## **Feed for Reproductive Performance**

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## **Key Points**

- Family farm running a sheep/cropping mix on Yorke Peninsula
- Achieving high reproductive rates in self-replacing Poll Merinos over all ages
- Ewe hogget seconds mated to White Suffolks for Woolworths lamb market
- Purchases the best possible Orrie Cowie sires to breed their own Poll Merino rams
- · Maintaining consistent high quality feed and animal health regime

"You've got to feed your livestock if you want to maximise their genetic potential," says Curramulka producer David Reade.

This may be stating the obvious, but for David and his family it is the most important component of their management plan that has seen them achieve high production and reproduction levels; seemingly better than many others in the district.

David and wife Pam, along with their son Gavin and his wife Emma farm 790 hectares at their Curramulka home property of "Floraville", a further 790 hectares 20km west of Warooka in the Corny Point area, plus leasing 690 hectares near Pt Victoria. They run a cropping/sheep enterprise mix on their limestone base country with 900ha sown to crops each year. Two thirds of the lease block is cropped, plus half of the 300 arable hectares on their Corny Point block. The balance of the cropping is carried out on "Floraville".

Their cropping rotation is one year in, one year out, which preserves the natural legume pasture base of species such as Jemalong and Barrel medic.

"We spray out and direct drill the crops. Any more frequent cropping rotation depletes the medics too much," David said.

Maintaining their pastures is very important to the Reade family. Firstly quality pastures are the key to their successful livestock enterprise, and secondly the natural nitrogen fixation is a far cheaper and more effective way of increasing crop yields than spraying.

Their livestock enterprise is a self-replacing Poll Merino flock producing high quality wool and prime lambs. They seek top end genetics and by ensuring the health and nutrition levels they receive is high quality and consistent, they maximise the production and income from their sheep.

They run 1240 Poll Merino ewes, with two thirds mated to Poll Merino rams and one third mated to White Suffolk rams. The Poll Merino and White Suffolk rams are sourced from Dennis and Heather Dalla's Orrie Cowie Poll Merino stud and their Redwood White Suffolk stud. They also run 340 Poll Merino wethers, mainly on the harsher Corny Point block, plus 300 replacement ewe hoggets and 220 wether hoggets.

Their reproduction rates are outstanding, as demonstrated by this year's results of 105% from the Poll Merino matings and 116% from the crossbred mating, significantly higher than the district average. Their Poll Merinos ranged from 100% for the maidens up to 113%.

They mate their prime lamb ewes on 1<sup>st</sup> November and the self-replacing Poll Merinos on 15<sup>th</sup> November each year.

"We mate then for several reasons. If we were to lamb later it would result in maximum sheep numbers in summer when feed reserves are rapidly dwindling. Also it allows us to market our prime lambs in August when prices are higher," David said.

However these good reproductive rates are not explained by that mating date, as ewes are inherently more fertile with late summer and early autumn matings. The success the Reade family achieves is due to their planned and rigidly adhered to management program.

Firstly they ensure the ewes and rams are kept well apart in the months leading up to mating. The ewes are kept in good condition throughout, but on a rising plain leading up to mating, which is easier to achieve in late spring.

Teasers are introduced for a fortnight before ram introduction and the rams are boosted with lupins for eight weeks prior to introduction.

As a result, the ewes cycle straight away and a bulk of their lambs drop in the first two weeks of lambing. This is a big advantage, especially with the crossbred mating. The Reades sell to Woolworths, aiming at an average 22kg carcase weight. With assistance from livestock consultant Trevor Cleland, they are able to get a big lift of their prime lambs in the first draft for August marketing.

A wheat stubble paddock is selected each year and specially prepared for the weaned lambs. It is top dressed with grazing oats, this year the new "Outback" variety being used and at this stage it is looking exceptionally good.

The lambs when weaned are given Cydectin Weanerguard (drench and Glanvac combined), plus cobalt and selenium pellets to compensate for these mineral deficiencies in the soils. They are also given 5mls of vitamins A and E in a specially prepared mix. At two years of age all the ewes are also given a copper bullet.

With the assistance of Orrie Cowie principal Dennis Dalla, the weaners are classed. The Poll Merino ewe hoggets classed out of the self-replacing flock go to the prime lamb flock, while surplus wether lambs are marketed with the prime lambs.

The Merino wethers are sold on-hooks at 3.5 years with the last lot sold achieving close to \$120/head.

The adult sheep are shorn at the end of August and into the first week of September while the lambs are shorn in the first week of October. With the area wool bale brand of Mt Rat, the Reade family regularly receive top end market prices, cutting an average of nine to ten kilograms greasy and selling for around 850 cents/kg last year.

The progress of the flock's improvement has been significant in the last decade or so.

"Originally we were only getting around 63% yield with a lot of grease on the tip. As this was removed we got dryer wools with dust penetration, especially on our southern block, but now the wools we are getting through the Orrie Cowie genetics have the right lustre and wax ratio and we are averaging yields around 67 to 68% and up to 72%. This allows us to put 7.5 to 8kg of 'clean wool' in the bale per sheep," David said.

He said the flock had come from 23 to 23.5 micron average in their adult sheep down to 21 microns, while the hoggets are now averaging 19.5 microns.

These results are achieved through the selection of the best available Orrie Cowie Poll Merino rams they can get. Historically the Reade family found they were always having to compete against stud breeders for top rams and were consistently missing out on their preferences. So when the stud's founder Vic Murdoch retired, and in the restructure half the flock was sold, they decided to purchase some of these stud ewes and instigated their own ram breeding policy.

"We purchase two top Poll rams to go over our classed special ewes each year. Our previous purchases then go over the balance of the self-replacing ewes. The young rams we breed go over the older ewes to prevent any inbreeding," David said.

"This way we can justify access to the very best genetics to allow our flock to continue its improvement," he added.

For example, last year they purchased OC Nepowie 520, the \$10,000 top priced ram from last year's sale. With wool measurements of 22 Mic, 3.2 SD, 14.5 CV, 99% CF; a bodyweight of 147 kg at 23 months and built like a Mack truck with a massive rump the Reades say his first lambs are outstanding, with well over 100% lambing from his single sire mating group of special ewes.

Sourcing top genetics is one thing, but making them work to their potential is another. It is here that the Reade family adhere to sound nutritional and health programs.

They do worm counts and carryout one main post harvest summer drench. Lice control through correct dosage of backliners is interspersed with a dipping by local contractors with a portable dip. They grind the teeth of their sheep at 3.5 years of age and this allows them to continue producing at a high level well beyond the 4.5 to 5.5 years that many producers cull at when their longer teeth would loosen and fall out if unground.

They carefully manage feed changes and this includes grain introduction prior to stubble feeding, where a sudden large intake can cause poor health outcomes and wool break. They also employ an agronomist to ensure their pastures and crop yields are top shelf.

"If you want to get the benefits from your sheep, it's pretty simple really; you've got to look after them. Do that and top genetics will reward you," David concluded.



David Reade looks over a mob of the very productive "Floraville" Poll Merino ewes with their 110% lambs.



David Reade shows off some of the 10.5 month high quality wool from recently shorn wethers that will be marketed soon. Their electronic fleece weighing equipment that allows every fleece weight to be recorded is in the foreground.



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