

Containment feeding improves pasture recovery, reduces labor and has shown increased lambing percentage .

LOCATION: Keyneton

ANNUAL RAINFALL: 400-500 mm

FARM SIZE: 2000 HA

ENTERPRISES: Self-replacing Merino flock with some ewes mated to Border Leicester rams

SOIL TYPE: sandy clay loam soils

Keyneton Station, located on the edge of Keyneton in the Barossa Valley, are a major site for the MLA Producer demonstration sites (PDS) containment ewe project. Georgie Keynes and Toby Rosenzweig, together with Georgie's parents Joe and Sally Keynes began containment feeding with the aim of protecting and maintaining their ground cover over summer. Containment also reduced labour as stock were all in one location to check and allows them to be held in one location with a stable water source.

Keyneton Station run 3000 Merino ewes on 2000 Ha. Hill grazing on the property consists of Phalaris, clover and annual native grasses plus 200Ha of sown pasture.

Enterprise

The largest proportion are mated to Merinos and the rest to Border Leicesters. Their enterprise focuses on wool, meat, and first cross ewe lamb production. Merinos are plain-bodied style sheep with mature ewes averaging 65 kg and cutting approximately 6kg of 19-micron wool with a 12 monthly shearing.

Containment Feeding decision

Ground cover maintenance is the main priority at Keyneton, looking after the native pastures which cover approximately half of the property. Containment feeding reduces the nutritional needs of ewes (due to less walking), retains cover on paddocks, protects perennial pastures and allows feed to 'get away' in autumn. Secondly the property is reliant on surface water which became difficult to manage when dams dried up in drought periods. Bringing stock into containment yards with reliable water solved a number of stock management issues during the summer months. Keyneton also wanted to improve lambing percentage by providing ideal nutrition in containment and optimum lambing conditions with feed on offer available in lambing paddocks upon release.

Containment Area

Ewes are teased with vasectomised rams late December with 100% of the ewes contained from January 1st, where they are also joined for a 5-week period. Ewes are scanned in late March and drafted into fat and skinny (<2.7 condition score), twin and single pregnancies. Pregnancy scanning has been integral to the business for over 10 years. Ewes bearing multiples are then given preferential treatment during gestation and lambing.

7 pens were built to accommodate up to 500 ewes at 5m² until scanning when the mob sizes are reduced to 250 - 300 ewes per pen. Water troughing is located at one end and lick feeders at the other.

Each year a mob of 500 ewes are sent out for agistment for 6 weeks in the mid north on bean stubbles from January to mid-February, upon return they are contained also.

Containment ration and cost

In the past the containment ration has consisted of predominantly straw ad-lib with barley in self-feeders, adjusted to deliver a calculated quantity to meet energy requirements of ewes.

Last season half of the mob were fed a hay-based ration with barley in a self-feeder when required. The other half commenced containment on straw and barley but were then swapped to a full feed ewe and lamb pellet - as barley price increased this became a more economical option.



Georgie Keynes with some of the ewes in containment

Mineral requirements were met by ewes being given ad-lib access to Rod's Hi Cal loose lick from January to Mid-May. During the last 6 weeks of pregnancy twin bearing ewes were given ad-lib access to Rod's Ultra Mag loose lick to meet Magnesium requirements coming into lambing.

Lambing Paddocks

Ewes are moved out of containment into a 'holding paddock' approximately 3 weeks prior to lambing. Georgie explained that this allowed time for them to adjust to the pasture before lambing and reduces stress. Just prior to lambing they are moving into the actual lambing paddocks which provide the best feed and shelter. This adjustment process has seen a reduction in cases of prolapse, particularly in the cross bred ewes. First lambs are seen on June 1st.

Mob size is generally 200 ewes for multiples and approximately 350 ewes per mob for singles, though Georgie would prefer smaller paddocks and mobs.

Lambing results in 2022 were good with twin mobs averaging 160% lambs marked, Singles 88% lambs marked and a total average of 120% to ewes joined. Over the last 10 years Keyneton station have made a substantial improvement in overall lambing percentage with the use of containment and improved nutrition and management.

Ewe mortality

In 2021 Keyneton Station recorded a 4% death rate which was mostly put down to hypocalcaemia particularly in twin bearing ewes. In 2022 the use of a balanced ration (full feed pellet) and addition access to minerals assisted to reduce the overall death rate down to 2%.

Ease of management

As mentioned earlier containment significantly reduces labour cost for this enterprise due to the size and terrain of their property and their dependence on surface water sources.

The investment in the containment infrastructure is easily justified by the benefits seen from protecting the precious ground cover over the summer and autumn months and up until lambing. Georgie commented that “Allowing ewes to continue to graze over this time would result in pastures with unsuitable feed values prior to and during lambing for twin bearing ewes.”

The pasture recovery seen at Keyneton Station is excellent and Georgie commented on the significant tree germination across the property. The containment infrastructure also provides suitable pens for lambs to be lot-fed too.

Disadvantages were few although ewes getting too fat on feeders were an issue that required close monitoring. Keyneton did experience some ewe losses which were investigated and attributed to calcium deficiency which was overcome by an adjustment to the feed and supplement ration.

Georgie finds that putting sheep into containment earlier allows them to be released earlier, reducing problems in late pregnancy. Scanning and tailored ewe nutrition aids lamb survival and overall productivity.

Georgie commented that “It’s imperative to test feed and ensure that your rations are correct. Take the time to do the figures to ensure that you are maintaining your breeding mob.”

The future

Keyneton station has been using containment feeding as part of their sheep management for some time already and plans to continue to do so into the future.

In general, the containment pens are suitable for purpose although they would like to add a raceway which would make moving sheep in and out of containment easier and quicker.