



# CLOVEN HILLS

450 Haydens Rd, Nareen VIC 3315

**Purpose bred for greater lamb production**

*"Flexible, profitable, sustainable"*

## Newsletter

August 2015

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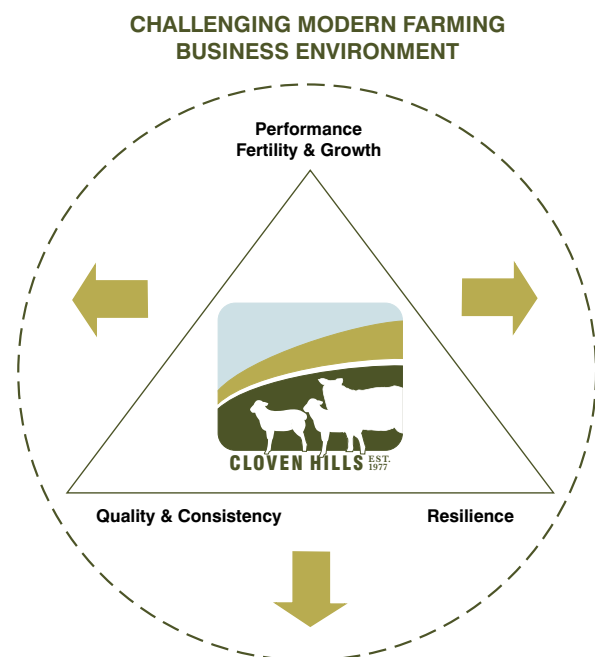
### Summary

Cloven Hills offers self-replacing prime lamb genetics which are characterised by high fertility, growth and doing ability. While this all sounds great, breaking it down for your own business and selecting stock that will drive your own productivity and deliver lambs that buyers and abattoirs want, is critical. It's almost a guarantee that the top ram I would select would be different to the one Chris would select, and when we have had couples or father daughter/son's come and select rams we realise that we are not Robinson Crusoe! However when we breakdown the practical and commercial priorities, we nearly always end up with the same pen of half a dozen top rams, but again our way of individually achieving this can be quite different!

Map reading, driving and sheep yard stories aside, we do find this debate and discussion worthwhile in achieving our goals. Needless to say every season brings different questions to the table. As we are currently riding around the lambing paddocks with good scanning and survival and patting ourselves on the back for good fertility, we are reminded of how important growth and nutrition are for these lambs, as we are not getting bogged in the usual places, as we think about everything but where we are going!

We are very thankful for the support shown to us by our clients and their validation of how our stock has performed for them in each of their different flocks and systems. It certainly reinforces our goal of delivering consistent lines of breeding stock, structurally and performance wise, but providing enough flexibility to ensure we all have resilient farming businesses (Fig. 1).

As we continue our journey in driving genetic gain and productivity through using 'precision ag tools' such as Lambplan and EID, we are also thinking about creating more value for producers in the future, as the industry hopefully adopts more technology in the supply chain to give more objective information and feedback. In doing this, we have spent quite some time following our lambs through the kill chain. Our aim is to understand and consistently produce what is valuable to meat buyers, but ensure it is profitable to us, linking it back genetically to sires, dams, cost and ultimately margin and profitability. In this newsletter, we outline some of the on farm R&D we have been doing in this area, alongside how we have been working towards building more resilience in our farming system. If we are going to breed them how do we cost effectively feed them?



**Fig. 1. The combination of performance, quality, consistency and resilience in Cloven Hills genetics helps meet the challenges of modern farming.**

**Fertility and growth - our latest info**

At the Birchip Cropping Group Sheep Showcase Day in Birchip in July, Chris heard Rob Norton the Managing Director of MLA talk about how Australia is producing record numbers of lambs at 22-25 million/yr. He said “The number of kilograms of lamb we are producing also continues to increase, despite the number of ewes remaining at around 70 million head. The key drivers for this are growth, (with average carcase weight increasing from 18 to around 23 kg) and more people switching from Merinos to cross bred ewes, which have higher fertility and subsequently higher turn off rates”.

This echoes our production system at Cloven Hills with the average carcase weight of our hook lambs this year being 22-23 kg. Likewise fertility is the key profit driver of our system and we were pleased with our scanning percentages this year, given last year we had a flock where 50% of the ewes lambed under 2 years old and weaned 155% topped off by a tough spring, summer and autumn. The average scanning percentages of our ewe hoggets, rising two year olds and mixed age ewes averaged 145, 165 and 180%, respectively (Fig. 2). Our overall average this year, including ewe hoggets was 175%, including dries at 2%.

The other pleasing thing about the scanning results were that over 90% of the ewes conceived within the first cycle, meaning most of our lambs will have hit the ground within 17 days, minimising any tail and ensuring they are all ready for marking and weaning at the same time. It also means spending less time checking ewes, and more time for other things!

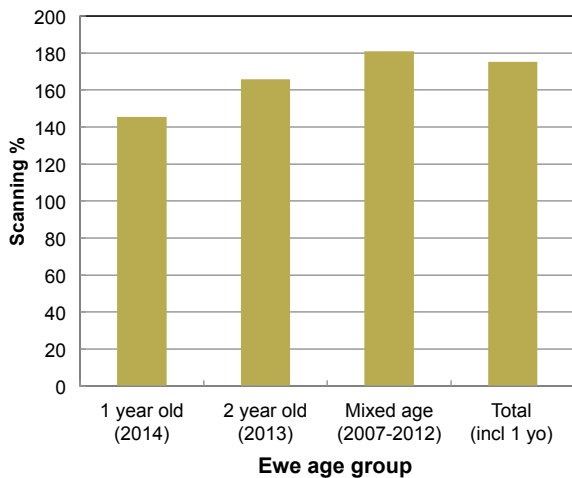
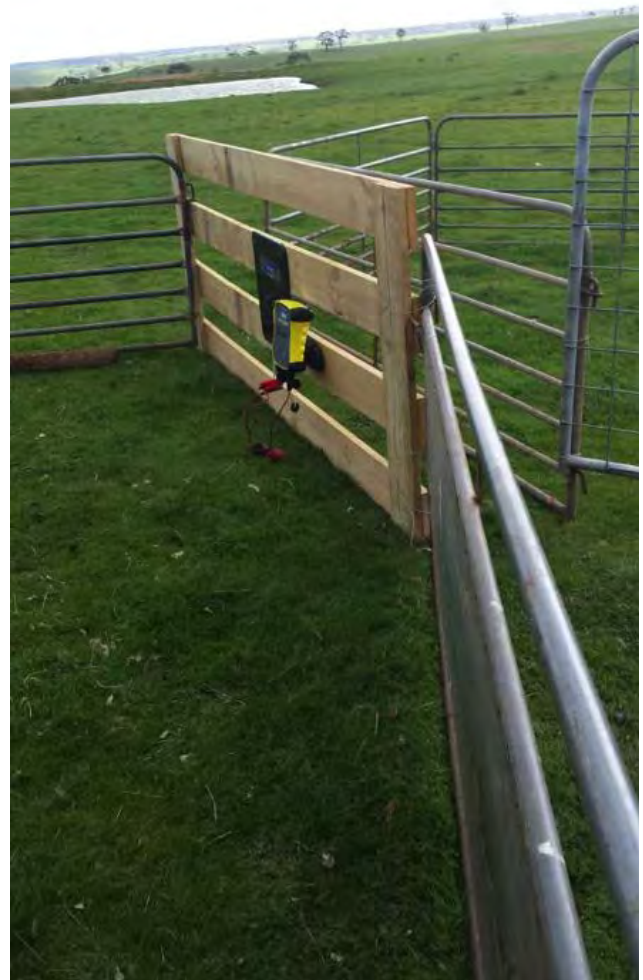


Fig. 2. The average scanning percentages of all ewes at “Cloven Hills” this year, including ewe hoggets was 175%.

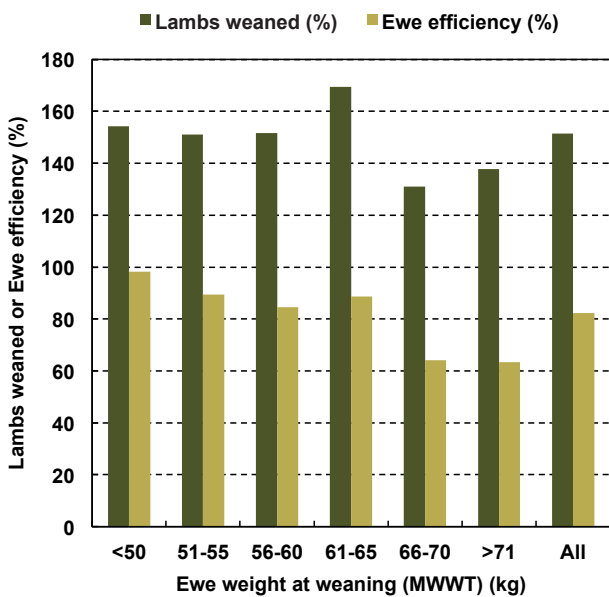
**Evaluating ewe and lamb and sire performance all the way to the abattoir**

It was good to recently be a part of the debates at the “Feeding and Finishing Forum” organised by the Southern Prime Lamb Group (SPLG) in Hamilton (May), as well as the “Birchip Cropping Group Sheep Showcase Day” (July). One of the topics of discussion was the use of EID tags in prime lamb production. We have had EID tags in all of our breeding ewes since 2008. In 2014 we decided to put them in all of our lambs, so that we could evaluate their commercial performance through undertaking a match maker trial, in collaboration with Tru-Test. After lamb marking, we set up panel readers between lick feeders and water troughs to identify which lambs belonged to individual ewes. We then tracked the growth of lambs through weaning and post-weaning and followed them through the kill chain at the abattoir to collect individual carcase trait information. We then related the data collected back to their dams and matched 2068 lambs to 1365 commercial ewes.



One of the first benefits of having EID tags in the lambs was at early post weaning, where we were able to identify and separate lambs with the lowest growth rates and prioritise allocation of scarce green feed in a failing spring. These lambs were put onto lucerne and summer crops, irrespective of their actual weights and their growth rates rapidly increased in a short period of time. We also identified that post-weaning, growth rates of twin lambs was 5% higher than singles and that there was not any difference in carcase yield (47-48%) between them. Other lessons we took from the trial were that it is essential to manage the supply of protein to lambs post-weaning and that separating shy feeders turns them around very quickly.

Secondly, we were able to evaluate which ewes were the most efficient, with respect to number of lambs weaned and how many kilograms of lambs were weaned relative to their body weight. Ewes less than 65 kg weaned the highest percentage of lambs (155-170%) and were the most efficient (85-100%). Above 65 kg, NLW and ewe efficiency was much less at around 135% and 65%, respectively, suggesting that ewes between 61-65 kg at weaning are the most productive, enabling us to run a stocking rate of 17 dse/ha.



As we continue to monitor and add the final abattoir lots we will have more findings in future newsletters. To date, what it has reinforced, is that the pillars of fertility and growth, along with physical classing, not only gives you resilience in the paddock but good good shape and carcasses hanging up. Of course scanning for eye muscle genetically and greater cover also drives yield. We look forward to seeing the much talked about technologies giving us more detailed feedback that will help make it more profitable for producers.



**A good line of Cloven Hills lambs, they are fresh and handle well across the back with good cover, just what I look for when buying lambs. We are always happy to buy them from Kate & Chris”- Ray Clark, Westside Meats Australia.**

### Building a resilient farming system

Resilience is a word which is used a lot these days. Kate recently attended a seminar on building resilience in children to equip them with the skills for tackling future challenges. We focus on breeding resilient ewes and rams, so they withstand tough seasons, dry or wet, hot or cold. What about resilient farms? How do we continue to produce what consumers want year in and year out when we are not sure about how much rain we are going to get and when? The dry period from 1 July 2014 to mid-January 2015 is still being felt with a soil moisture deficit likely going into spring, despite reasonable rain in May, June and July. However, in our area we can still be reasonably confident of growing dry matter from May to August and so our challenge is to grow the maximum quantity and quality of feed during this period of “certainty” through perennial pastures like phalaris and optimising fertiliser application. Dry sowing annual ryegrass in March/April and containment feeding has also helped in the past few years to build a feed wedge going into winter, allowing stocking rates of 8-9 twin bearing ewes per hectare in most paddocks for lambing from mid-July.

Speaking to a neighbour, he said that with respect to other times of the year it is about growing what you can when the opportunity arises. For example, we planted most of our summer crops in August last year and planted more on the back of the January rain we received, with good results. We believe building flexibility into the system is critical for responding to challenges or opportunities when they arise.

Each farm and district is different and faces different constraints, but also has specific comparative advantages. Chris was fortunate to visit Tasmania in June and saw impressive enterprises with high rainfall, centre pivots, cheap water and power. However, their dryland pastures do it tough

in the winter and they are faced with considerable freight costs (eg. \$8/hd for lambs) which, they need to absorb. Likewise, farmers in the Wimmera and Mallee have less rainfall but have better access to grain and stubbles which they can utilise for feeding ewes and finishing lambs. Whilst, there is not a magic bullet, identifying and focusing on the strengths of the enterprise, minimising exposure to risks and having the flexibility to respond to changing circumstances is likely to assist in building a more resilient farming system.

### Keeping weaners in forward condition using standing oats

Grazing standing oats has worked well for keeping lambs in forward condition post-weaning, but meeting their protein requirements during this time is a challenge we are still working on. This year we will look to supplement their diet with legume grain or hay when they are on the crops.



Adrian (Buddy) Linke, "Willowbrook", Peshurs, July/Aug drop ewe lambs in Nov 2014 "very happy with my Cloven Hills ewe lambs they have done very well."

Nevertheless, we still think the standing oats adds considerable value to our enterprise as shown in Table 1. This suggests that even if the price stays the same (\$4.50/kg cw), the stock would still appreciate in value

by \$9.11/hd. Accounting for establishment and opportunity costs, this would generate an additional \$26,450 in income. However, if the price increased to \$5.50/kg cw, as it did in Jan-Feb 2015, it could potentially add another \$96,000 of income to the business (Table 2). Moreover, the January rains generated considerable green pick from germinating oats, onto which we joined our lightest and youngest ewes. The market price would have to fall from \$4.50 to 4.00/kg cw, before the standing oat crop would lose money (Table 2).

Table 1. Comparison of growing 50 ha of standing oats for managing lambs post weaning to generate additional income to the business.

	Option 1	Option 2
	Standard Grazing	Standing Oats
Area (ha)	50	50
Establishment cost (\$/ha)		200
Establishment cost (\$)		10000
Stocking rate (Stock/ha)	7	80
Stocking rate (Lambs)	525	4000
Entry weight (kg)	34	34
Growth rate (g/day)		150
Time on crop (Days)		30
Liveweight gain (kg/hd)		4.5
Exit weight (kg)		38.5
Price (\$/kg cw)	4.5	4.5
Value (\$/hd)	68.85	77.96
Income (\$)	36,146	62,596
Additional value (\$/hd)		9.11
Additional Income (\$) (incl. estab costs)		26,450

Table 2. Sensitivity analysis of the effect of lamb price (\$/kg) on the profitability of grazing a standing oat crop with weaner lambs.

	Option 1	Option 2				
	Grazing	Standing Oats				
Price (\$/kg cw)	4.5	3.5	4	4.5	5	5.5
Value (\$/hd)	69	61	69	78	87	95
Income (\$)	36,146					
Additional value (\$/hd)		-8	0	9	18	26
Add'l Income/ (Loss) (\$) incl. estab costs		(42,850)	(8,200)	26,450	61,100	95,750



CLOVEN HILLS SIRES BALANCING FERTILITY, GROWTH, SHAPE & STRUCTURE



Top 150 & Sale Sire Cloven Hills 13-23 Maternal \$ Index 133



Top 150 & Sale Sire Cloven Hills 13-517 Maternal \$ Index137



2015 Sire Cloven Hills 13-842 Maternal \$ Index140



Top 150 & Sale Sire Cloven Hills 11-43 Maternal \$ Index137

\*See back page for trait information.

# CLOVEN HILLS 2ND ANNUAL RAM SALE

**MONDAY,  
12 OCTOBER  
1:00PM**  
VIEWING FROM  
11AM

## CASTERTON SHOWGROUNDS, ISLAND PARK

We were very appreciative of the support shown to us by existing and new clients at our inaugural ram sale last year. We cleared 91 out of 93 rams offered, at an average of \$984/hd and a top price of \$1800/hd. Given these rams averaged in the top 10% of the Maternal \$ Index, we believe these rams represented great value for money and performance. Furthermore, the growth and carcass data of both these rams and the Cloven Hills rams in the top 150 Maternal Rams in Australia is unmatched.



We are pleased to announce that this year's sale will be held on Monday 12th October at 1.00PM, with viewing from 11.00AM at the Casterton Showgrounds, Island Park. This year all rams offered will be in the top 10% of the Maternal \$ Index with similar characteristics of driving production through fertility, growth and doing ability.

We also place strong selection pressure on carcass characteristics in our breeding program, with our rams, ewes and lambs exhibiting consistent length and shape, particularly in the hind quarters. We have been following our lambs all the way through to the abattoir and continue to receive very positive feedback about our lamb carcasses both directly from abattoir managers (Westside Meats and JBS Bordertown) and from abattoir feedback to clients (Hirds). We also have a number of sires in the Sheep CRC nucleus flock.

Our sale catalogue will be available on our website shortly, and you can find the rams we will have for sale on the new Sheep Genetics "Ram Select App" ([www.ramselect.com.au](http://www.ramselect.com.au)). One of the exciting things about this new tool is that it will help clients select rams based on their own breeding objectives, by putting more or less weighting on particular traits that are important to your business and not pre-selected in the Maternal \$ Index.

### Cloven Hills Sires - Balancing Fertility, Growth, Shape & Structure

NAME	BWT	WWT	PWT	AWT	PFAT	PEMD	PWEC	PSC	NLW	YNLW	MWWT	MAT\$
CLOVEN HILLS 130842	0.6	8.2	14	16	-0.8	0.7	-73	4.3	12%	17%	0.7	140
CLOVEN HILLS-100546	0.4	8.5	13	14	-0.5	0.1	-49	4.3	18%	11%	-0.2	138
CLOVEN HILLS-130517	0.4	9.1	14	16	0.1	0.8	-36	4.3	11%	6%	0.7	137
CLOVEN HILLS-121363	0.3	8.9	14	15	-1.2	1.1	13	4.9	12%	9%	0.1	136
CLOVEN HILLS-110043	0.3	7.8	13	16	-0.2	1.2	-67	4.3	10%	19%	-0.6	135
CLOVEN HILLS-120070	0.2	7.3	13	14	0.2	2.4	-33	4.9	5%	2%	-0.1	134
CLOVEN HILLS-130023	0.5	7.7	13	15	-0.4	0.8	-37	3.7	6%	9%	0.8	133
CLOVEN HILLS-121356	0.5	8	13	15	-0.3	1.8	-61	5.1	3%	9%	0.1	131
<b>BREED AVERAGE</b>	<b>0.5</b>	<b>6.3</b>	<b>9.3</b>	<b>11.1</b>	<b>-0.5</b>	<b>0.4</b>	<b>-22.0</b>	<b>2.7</b>	<b>6%</b>	<b>7%</b>	<b>0.0</b>	<b>123</b>