



# CLOVEN HILLS

450 Haydens Rd, Nareen VIC 3315

**Purpose bred for greater lamb production**

*"Flexible, profitable, sustainable"*

## Newsletter

August 2014

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### Announcing Cloven Hills Inaugural Ram Sale 2pm Tuesday 14th October, Casterton Show Grounds

We are very excited to announce we will be holding our first Ram sale on Tuesday 14th October, 2014. To hopefully make it easier for clients from SA and Vic, we have decided to hold it at the Casterton Showgrounds. Stock will be available for viewing a few hours before and the auction will start at 2PM. Further information and the sale catalogue will be posted on our website prior to the sale ([www.clovenhills.com.au](http://www.clovenhills.com.au)), at Landmark Casterton, as well as notices in various rural papers. Approximately 85% of 2013 rams on offer are sired by the top 150 Maternal Rams in Australia (Table 1).

### What's in this newsletter?

There have been a lot of informative and good days this year with a focus on lamb, such as Lambex, MLA Meat for profit day in Hamilton and the Best Wool Best Lamb conference in Bendigo. These days are great at reinforcing why we all keep putting on our gumboots and head into the elements each day. There is no doubt there is growing demand for lamb, with firstly, a very solid domestic market coupled with growing demand overseas from the developed high value markets and the rising incomes and demand



*LAUNCHING CLOVEN HILLS*  
**INAUGURAL RAM SALE**  
AT CASTERTON SHOW GROUNDS



**TUESDAY,  
14 OCTOBER  
2PM**

VIEWING FROM  
MIDDAY

➔

SEE BACK FOR DETAILS

SIRED BY AUSTRALIA AND NZ'S BEST LAMB GENETICS,  
BENCHMARKED NATIONALLY IN LAMBPLAN

85% of Rams on offer are sired by the top  
150 Maternal Rams in Australia

Focus on fertility and growth  
QA- brucellosis accredited, OJD eligible all states


*'Heavy selection on structure, easy care attributes and measurement of essential traits that you can't see, in commercial conditions, means only the does get through'* - Kate & Chris Dorahy

Breed make-up: 50% Coopworth, 10% East Friesian with 30-40% terminal, primarily White Suffolk with some Texel and Poll Dorset. Balancing fertility, milk and mothering with growth and carcass traits.

COME AND SUPPORT HOME GROWN AUSTRALIAN BRED GENETICS AND SELECT THE ANIMALS THAT SUIT YOUR BUSINESS WITH ALL THE INFORMATION ON INDIVIDUAL ANIMALS.







**CLOVEN HILLS** EST. 1977

Visit our website, email or call us for more details.

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for protein in Asia. Australia and New Zealand are the only significant exporters of lamb. However, with New Zealand's lamb producers competing with dairy farmers for a limited supply of suitable land, Australian growers are certainly well placed to capture these opportunities.

However, making this happen in an environment of increasing seasonal volatility, costs of production, satisfying various accreditation schemes, whilst trying to produce lamb consistently and cost-effectively, is a challenge. Therefore, each of us needs to think about what we need to do to achieve these goals in our respective businesses. No mean feat given no two farms are the same – it is certainly not one system fits all!

So, in this newsletter, we want to share how we are making our own farm and business more robust and versatile. Secondly, we also aim to explain why and how we are measuring, selecting and culling in our stud to produce animals which will assist in driving the productivity we need to create a simple and sustainable business. Thirdly, we talk about having the feed system and production to optimise a highly fertile flock.

### What do we mean by simplicity?

Our aim is to keep things simple and do it as best as we possibly can. Having one sheep system (in our case self-replacing) enables us to streamline our management practices, giving us more time to focus on productivity gains, and replicate it across different blocks. For example, we have found that running ewes by condition score allows us to prioritise how much different sheep get fed. Managing condition score not only saves on supplementary feeding costs, but improves stocking rate, conception, lamb survival (through higher birth weights) and therefore percentages, by insuring ewes are on the right plane of nutrition.

### Linking genetics to your objectives

I was recently talking to a friend who runs a start-up IT business in Beijing, saying I didn't know how he did it. He quickly pointed out that we are the gamblers! Like many prime lamb enterprises with seasons, prices, interest rates and costs becoming more volatile, we have to become more versatile and be good at minimizing risks. As we regard our ewes as the engine room of our business, we believe selecting the right genetics is pivotal to our business performance and one of the things that we can control. The selection of ewes and rams for purpose, produces replacements that will perform, with less biosecurity risk and cost.

No two farms are the same, with each having different sheep, microclimates, budgets, priorities and breeding objectives. Hence, it is critical to have the best information for selecting genetics which suit your own production system. Our rate of genetic gain in the past five years has averaged 2.4 % p.a., which is 30 % higher than the average for flocks using the Coopworth \$Index. Approximately 85% of 2013 rams on offer are sired by the top 150 Maternal Rams in Australia (Table 1). Collectively these sires have 3929 progeny recorded across multiple flocks in Australia. The New Zealand rams beginning in SIL are benchmarked in Lambplan and SIL. In the NZ SIL system, SIL 071699 is number 2 and SIL 07807 is number 7 for reproduction. SIL 07807 is number 1 on the Dual Purpose Index and on the Dual Purpose Meat Yield Index and number 7 on the Dual Purpose Worm FEC index.



Kate recording lambs.

### The unseen traits that drive productivity

Easy care traits, such as feet and structural soundness are a given, and we always offer replacements for the small percentage of animals where something goes wrong. However, the critical profit drivers, namely fertility, growth and carcass traits, which you can't see, need to be objectively measured and recorded. Moreover, relative performance needs to be compared nationally through genetic linkages to other Australian studs in LAMBPLAN, in order to achieve genetic gain and lift productivity. "Cloven Hills" is highly ranked in the Maternal \$ Index and our genetic progress has been underpinned by having a large gene pool (population) to identify star performers who withstand the meticulous selection process that focuses on fertility, growth and resilience. Then being able to select from these animals for the traits you want is extremely valuable and we enjoy helping our clients in this process.

At our ram sale this year we will provide individual Australian Sheep Breeding Values on rams for:

- Birth weight
- Weaning weight
- Post weaning weight
- Eye muscle depth
- Fat
- Milk
- Number of lambs weaned for mature and yearling ewes
- Worm egg count
- Scrotal circumference
- Overall maternal \$ index

We will also offer independent classing information on:

- Feet and leg structure
- Feet colour
- Pigmentation
- Conformation
- Wool type
- An overall score

We will also offer information on:

- Dag score
- Birth type ie single, twin or triplet



**Table 1. Australian Sheep Breeding Values (ASBV's) for top ranking sires of Cloven Hills 2013 rams in the Mat\$ Index -All sires top 150 (bolded boxes top 10%)**

SIRE	Rank/150	BWT	WWT	PWT	AWT	PFAT	PEMD	PWEC	NLW	MWWT	MAT\$	LMY	IMF	SHEARF5	Rank/150
CASHMORE OAKLEA-092378 CRC	4	0.6	6.4	<b>11.5</b>	13.9	-0.5	<b>1.4</b>	<b>-79</b>	<b>21%</b>	0	142	3.84	-0.51	2.6	4
LANGLEY HEIGHTS-060073	13	0.4	6.7	11.1	14.3	<b>0.7</b>	<b>3.4</b>	-3	13%	<b>1.3</b>	139	-	-	-	13
CLOVEN HILLS-110345	17	0.4	<b>8.9</b>	<b>14.1</b>	13.5	-0.8	<b>1.4</b>	2	11%	<b>1</b>	138	-	-	-	17
CLOVEN HILLS-110043	26	0.6	<b>8.0</b>	<b>13</b>	15.7	-0.4	1.1	-33	<b>15%</b>	-0.7	137	2.94	-0.28	1.9	26
CASHMORE OAKLEA-090972	35	0.4	<b>7.9</b>	11.2	13.5	-0.5	0.7	19	<b>15%</b>	<b>1.6</b>	135	-	-	-	35
CLOVEN HILLS-100546	45	0.5	<b>8.2</b>	<b>12.5</b>	14.5	-0.8	0.1	-45	13%	-0.4	134	-	-	-	45
CLOVEN HILLS-111217	50	0.6	<b>8.3</b>	14.2	15.3	<b>0.4</b>	<b>2.6</b>	<b>-60</b>	1%	-0.1	133	2.82	-0.11	0.2	50
CLOVEN HILLS-110070	51	0.7	6.9	<b>11.6</b>	14.2	-0.5	0.5	<b>-54</b>	12%	0.3	133	-	-	-	51
CLOVEN HILLS-110560	54	0.4	7.3	<b>11.6</b>	12.7	0.1	<b>1.4</b>	-2	10%	<b>1.3</b>	133	-	-	-	54
CASHMORE OAKLEA-070790	62	0.4	7.3	11.1	12.9	-1.2	-0.4	2	<b>23%</b>	-1.9	133	-	-	-	62
SIL4474-TWIN FARM-071699	64	0.4	7.3	10.5	12.2	-0.2	0.6	-32	<b>16%</b>	-0.9	133	-	-	-	64
CLOVEN HILLS-110073	68	0.5	6.4	10.8	12.5	-0.2	<b>2.3</b>	<b>-48</b>	7%	0.3	132	-	-	-	68
CLOVEN HILLS-111216	74	0.4	7.3	<b>12.3</b>	13.1	<b>0.6</b>	<b>2.8</b>	<b>-80</b>	0%	0.6	132	-	-	-	74
CASHMORE OAKLEA-113832	89	0.4	7.2	11.2	11.7	-0.3	0.6	-37	11%	0.5	131	-	-	-	89
SIL4474-TWIN FARM-070807	93	0.7	<b>8.6</b>	<b>12.6</b>	10.7	-0.6	<b>1.4</b>	21	8%	-0.5	131	-	-	-	93
CLOVEN HILLS-100548	97	0.4	<b>8.1</b>	<b>12.7</b>	14.5	<b>0.4</b>	<b>1.6</b>	44	5%	<b>1.1</b>	130	-	-	-	97
CLOVEN HILLS-110493	131	<b>0.2</b>	6.0	9.4	10.5	-0.1	1.2	0	9%	<b>1.5</b>	128	-	-	-	131
CLOVEN HILLS-120065	149	0.3	6.0	11.3	13.4	-0.3	<b>1.4</b>	-28	3%	0.7	127	-	-	-	149

## Flexibility

Having a system that provides us with different marketing options is important to us. For example we can sell store lambs, ewe lambs, ewe hoggets, mature ewes (SIL, dry) and trade lambs, which can be sold depending on the season, prices and cash flow.

Our genetic performance is highly correlated to our overall financial performance, as illustrated by the results from the South West Farm Monitor project for 2012/13- a tough year both seasonally and price wise. Our annual income per hectare is 160 percent of average, whilst our return on assets and equity was 4.3 (vs 1%) and 2.8% (vs -1.2%), respectively – managing cash-flow is pivotal in this and is therefore, closely monitored.

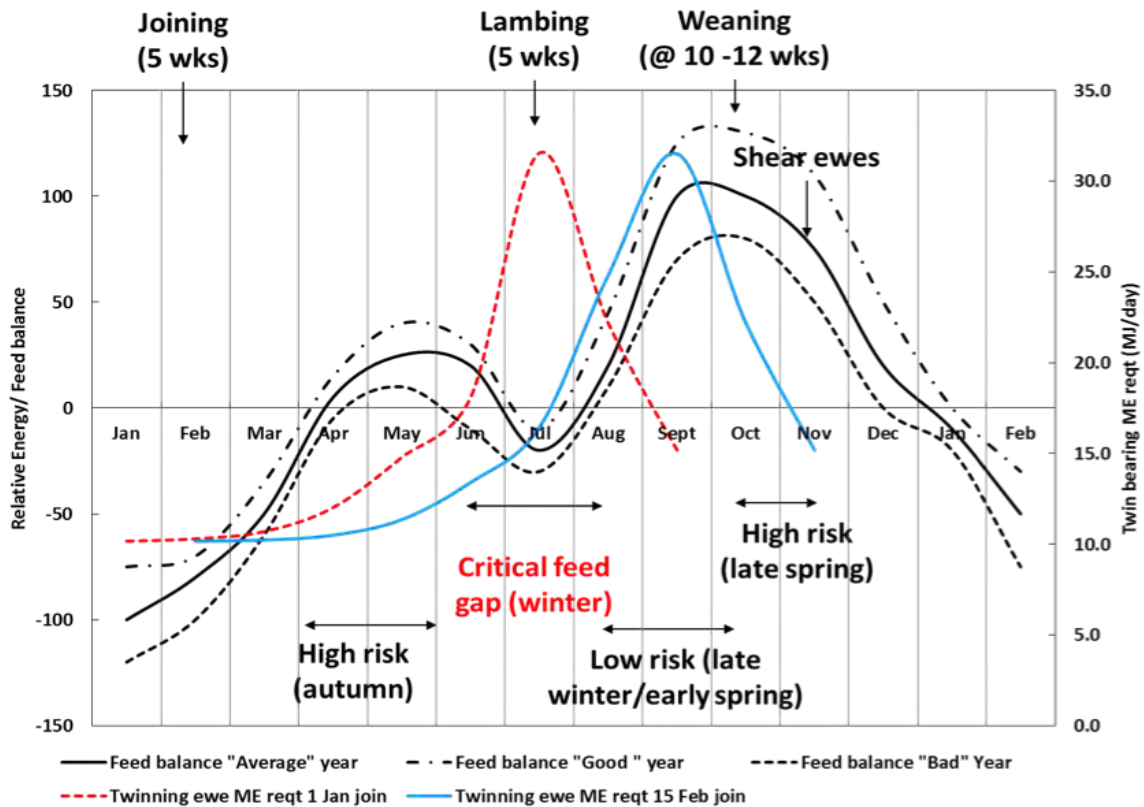


Fig. 1. Comparison of the feed / energy balance over time with the metabolisable energy (ME) requirement of twin bearing ewes based on time of joining and how this influences management at Cloven Hills.

**Creating a feed system to optimise a high fertile flock**

The combination of genetics and feed management has enabled us to achieve an average stocking rate of 19 dry sheep equivalent per hectare, (up to 22 DSE/ha in good seasons), which is 27% higher than average producers in the South West Victoria Livestock Farm Monitor Project. Our average annual rainfall is 703mm, although between 2009 and 2013 this ranged from 584 to 855 mm, meaning that pasture production has varied considerably and that these stocking rates could be a liability in drier years.

Hence, whilst selecting for higher fertility and growth increases profitability, high performance animals can be a risk to the production system if they aren't managed appropriately. However, exposure to seasonal risk can be managed by matching ewes' energy requirements to seasonal food on offer to minimize supplementary feeding and maintain ewe condition. Consequently, our level of supplementary feeding has been 126 % of the SW Livestock Farm Monitor Group.

Having a good pasture and soil fertility base is essential for achieving the full genetic potential of our livestock and minimising the feed gap in early winter, which optimises the spring flush of feed and stocking rate. Our medium

term goal is to have 80% of Cloven Hills sown to a perennial pasture system, with recent pasture renovations focused on sowing phalaris and sub-clover. The aim is to dedicate the remaining 20% to ryegrass, forage rape, Lucerne and standing oat crops for weaning, backgrounding and finishing lambs.

During the time we have been back, we have experienced 3 failed springs, 2 average springs and one good season, not to mention very tight autumns in most years except this one. We believe that lambing from mid-July onwards optimises fertility and lambs on the ground, which is one of the key profit drivers. It also brings the feed on offer more in line with ewe energy requirements, particularly for twin bearing ewes, enabling higher stocking rates and lower supplementary feed costs in autumn. Managing nutrition and condition scores of ewes, enables ewes carrying multiples to be prioritised, this in turn, improves lamb birth weights, resilience to exposure and therefore, survival (Fig. 1).

Managing ewes by condition score and pregnancy status, (key productivity drivers) becomes more complicated when running several breeds/ flocks, which is why we simplified to running one self-replacing system. Looking after our ewes is our number one priority, as they are the engine room of our business.

However, lambing later means we need to be disciplined about weaning at 10-12 weeks of age (around 15 October), to give our ewes access to 4 weeks of green feed post-weaning to put on condition going into summer. Likewise, we need to have well prepared and high quality weaning and post-weaning paddocks for finishing lambs. Last year we put 2000 lambs onto 20 ha of standing oats for the first time. This did an excellent job of holding and backgrounding the lambs over the busy December/ January period and enabled us to spread how and when they were marketed. Moreover, it reduced the risk of a failed spring and reduced the cost of supplementary feeding (This is described in more detail below). Growing feed and aligning it with our production system is pivotal to profitability, in that if you've got feed then you have options for breeding and trading stock.



### Managing for a failed spring

Traditionally, summer crops and Lucerne have been used to provide out of season feed for prime lamb systems in the Western District. However, several failed springs over the past decade mean these options have been risky for holding and finishing large numbers of stock. Feed lotting is becoming increasingly popular, but best results are achieved when the lambs have been well backgrounded.

Following three consecutively tough springs in six years, last year, we trialled sowing a 20 hectare paddock with oats as a "safe feed" option. When managing a highly fertile flock, having flexible feed systems to cater for a failed spring is critical. You are always balancing the time of lambing, as the later you lamb the more lambs you have, but the less time you have to finish them on green feed. Typically, the market is flooded every year when the spring cuts out and the price drops for this period. We budgeted on trying to secure enough feed for 2000 lamb weaners over a 60 day period. Assuming they would eat 500 grams of grain and 1 kg of dry feed per head per day, this equated to about 60 and 120 tonnes, respectively. However, it takes a while to get lambs going on grain and is expensive and time consuming to feed out grain and hay, particularly during December/January, which is always a busy time.

Summer crops can fail without decent spring rain and even in good years they need to be sown very early to be ready to graze when the green feed runs out. So we needed an alternative

food source to be safe. We started thinking about whether we could achieve this by putting lambs onto a standing oat crop as a low risk option, given winter rainfall is fairly reliable in our area, even in drier years. To achieve this we budgeted on growing 20 ha of oats with a target yield of 3 t/ha, which I think we easily achieved.

The lambs went onto the crop in the first week of December, when the crop was virtually mature and when the green feed elsewhere had started to deteriorate. The crop was stocked at 100 lambs/ha and the feed value was 13.1 MJ/kg/DM with 86 % digestibility. Once the lambs had eaten the grain, lick-feeders were placed in the paddock, with the stubble remaining a valuable feed source.

Of course, there is a cost in taking these paddocks away from lambing ewes but the areas are quite exposed and needed renovating anyway. The other advantage is that the paddocks are close to our laneway and the back yards making it easy to run the lambs in for weighing and drafting into various lines and then quickly returning them to the paddock.

It really took the pressure off last summer, seeing the lambs backgrounding nicely at growth rates of about 150-250 g/head/day over what was a very hot summer. It's not rocket fuel, but a low risk option for keeping lambs in forward condition. We were even able to have a week's holiday at the beach in January and could relax, knowing the stock had good access to feed and water (The nearby fires however, were another story....).

Once the lambs reached 38 kg they were then put into containment pens with open feeders and ryegrass stubble for finishing. This enabled us to turn off 150-200 lambs every 2-3 weeks with an average carcase weight of 20-22 kg and fat score of 3-4.

This year, we have sown 50 ha, following the success of the initial trial.

If the spring does cut out early, hopefully the practice of direct drilling and retaining last year's stubble will hold that bit of extra moisture to finish the crop, as well as build soil health over time.

Everyone was talking El Niño and another potential failed spring, so the oats should give us another safe feed option to keep our largely multiple lambs going in a labour efficient and cost effective manner.

We wean lambs onto green pastures at 10-12 weeks of age, so it provides that next step for lambs ready to go to market and makes sure they don't get set-back. The alternative feed option also enables the operation to better capitalise on markets during these tough seasons by providing a back-up food source to hold some lambs, be it ewe or wethers lambs.

Historically, supply increases as producers off-load numbers during failed seasons. We know that this never going to change, so it is about spreading risk by providing flexibility to target various market options.

When you have a high fertility system, it is about capitalising on putting as many lambs on the ground as possible and growing them out in the shortest time to maximise the kilograms of meat per hectare. However, the challenge is to get the system right to manage the stock properly so that they can achieve their full genetic potential.

For us, it is all about managing risks which, involves controlling costs and having the flexibility to respond to fluctuations in seasons and markets. The oats have played a valuable role in achieving this and are a part of balancing genetics, the production system and marketing to build a sustainable and resilient business (Fig. 2).

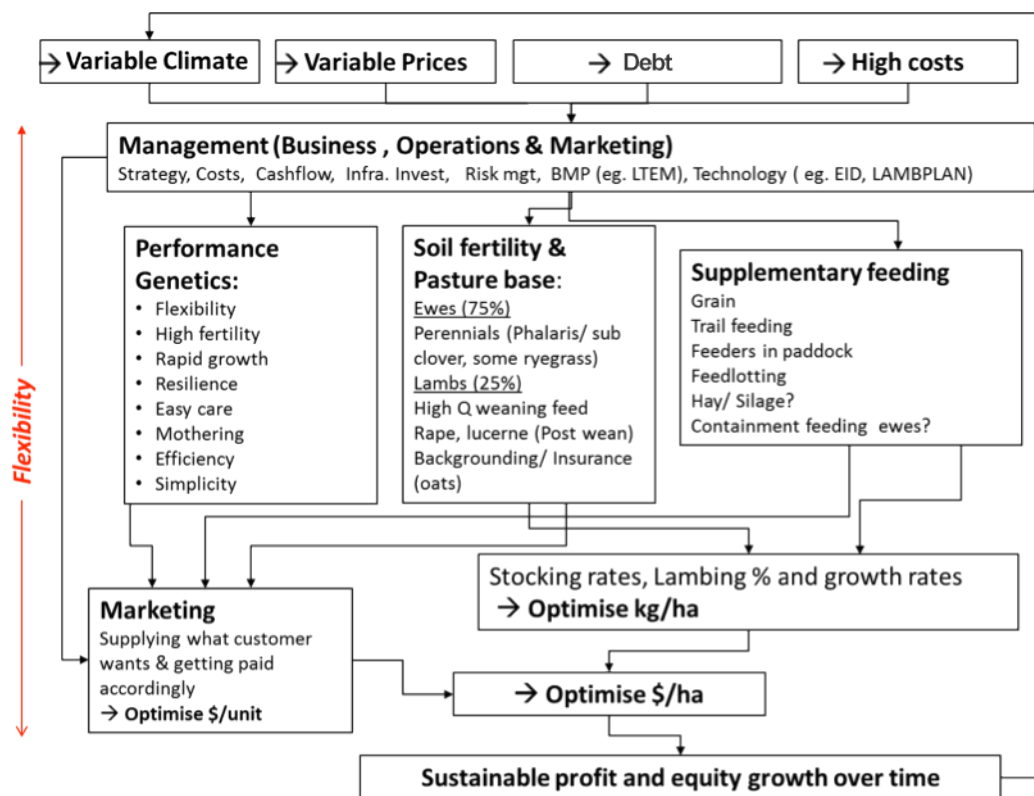


Fig. 2. Conceptual framework to describe an integrated approach for managing variable seasons and prices, debt and high costs associated with a prime lamb enterprise.

**Southern Prime Lamb Group field day**



Cloven Hills was very pleased to be part of the organising Committee of the Southern Prime Lamb Group tour of the Western District, Victoria. We were thrilled that 130 people participated, including 22 people from the Peppin Shaw Group from the Riverina, as well as Tasmanian and South Australian lamb producers. The aim was to get growers together on-farm and talk about what various people were doing to get productivity gains in their respective businesses. We finished up at the Australian Lamb Company’s abattoir at Colac, where we gained insights into what they need from suppliers and how they are driving productivity in their business with new technologies. However, Chris and I feel the biggest potential gains for the whole industry will be when they can pay growers for yield and quality, something they tell us isn’t far away.

Photos courtesy of Annabelle Beale, Fairfax Media & Peter Mecham, Zoetis. Edited sections of this newsletter have or will be published in the Stock & Land by Annabelle Beale.