weaning of lambs was a new strategy of us. We adopted it so we could maintain sheep numbers if the season broke and wouldn’t need to buy in replacement stock at high prices.”

Their property 12,000-hectare property ‘Heather’ is located near Bollon in South West Queensland. It features a mix of black soils with native grasses and red buffel grass country. The property runs Merino sheep for breeding and wool production, plus a Charbray breeding herd.

Due to the current drought Bob and Amy have decreased their Merino ewe numbers from 6000 to 3000.

Research



The lambs in the feedlot

Bob and Amy considered four options for their lambs: do nothing; sell the lambs at a young age; send them to a commercial feedlot; or wean them and feed them on-farm.

The option to do nothing was likely to have resulted in nearly all the lambs being lost. If 80 per cent of the lambs died at an average value of \$50 per head this would have been a loss of \$52,000.

To sell them at a young age would have only resulted in a sale price of \$15 per lamb at the time - six months later the same commodity was making



\$80 per head. This option would have cost \$65 per head in buying in replacement stock at high prices. Even at an average sale price of \$50 per head this still would have been a loss of \$35 per head or a total loss of \$45,500.

Sending the lambs to a commercial feedlot was just not an option at the time, with all feedlots full to total capacity. Even if space was available, the move would involve trucking costs and a commercial feedlot could not give the younger lambs the specialist care they required.

Early weaning was considered the best financial option and also the best decision for future production. The cost of early weaning the lambs on the feedlot for eight weeks was \$8.60 per head in total, including feedlot set up, feed and vaccinations. The lambs were released in February 2014 back into the paddock because there had been a break in the season. The wether lamb portion was then sold in May 2014 for \$70.50 per head.

The feedlot was set up in existing sheep yards. Water was installed using PVC pipes with floats, feed troughs were made out of poly belt screwed to logs and hay containment was made by bending reinforcement mesh to the shape of the hay bales. Lick was distributed in 20 litre drums with the tops cut out.

The Feedlot



The waters and more feed troughs

The ration was designed for the Browns by consultant John Milton. It wasn't intended to fatten the lambs, but only to grow them out. They were fed barley straw hay ad lib, sheep lick mixed with soya bean meal, and pellets. Pellets were Riverina New England Starter Pellets and the lick was custom made from Stock Lick in Roma.

At the outset each pen was fed a small portion of good quality lucerne hay to encourage the lambs onto the feed. A small portion of lucerne chaff was then sprinkled over the top of the pellets to entice the lambs to eat the pellets.



Temporary structure to put shade cloth up on

"This worked well because the lambs picked up on eating pellets straight away which is generally where people have trouble," Mr Brown said.

"Plenty of trough space was also available with long troughs side by side. The lambs were already familiar with the lick as it was fed when they were on their mothers in the paddock.

"All up we spent approximately one and a half hours each day looking after the lambs."



Costs

The feedlot cost a total of \$3,000 to set up, covering materials including:

- Shade cloth
- Steel posts
- PVC
- Floats, pipe and pipe fittings
- Poly belt and text screws
- Reinforcing mesh

Feed and treatments were other costs incurred, which included:

- Lamb pellets - Riverina New England Starter Pellets
- Soya Bean meal
- Sheep lick - custom made from Stock Lick in Roma
- Barley straw hay
- Lucerne chaff (only fed for the first 2 weeks)
- Lucerne hay (only fed for the first week)
- Drench
- Vitamin A,D & E injection
- 6 in 1 vaccination



The feed troughs

The feed equated to 60 cents per head per week and drenches and vaccine amounted to \$1.50 per head.

The total cost of feed for the lambs was \$6240, plus the set up costs of \$3000 and drench and vaccine costs of \$1950.

The total cost for feed, setting up, drench and vaccine was \$11,180 for 1,300 lambs, or \$8.60 per lamb.

Was it good for business?

The lambs came out of the feedlot with good weight for age and their stomachs were developed to handle roughage in the paddock.

These lambs were then set for life – they were expected to be more fertile and have better staple length than if they hadn't been fed. In addition, supplementary feeding will be easy in the future because flock is now trained in the process.

To put this in perspective, the lambs from the year before were not fed and did it very tough in drought conditions. At the moment they average 35kg, at 12 months older than the feedlot lambs. The lambs that were in the feedlot weigh 36kg so are 12 months ahead.

Early weaning of the lambs also had big benefits for the ewes, including better survival rates any estimates on this in drought conditions and plenty of time to recover for joining.



“The program was very successful and will be done again if required,” Mr Brown said.

“In hindsight, we would have given the lambs their vitamin A, D & E injection when they first went in rather than halfway through their time in the feedlot, which may have prevented some eye problems later on.

Lack of vitamin A is directly related to pink eye, which went through all the lambs. Lambs with sore eyes were treated with pink eye spray once a day. It was successful as they all recovered.

“Weaker lambs were drafted out all the time and put in a pen with no more than 150 lambs where there was less competition.

“An undercover sick pen was also established which resulted in most lambs that were put in there surviving.

“No more than 300 lambs were in one pen. There was an approximately one per cent death rate which is normal in intensive feedlotting.”

Conclusion

Early weaning of lambs will be considered in the future to keep ewes in better condition for joining and also to give the lambs a better start in life for better productivity.

“We achieved positive results during a drought when there were limited options. Successful early weaning of lambs in Queensland is rare but with good nutritional advice it’s possible for producers looking for other options,” Mr Brown said.

Top Tips

Additional tips for anyone considering early weaning and feedlotting:

- A thin layer of dust will settle on the water troughs and deter lambs from drinking. It is important to clean out the water troughs regularly. Also the sound of running water as the troughs are filling up encourages lambs to drink. The more they drink, the more they eat.
- Draft the weaker lambs away from the bigger stronger ones and put them in their own pen together. This way they are less likely to be pushed over at the feed troughs.
- Be very careful with feeding soya bean meal as it can kill lambs very quickly. It must be introduced very slowly with no sudden changes made to the lick to soya bean meal ration.
- Most deaths will during the first week the lambs are in the feedlot. It is important to feed good quality lucerne hay and chaff during this time to encourage the lambs onto feed as soon as possible. We also found that giving them a vitamin A, D & E injection helped to pick them up, plus prevent eye problems caused from the dust and intensive feedlot situation.
- A blower vac makes light work of cleaning out the troughs before feeding time.
- It is a must to vaccinate them with 6-in-1, especially for pulpy kidney. It is preferable to do this before they go into the feedlot, as pulpy kidney can be a major cause of deaths.