

## **Unique feeder design saving time and money**

A modified feeder design has taken some of the hard work out of feeding cotton seed to ewes for Nindigully producer Jeff Betts.

Mr Betts had his feeder on show at a recent Leading Sheep Lamb Finishing day held in Nindigully to share the idea with other producers looking for innovative ways to save money and reduce labour.

Charleville-based Department of Agriculture, Fisheries and Forestry extension officer Alex Stirton said feeding during lambing in drier conditions was critical to improving ewe condition and Jeff Bett's design would help with problems like feed waste, spoilage and mis-mothering.

"Mis-mothering often occurs when trailing out supplements on the ground," Mr Stirton said. "Jeff's simple design reduces this problem as ewes and lambs access feed at their own pace and when they want."

Mr Betts built the feeder from basic materials to solve the labour problems associated with regular feeding of cotton seed, as well as the problems of managing shy feeders during trail-feeding.

Jeff and Wendy Betts run 6000 ewes on their Nindigully property 'Chelmer' and have been using the feeder for lambing ewes during dry times since the 1990's.

"With this system, the cotton seed is in the paddock 24 hours a day," Mr Betts said. "I use a tip truck to put a week to 10 days' worth of cotton seed into the feeder at a time. This makes it significantly less labour-intensive than shoveling feed out by hand every second day.

"I found that when I hand-fed out from a vehicle, there were major mis-mothering problems when ewes left their lambs to feed. There were also problems with the bullies taking more than their fair share and leaving the shy feeders with too little," he said.

The feeder is a six-sided weld mesh pen sitting on rubber matting, with two predominant sides where the sheep can access the feed.

The tin around the bottom of the frame stops most of the lambs from getting inside. It also serves to push the seed to the center as the animals slowly force the sides inwards as they eat down the feed.

"The design means that neither ewes nor the lambs can get inside the feeder and trample and spoil the cottonseed, which means very little to no waste," he said.

"I aim to refill the feeder before it is completely empty to prevent the ewes getting hungry and gorging on the fresh feed. I set it up near water, so when the sheep camp is not far to go for a feed.

“It does take some time for the mob to get used to the new way of ad-lib feeding, but with time they learn to eat their ration, which is 400-500 grams per day, and then walk away to feed elsewhere.”

Mr Betts said that since adopting the feeding method, the mobs have become more relaxed.

“They don’t have the stress of running after a feed-vehicle in the paddock every second day, and competing for feed fed out in a trail,” he said. “They can eat at their own pace and this solves the shy feeder problem.

“We used motion sensor cameras initially and found shy ewes feeding throughout the night at their own pace and without the pressure from bullies.”

Mr Betts uses the cottonseed as a supplement for lambing ewes in dry times. He starts feeding ewes about a month before lambing, and then through to weaning.

“All the ewes are scanned to ensure only pregnant ewes are being fed,” he said.

“I haven’t tried it with other feeds, but I image it would work very well with hay as it would prevent trampling and spoilage.”

- For more information about the feeder, contact DAFF extension officer Alex Stirton on 0428 109 620 or [alex.stirton@daff.qld.gov.au](mailto:alex.stirton@daff.qld.gov.au)
- General information about supplementary feeding and managing sheep in drought can be found on the Queensland Government Business and Industry Portal <http://www.business.qld.gov.au/industry/agriculture/animal-management/sheep/health-welfare>

## **COTTON SEED FEEDER CONSTRUCTION SUMMARY**

### **CONSTRUCTION**

Ground needs to be level, free of grass butts and rocks.

### **FRAME**

Use thin 25mm boxing. Horizontal boxing butts onto inside of vertical to allow for welding of hinges. Swing frame on 12mm gate hinges.

### **MESH**

Use 8 inch square reinforcing mesh. One sheet can be cut into 4 panels. Place mesh on the outside of the frame (on sheep side).

### **TIN**

Tin is on the inside of the frame (on cottonseed side). Cut height so the tin fills in 2 squares of mesh.

## MATTING

As with any other feeder, the mats stop hooves wearing the ground away. I used second hand conveyor belting placed 600mm apart under the cottonseed. The panels slide across the mat with consumption.

## APPROXIMATE MATERIAL COST

- \$50 per panel using seconds where possible. 6 panels per feed station. \$300
- *Optional* 2 sheets of matting 3000mm x 1200mm @ \$25 / m. \$150

## ADVANTAGES

- Sheep don't follow feed vehicle ( limits mis-mothering)
- Up to two weeks supply per fill-up
- Ease of filling - mechanical fill-up with no shovelling
- Access 24/7 -shy feeders get a go
- Feeder material cost approximately \$300 plus labour per site
- Pigs and emus don't go near feeder
- Minimal waste
- May work with hay
- Simple manufacture on farm

## DISADVANTAGES

- Perhaps lambs aren't being trained to feed
- Once we had two heads jammed in one square
- Only works with ad-lib feeding, no control over gorging, (the animals do seem to self-limit to approximately 400-500g maximum/day/lactating ewe with cottonseed.)
- Would not work with cereals



**Filling station**



**Station full**



**Partially eaten, frames slide in on matting.**





Totally eaten



Placement of mesh & tin



**Hinges**