



CLOVEN HILLS

450 Haydens Rd, Nareen VIC 3315

Purpose bred for greater lamb production

"Flexible, profitable, sustainable"



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Newsletter

AUGUST 2017

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Introduction

Contrary to the simple image portrayed, modern farming is a multifarious business. We think placing some urban professionals at the helm of farms, could one day create a great reality TV show! Life is never dull, as most things around us change as we plan and manage our way through rising costs of production, debt, fluctuating prices and seasonal variability. The game is always changing and so flexibility is required to respond to the curve ball which is just around the corner.

CLOVEN HILLS GENETICS AND COMMERCIAL BUSINESS BUILT ON SIMPLICITY

Simplifying the system

At Cloven Hills, we believe one of the best strategies for dealing with the complexity of modern grazing systems, is to keep the flock structure as simple as possible, but manage the flock as best as we possibly can. This is why we run a single self-replacing system, as it allows us to focus on getting the timing right for key operations, with the end goal of optimising fertility, growth rates and meat yield to produce more kilograms of meat per hectare. Moreover, having a single flock simplifies marketing, in that it enables tight runs of consistent lambs to be turned off during periods of peak demand.

But what does this mean practically speaking?

Getting the timing right

At the beginning of each year the calendar of operations is mapped out to look at key dates for joining, scanning, lambing, weaning and marketing. Where possible, multiple operations are undertaken when ewes are brought into the yards. Fewer classes of stock and a single joining reduce the potential for conflicts between operations and allocating feed resources.

Joining

Ewes are joined for 35 days in mid-February, to ensure peak lactation and ewe energy demand coincides with the period of peak pasture growth. Ewes are flushed with lupins to stimulate ovulation and optimise the chance of conceiving twins. More than 95% of ewes conceive in the first cycle enabling a tight lambing, which then streamlines subsequent operations like lamb marking and weaning, avoiding tail enders. Using teasers for 2 weeks prior to joining again assists, if you've got them for ewe lambs use them for young ewes.



Ewe lamb joining

Ewe lambs that rear lambs have better life time fertility (12% from our data) and are better mothers as a 1.5 year old. Increasingly, clients select a portion of their rams with low birth weights (BWT 0.2-0.3), which can be used for mature ewes as well as ewe lamb joining. All of the rams can be out working, enabling a higher joining percentage of rams and first cycle conceptions within the mature ewes. The rams with low ASBV's for birth weight, can then be put out with the ewe lambs after they are depastured from the mature ewes. After weaning, the progeny of the ewe lambs, can then be drafted into the main crop of lambs, keeping the genetics consistent and simplifying marketing and management.

Table 1. Joining ewe lambs puts more lambs on the ground, reduces opportunity costs of growing out replacements and increases lifetime fertility by 12%.

Ewe lambs	2017 Scanning (%)
Stud ewe lambs commercially joined	157
Stud ewe lambs single sire joined	140
Commercial '3rds' we decided to keep and join ourselves	136
Ewe lambs out of ewe lambs born in September	94

Scanning

Ewes are vaccinated and condition scored prior to going into the scanning crate. Cloven Hills ewes consistently scan 175% including drys (Figure 1), which is a sweet spot where twins are maximized before the number of triplets significantly increases. After scanning, ewes are separated into singles, twin and triplet bearing ewes. Second cycle ewes (<5%) are identified and run separately to reduce the time checking ewes and marked last. Any light, old or young multiple bearing ewes are given particular priority and access to the best quality and quantity of feed on offer (FOO), to give them the best chance of retaining foetuses and then ensuring lamb birth weights optimise the chance of survival. The more complex the flock structure, the more difficult it is to separate and look after more vulnerable stock when feed is tight, impacting upon overall flock fertility and weaning weights.

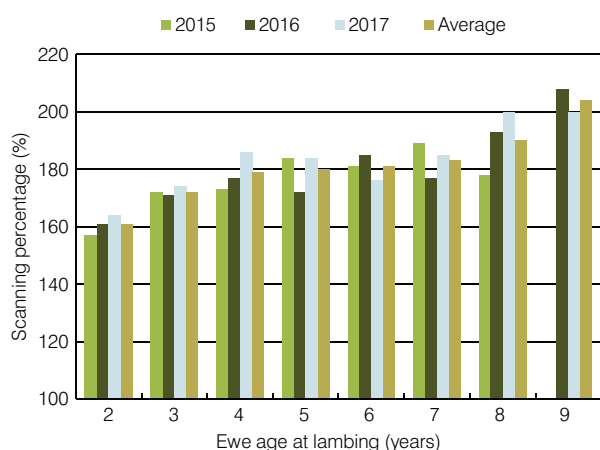


Figure 1. Cloven Hills ewes consistently achieve average scanning percentages of 175% averaged across all age groups.

Lambing

Multiple bearing ewes are given more room and generally stocked at 7 ewes/Ha, to maintain condition and optimize lamb birth weights and survival. The reverse applies to singles which are run harder at 10 ewes/Ha. Selecting

for mothering in our stud is highly important, as the faster the lambs gets a drink when born, the more likely they are to survive. Generally our twin survival is high 80s (% of scanned ewes) in better lambing weather (2015) and mid 80s in bad weather (2016).



Post lamb-marking

Having a single flock enables mobbing up of ewes to eat the wedge of feed which arrives in the spring and locking up paddocks for weaning.

Simplifying marketing

At weaning (10-12 weeks) the lambs are monitored and drafted into weight categories in preparation for marketing. If the spring fails, then it is easier to separate and allocate scarce green feed to the lambs who need it the most and make better decisions about which stock to sell and when. Having a single flock enables tight runs of consistent lambs to be turned off during periods of peak demand.

Optimising productivity

The key drivers of productivity in prime lamb enterprises are fertility, growth, stocking rate and meat yield.

Fertility is optimised by breeding fertile ewes and rams (Fig. 1). Lamb growth becomes even more important as fertility increases because the ewe has more lambs to feed. Farmers still want the lambs gone by Christmas and ewe lambs up to weight for joining. This is why we place strong emphasis on weaning weight (WWT) and post-weaning weight (PWWT), but downward pressure on adult weight (AWT), in our breeding program.

Stocking rate and feed utilisation is driven by coinciding lambing with the start of peak pasture availability and running moderately sized ewes (Average 65 kg). As most clients are looking to reduce the size of their ewes we are also putting downward pressure on AWT in our breeding program. Along with physical selection, we use the MCP+ index in LAMBPLAN as this promotes carcass characteristics and puts neutral pressure on adult weight (AWT), unlike the Maternal \$ index, which increases adult weight over time.

These strategies enable the full genetic potential of the stock to be realised so that as many kg of red meat can be turned off per hectare, as cost-effectively as possible.

Achieving resilience

Cloven Hills ewes are run under tough commercial conditions and require resilience and longevity. Condition score is monitored throughout the year and recorded with EID so that we can select for productive ewes and identify and cull poor feed converters. We typically drench mature ewes only once per year, less when drier, even though our ewes are run under high stocking rates (> 18 DSE/ha) and over 75% bear multiples. We place strong selection pressure on low WEC, never capsule our ewes and haven't had any significant pneumonia outbreaks.

WORKING TOGETHER FROM THE GROUND, UP – BOBBIE & ANGUS MCLEAN, PIGEON PONDS & HARROW

By Kristy McDonald



LIKE-MINDED farming philosophies and service from the ground up, have drawn Angus and Bobbie McLean to Kate and Chris Dorahy's Cloven Hills genetics for their relatively new prime lamb enterprise. The traditional fine Merino wool and Angus cattle farmers grabbed the opportunity to diversify their business interests and introduce their young family to a new experience, a little over two years ago.

"We got the opportunity about three years ago to purchase some land; it was a very run-down lot and we purchased it with its existing stock, which were Dohne blood," Angus said.

"To us, the prime lamb market seems to be reasonably solid at the moment; we've done a little bit of growing out lambs here on the home block with older sheep and we were quite interested to try something on a bit bigger scale."

With some – albeit limited – knowledge of developing a prime lamb enterprise and a 'challenging' 1260 acres to turn

around, the hunt was on to find a line of genetics to introduce to their existing flock.

"We'd planned on it being a self-replacing enterprise and with being a run-down property, it was going to be too inefficient to be successfully running an 80 or 90 kilo sheep," Angus said.

"Just researching what was around and what was available, I liked Kate and Chris' philosophy that you can produce high fertility sheep, without having to run big sheep.

"If we can do the same job with a 60 to 70 kilo ewe, we would be much better off and much more efficient."

Meetings were held to determine the 'right fit' for Cloven Hills in Angus and Bobbie's future plans and Kate and Chris' philosophy of purchasing a ram not only for its genetic traits, but within a budget that will justify the outcome, cemented the deal.

In 2015, McLeans joined 600 ewes to Cloven Hills rams and a further 1100 to White Suffolk rams and while not a clear success their first season produced some pleasing results.

"Within that first season, we could see that the Cloven Hills Composite blood line was producing a better result," Bobbie said.

"(The Cloven Hills) offspring were more complete, a better size and shape with a lot of depth and breadth to them achieving better survival rates. "The ewes joined better with the composite rams, lamb survival rates increased and we felt the end product was a better product." But it wasn't all butterflies and sunshine. "Our scanning rates were ordinary, I'll be honest," Angus said.

"And it had nothing to do with the rams. We had a lot of issues in the first 12 to 18 months with trying to just get the sheep into condition, after finding lice within two months of having the property, and such a late lambing. "Unfortunately that had a big effect on what we did and there was a lot of learning on the property with water and feed issues through dry times."

Just on a year later, their resolve to make their new enterprise work and the confidence they gained from seeing the Cloven Hills first cross, is starting to pay dividends. "We made the decision, seeing those first results, to put the Cloven Hills blood line over everything we could this year, with the view to be exclusively Cloven Hills going forward" Angus said.

"This is the first year we've trialled ewe lambs and we were really happy with the joining," Angus said. A LIFT in scanning and marking percentages of 17 and 30 per cent, respectively, between their first two seasons as prime lamb producers has Angus and Bobbie McLean confident in their decision to choose Cloven Hills to partner in their new enterprise.

As well as the numbers, the view over the paddocks is becoming more satisfying with a healthy ewe and consistent lamb gracing what was once a fairly poor property.

"We have noticed, with the Cloven Hills bloodlines and the ewe lambs that we lambed down from them this year, the ability to do is exceptionally better than anything else on the property," Angus said. "They are a more finished lamb, a thicker, heavier doing-style sheep and with a lot less attitude. We didn't have a lot of issues lambing them; their lambs are also quite consistent, there's not really much of a tail, which is very impressive.

"They are quickly building an ordinary flock to a quality holding – we will definitely be keeping a selection of ewe lambs out of the Composites again this year."

Working with the Cloven Hills genetics and Kate and Chris' assistance, the McLeans' aim is to increase their flock by a further 32 per cent, with a base of Cloven Hills Composite genetics.

"We are currently just going into a store line; because of the limitations of the property, we don't have finishing systems in place yet, but that is the next phase of the development of the property ... looking at around 2500 head," Angus said.

The 'after-market' package has also been a selling factor, with the McLeans' decision to continue their journey with Cloven Hills genetics. "I've been on a tour with Kate down to the abattoirs, seen how they manage the product, what they are aiming to do and spoken to them as a buyer, so we can better align our product to what the buyer needs," Bobbie said.

"We've been on a farm tour around Cloven Hills, which helped us with some planning decisions on our farm, where to put laneways and fencing. "They've also helped with the industry side of things; Kate and Chris have been using EID equipment for some time now, while new for us, we've been quite confident to ask them what they use, how they use it, how to input the data and use the data within our systems. They have also introduced us to field days run by the Southern Prime Lamb Group – which has also been very helpful for extending our knowledge base.

"Using Kate and Chris' genetics will only get us there quicker and easier, while still fitting with our farming philosophies and we know that they are just a phone call away for anything, if we ever need it."

THE NUMBERS ADD UP - GARRY CARLIN, WANDO VALE & CHETWYND

By Kristy McDonald



GARRY Carlin is a numbers man and the 30-year farmer only has to look at Cloven Hills' ASBVs, to know he has made the right choice for his Wando Vale prime lamb property.

Working for Kate and Chris Dorahy on their Nareen property, Garry first purchased Cloven Hills genetics seven years ago and has great plans for them to increase his flock, in the immediate future.

"We run a low cost business and the Composite sheep are low cost sheep," Garry said.

"They are a moderate size sheep, which appeals to me too, because you can obviously run more of them.

"I'd seen (Cloven Hills) sheep when I was working out there and Kate and Chris have comprehensive ASBVs for their stock, really comprehensive figures, a lot of people don't, so they look good and with the figures, I know what I'm getting from them.

"I buy from them every year."

Across his flock of 3000, Garry and wife Sandra see an average 120 per cent lambing rate from the Cloven Hills genetics and a quality trade lamb.

"I like that (Cloven Hills) started with a Coopworth base, I like to keep that look," he said.

"The ewes have easy lambing, they're a good doing sheep and the lambs are consistent in reaching that trade weight."

Just returning from a New Zealand study tour, Garry has plans for significantly increasing his holdings in the near future, in which Cloven Hills genetics will play a vital role.

"We have big scope to increase our sheep numbers quite a bit shortly, to raise our stocking rate and lamb survivability," he said.

"We are going to use those higher ASBV rams, along with improving our management systems to lift our percentages; their genetics and those ASBVs will definitely help us in that regard and improving our management systems will help us get the best out of those quality genetics."

GENETICS THAT WORK FROM Paddock TO PLATE – CELIA SCOTT, POOLAIJELO

By Kristy McDonald



WHEN you have a national end-buyer with plenty of product to choose from, your prime lamb product must be consistent in quality and quantity. For the Scott property at Poolaijelo, Cloven Hills genetics is the starting point for the quality product it sells to major players in the trade lamb market.

A somewhat 'non-traditional' succession story, Celia Scott is the third of four siblings – all girls – and after seven years learning the ropes, has been in the driver's seat for the past 12 months, leasing the family's 2500 acre prime lamb and Angus beef property.

After working in hospitality, studying agribusiness at Marcus Oldham College and trying her hand in the dairy and beef export industry, Celia returned home to help for a couple of weeks on the farm "and didn't get around to leaving".

"I came home about eight years ago now and I worked for Mum and Dad for the first seven years; for the last year and a month I have been leasing the farm from mum and dad," Celia said.

The decision to take on the family farm was not taken lightly, but for Celia, the challenges of running a prime lamb business and its rewards, more than justify her decision.

"I guess one of the things that I find most rewarding is that every bit of effort I put in, I see a result for," she said.

"Having worked for other businesses, you can put in 120 per cent, at the end of the day you still only get rewarded for 100 per cent.

"Managing a farm business, you're rewarded by getting out of it what you put in, depending on how you measure reward – whether it's financial gain or whether it's being able to walk out in the morning, see a mob of lambs and thinking 'Yep, those animals are spot on, we're proud of producing that ourselves'."

The Scott breeding pool has gone through several transformations, working through a variety of Composite genetic combinations to produce maternal ewes, in the past eight years.

"We first started with Cloven Hills about six years ago; we were using a couple of different studs genetics, but we were getting too much variety in our maternal ewe composition" Celia said.

"There were too many different breeds coming in, not enough uniformity in the adult ewes and their lambs, we were struggling to produce a consistent product that met our end markets needs."

Four years ago, the decision was made to use Kate and Chris Dorahy's Cloven Hills genetics, exclusively, now the 3500 Composite ewe flock has stabilised to the point where 90 per cent of the finished product, fits the trade market.

"We aim for – and generally get – a more uniform adult ewe and lamb now," Celia said.

"Our marking percentages are still sitting well – last year from joining to marking we managed 134 per cent and we can see we're getting a more consistent animal by the fact that we're getting so many more lambs up to trade weight.

"We look forward to building on this and can see there is still room for us to improve.

Celia said the decision to move exclusively to Cloven Hills genetics had taken a lot of guess work and a lot of hard work, out of providing a quality ram for their breeding base.

The Dorahys' commitment to researching genetic selections and sharing that knowledge is paying dividends for their client in the paddock and the market and will ensure a strong relationship between the Scott property and Cloven Hills, into the future.

"Kate and Chris have done their research to achieve what they've achieved and I appreciate that," Celia said.

"Any query that I've had, to do with breeding, animal husbandry, or even supplementary feeding, they're always willing to share their knowledge on the topic because generally they've researched or experienced it somewhere along the road."

And, a common theme among all the Cloven Hills clients, is the satisfaction with 'after-market' care.

"They understand the broader picture, the challenge of being where we are with terrible phone reception, having busy lives and trying to fit that with farming," Celia said.

"For us the Cloven Hills genetics create a sheep that fits with our environment and business, they're an animal that is easy maintenance most of the time, doesn't require a lot of coddling and grows a good lamb quickly."

"They care about future of farming and it flows through to their rams."

This year's sale team

Below is a table of some of the elite sires of this year's sale rams (Table 2). While our focus is fertility, growth and carcass traits, we put a lot of work into selecting rams and dams with balanced traits, and culling on extremities and structure. Our aim is to produce productive sheep that are resilient, easy care and low cost to run. Having a large base of 2000 recorded ewes to select from enables us to do this and also cull off type animals. Collecting data on progeny also enables us to improve the quality of our information.

This year, the sale rams are sired by 26 sires that have 2213 progeny. Eight of the 26 sires have progeny across 5 flocks around Australia, and most of the other sires have linkages through grandsires. This linkage enables Sheep Genetics to take out the environmental influences of season, feed etc and evaluate the genetic merit of individual traits to ensure they perform for clients under a wide range of conditions.

Table 2. Leading sires of 2017 sale rams

Sire ID	Grandfather ID	MCP+	BWT	WWT	PWWT	AWT	PFAT	PEMD	PFEC	PSC	NLW	YNLW	MWWT	DRESS	BT
Cloven Hills - 150291	Farrer - 080017	161	0.8	11.2	17.9	17.8	-1.4	1.4	-59.5	4.8	10%	14%	0.0	2.5	3
Cloven Hills - 140919	Cloven Hills - 111217	159	0.4	8.7	14.8	14.9	0.0	2.1	-44.1	5.2	13%	16%	0.9	2.5	2
Cloven Hills - 140165	Cloven Hills - 110043	153	0.4	7.7	12.8	13.2	-0.3	1.7	-69.0	4.4	12%	13%	0.5	2.1	2
Cloven Hills - 140236	Cloven Hills - 110043	149	0.4	8.4	13.2	14.5	-0.2	2.1	-7.9	5.6	9%	14%	1.0	2.2	1
Waratah - 130597	230299200909097	149	0.6	9.0	14.4	13.4	-0.7	1.6	-39.2	4.2	5%	9%	0.4	2.3	2
Cloven Hills - 140231	Cloven Hills - 110043	148	0.4	8.0	13.4	14.6	-0.1	1.9	-27.3	3.9	9%	16%	0.5	2.5	2
Cloven Hills - 140815	Cloven Hills - 121363	148	0.5	8.7	13.3	11.1	-0.5	1.6	-25.8	4.1	4%	5%	0.3	2.0	2
Cloven Hills - 150908	Cloven Hills - 121356	148	0.7	8.4	13.4	14.1	-1.1	1.5	-2.5	5.9	11%	12%	1.0	1.7	3
Cloven Hills - 140841	Cloven Hills - 120070	147	0.3	8.8	14.2	13.4	0.3	1.5	-22.7	5.6	9%	9%	-0.3	2.4	2
Cloven Hills - 150909	Cloven Hills - 121356	147	0.5	7.7	12.9	14.2	-1.0	1.5	-3.1	5.9	11%	12%	1.0	1.7	3
Cloven Hills - 110345	Cashmore Park - 090972	145	0.3	8.1	12.2	9.5	-1.8	1.6	15.0	6.7	2%	12%	1.0	1.3	2
Cloven Hills - 150075	Cloven Hills - 110043	145	0.4	8.6	14.0	17.9	-0.3	1.2	-5.5	5.5	14%	18%	0.9	1.7	2
Twin Farms - 110036	SI27442006060394	144	0.8	10.5	15.2	15.8	0.1	-0.5	-54.4	5.8	16%	14%	-1.5	0.2	3

Bold top 5% of breed, shaded top 10% of breed.

Puketauru 529/13

From last year's trip around NZ's top maternal sheep studs, Puketauru 529/13 was our top selection for performance, structure and resilience. 529/13 had good bone and depth, see photo on page 10. He is being evaluated by 6 studs through Coopworth Genetics in Australia, so his progeny will have excellent linkages in LAMBPLAN and we are excited about tracking their progress.

Infrastructure and Technology

Having had a good season in 2016, Chris and my focus was to invest in infrastructure and technology to improve efficiencies (doing multiple operations when stock are in the yards) and collecting individual data on the run, so that it doesn't sit on my desk. For example, this year, Chris and I have recorded about

1200 lambs before Sheepvention, and it has all gone straight into the indicator in the paddock, which will streamline data collection and management. Not one soggy piece of notepad paper to be found! As parents, we sometimes wonder how each of our children can be so different coming from the same parents, hence if we are to select animals that meet clients breeding goals, individual data is imperative.

Accessing local land - blue gum reversion

Accessing land that is nearby and affordable is certainly a significant challenge for many farming businesses. In December 2016, we purchased 561 acres (227 ha) of former Blue gum land adjoining Cloven Hills. Kate's parents sold it about 15 years ago and so it was an exciting opportunity to be able to purchase it back. The trees were harvested in

September 2013, with the logs being stripped in-situ. This left a huge amount of trash next to the stumps, which at first, looked insurmountable. However, over time this decomposed quite considerably, but was still significant. After harvesting, the coppice regrowth was sprayed with mixed results.

In June 2016, PF Olsen chopper rolled about 73 ha (Figure 2), which further broke up the trash and split open some of the stumps. 53 ha was sprayed, but not chopper rolled and had a moderate amount of coppice regrowth. 40 ha of coppice was retained, with each stump having 5-6 shoots 8-10 metres high.

We spoke to various people about where to start and decided that instead of raking and burning the remaining trash, we would incorporate it using off-set discs in between the rows of stumps (Figure 3). We were very surprised at how well the trash broke up and how pulpy it had become. We then broadcast 2.5 t/ha lime and 30 kg P/ha and 20 kg K/ha over the 73 ha which was originally chopper rolled. Mixed in with the fertiliser was 2 kg/ha Balansa clover, 10 kg/ha annual ryegrass and 10 kg/ha perennial ryegrass.

We chopper rolled the additional 53 ha and slashed the retained coppice (40 ha) using a spinning blade attachment on an excavator. Given the block is fairly open, flat and more exposed than "Cloven Hills", we decided to strategically retain 6 rows of coppice along the contours to act as shelter belts for lambing ewes in the future. A significant area of the block (60 ha) along creek lines and gullies was not planted to blue gums and of this, we were able to direct drill 30 ha with the the ryegrass and balansa blend.

Prior to the application of seed and fertiliser, we opened the gate and put 1400 ewes on the block for 6 weeks between pulling the rams out and scanning (Late March to early May). This knocked down a fair bit of the dry feed which was on the block and gave us an opportunity to build a feed wedge with our phalaris/sub-clover pastures at "Cloven Hills". The ewes were supplementary fed with a barley ration and became very good at finding the feed cart.

There weren't any fences at all and so we have started to clear some stumps away from what will be a central laneway and future fences, so that we have enough room to turn gear at the end of the rows when we come to a fenceline. We have run a 200 m section of new fence to isolate a 40 ha section of the block where we are lambing down 216 middle age, medium/fat twin bearing ewes. The survival looks to be very good, so it will be interesting to see how they mark. After lamb marking we plan to put some large mobs of ewes on the other sections to eat the ryegrass and balansa clover which has established well, despite being grazed over the winter by several hundred kangaroos!

The next steps are to disc the remaining 53 ha of chopper rolled sections and probably burn the coppice trash. We have bought a 7ft wide Connor Shea 3PL seed drill which we will use to direct drill short term pastures and summer crops between the tree stumps. After several years, we expect the stumps to rot down, after which time we hope they can be disced and then plant permanent pastures (phalaris) across the block. There is a fair bit of fencing to be done, but we are planning to gradually fence off sections and then extend poly pipe out from our main farm header tank as required.

It is still a work in progress, so we will give you another update in next year's Newsletter. Thanks to Mark Bunge, Ian Jeffries, Peter Schroder, Martin Slocombe, James Stewart, Jamie Tidy, Paul Obrien and Paddy Milne for their advice in tackling the project so far!



Figure 2.



Figure 3.



Figure 4. V blade and offset discs

USING OUR WASTE AS A FERTILISER - FACTS & FIGURES

There is growing interest in the use of alternative fertilisers as inputs to pasture and grain farming systems. This autumn, we spread approximately 400 m³ (~296 wet tonnes) of compost across 40 ha of adjacent pastures and also in the bluegum block we are regenerating. The compost had been stockpiled outside our woolshed and had been added to each time we cleaned out the pens we used to feedlot lambs and contained manure, straw bedding, animal mortalities and soil. We were interested to know the nutrient loading associated with applying the compost at 10 m³/ha and whether or not it was cost-effective. To do this we collected some samples for analysis and then compared the nutrient loading and costs with Pasture King SS13 fertiliser, which we had applied on some paddocks as part of our normal fertiliser program.

Applying the compost delivered a similar amount of phosphorus (9.7 kg P/ha) and a bit less than half the sulphur (5.5 kg S/ha) than the Pasture King SS13 fertiliser (Table 1). It also delivered 334, 37 and 12 kg/ha of carbon, nitrogen and potassium, respectively, which are agronomically useful. However, given the Carbon/Nitrogen ratio of the compost was 9:1, these nutrients are likely to be in stable forms and only gradually available to plants (Table 1). In contrast, the P and S contained in the Pasture King SS13 is in an inorganic form and highly soluble.



Table 3. Nutrient concentration and loading associated with applying compost at 10 m³/ha or Pasture King SS13 fertiliser at 71 kg/ha.

	C	N	P	K	S	Ca	Mg	Cu	Zn	Moisture	C/N
	----- (%) -----										Ratio
Compost	6.4	0.7	0.185	0.235	0.105	0.49	0.11		0.013	29.6	9:1
Pasture King SS13			14.1		13.1						
	----- (kg/ha) -----										
Compost	334	37	9.7	12.3	5.5	25.6	5.7	0.1	0.7		
Pasture King SS13			10		9.3						

The Pasture King SS13 fertiliser cost approximately \$39/ha to supply, transport and spread, whilst the compost cost approximately \$84/ha. Given the compost also delivered approximately \$35/ha of nitrogen and \$13/ha potassium, it can be concluded that it was reasonably cost-effective to beneficially reuse what would otherwise be a waste product. However, it would probably have been cost-prohibitive if we also had to buy and transport this material (296 tonnes).

Alternative inputs like composts and manures can supply significant quantities of nutrients in slow release forms. However, users should know what is in the material and adjust application rates to ensure they are agronomically beneficial. Further information on these considerations can be found at:

NSW DPI Prime Fact: Using recycled organics and manures in grain cropping systems. http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/341762/Using-recycled-organics-and-manures-in-grain-cropping-systems.pdf

GRDC Recycled organics fertiliser fact sheet:
https://grdc.com.au/_data/assets/pdf_file/0017/21554/grdcfsrecycledorganics.pdf

Table 4. Estimates of the overall costs (\$/ha) of Compost and Pasture King SS13 fertiliser.

	Compost	Pasture King SS13
Quantity (t)	296	5.59
Application rate (kg/ha)	7400	71
Area treated (ha)	40	78.8
Supply (\$/t)	-	445
Freight (\$/t)	-	20.3
Spreading (\$/t)	11.39	81.7
Overall (\$)	3375	3364
Overall (\$/t)	11.40	601.77
Overall (\$/ha)	84.4	38.8

2016 Sale Results

Cloven Hills third annual ram sale saw a significant lift in the number of rams sold and average price.

We offered 160 rams selling 153 at auction, plus 4 afterwards. Having had strong interest in our rams, we decided to offer an additional 54 rams and were thrilled to sell 57 more than in 2015. We were very appreciative to see our regular clients as well as new ones actively buying at the sale.

The average price increased by \$202/head to \$1273. The first 50 lots were hotly contested averaging \$1760, and two rams made up to \$3000. We spend a lot of time recording the production data of our flock and we are pleased that buyers were using it to select what's important for their own. However, it's important for us that all buyers were offered value and could purchase within their budget, which we hope the sale offered, ranging from \$600 to \$3000/ hd.

Mareeta Cox, Coojar, who has been purchasing Cloven Hills genetics for 6 years, bought Lot 17 for \$3000, and Georgina Gubbins, Maneroo Partnership, Allansford, bought Lot 2 also for \$3000. Volume buyers included Nick and Ian Harvey - Strathdownie Estate, Strathdownie, Sam Dohle, Tahara and Celia and David Scott, Ardmeen Farms, Poolaijelo. Rams went locally, as well as to buyers from South Australia and New South Wales.



New venue for 2017 Sale

We have been very appreciative to the Casterton Show Society for letting us use the Ross Davidson Pavilion for our ram sales over the past three years. Last year, was quite challenging with floodwaters lapping Island Park until a few days before the sale! However, the Glenelg Shire Council could not have been more helpful in ensuring our event was not affected.

Whilst, the venue at Island Park is excellent, we have decided to move our sale to Cloven Hills. We are in the process of building a new shed and undercover yards, which will give us the facilities for hosting the sale on-property. We are excited about welcoming you to Cloven Hills for our open day on Friday 29th September and our 4th annual sale on Monday 9th October, 2017.



Conclusion

We are still waiting to put our feet up on the recliner and gaze out from the verandah to watch the sunset on yet another lazy day in this idyllic farming life. However, we believe that simplifying the system and focusing on the targets which drive productivity, enables better planning and execution, streamlines processes, allows the full genetic potential of our stock to be realised and improves farm efficiency and profitability. As Albert Einstein said, "Everything must be made as simple as possible, but not one bit simpler".

**RAM SALE
MONDAY
9TH OCTOBER**

**OPEN DAY FRIDAY 29TH SEPT | BOTH AT
CLOVEN HILLS, 450 HAYDENS RD, NAREEN**



Sale rams



Ewe lamb with twins



Sale ewe lambs November 2016



MCP + Index 161 (3rd in top 150 maternal sires nationally)



Puketauru S29/13