LEAHCIM NEWSLETTER

Accredited Brucellosis Free

Newsletter No.21





July 2023

White Suffolks & Poll Merinos Leahcim Wool - Farm to Yarn to You Hummocks Station Tourist Park





Welcome

The last twelve months has seen generally good rainfall over most of Australia with some areas challenged by excess amounts. Snowtown, Meningie and Willalooka have all had average or above rainfall, with some challenges late in the season for our sheep; from barber's pole worm and cow pea aphid toxicity in pastures at Snowtown. The challenges of extreme wet periods, availability of shearers, shearing costs, returns from stronger wools and the reduction in • price of red meats has some farmers questioning their farming direction. At Leahcim we have used the slogan "Breeding for the Future" for 25 years which is very much at the forefront of our genetic selection, traceability of product and goals for us and our clients.

Leahcim's strong belief that a Poll Merino breeding operation with sub 19 micron white wool, mules free animal, high growth and yielding red meat carcass with high fertility and survivability can

be achieved using our genetics because of the highly accurate ASBV's and traceability we offer.

In this newsletter we will cover:

- Meat eating quality achievements.
- Data showing how Leahcim is targeting high value products while maximising the best animal welfare standards.
- Why, more than ever, Australia's wool and meat production needs traceability with a focus on what our customers are requesting.
- Opening of the restored stables, store room and trap shed at Hummocks Station which will be the venue to sell and showcase Leahcim wool "Farm to Yarn to You" products.
- Trip to New Zealand which included a wool tour with AWN and likeminded growers.

The Michael Family

Leahcim's 2023 Calendar of Events

- ★ Australian Sheep & Wool Show at Bendigo Friday 14th Sunday 16th July
- ★ South East Stud Merino Field Day at Keith Wednesday 19th July
- ★ Sheepvention at Hamilton Sunday 6th August Monday 7th August
- ★ Leahcim Snowtown Poll Merino Sale Tuesday 12th September
- ★ Leahcim Snowtown White Suffolk Sale Friday 15th September

Overview

Leahcim has aways focused on increasing industry profit drivers while reducing labour inputs and maximising the animal welfare outcomes for us and our client's livestock operations. Many of the challenges experienced last year across Australia by sheep producers such as, high worm infestations, delayed shearing and flystrike has made many people look at where they should invest their funds in genetics.

At Leahcim we have invested our time and money in the identification of worm resistance, highest value and performance of meat and wool on an animal that delivers an outcome that works for commercial clients right through to our customer at the end of the supply chain.

Leahcim offers genetics that are of the highest level for measured quality, traceability, and repeatability. Sheep Genetics data assessment for over thirty years has given Leahcim one of the most accurate and largest data bases in Australia. The addition of large numbers of follicle density measurements over the last five years to increase wool quality, skin quality and production will help Leahcim, and our clients maintain a profitable and ethical breeding operation.

Leahcim's venture into having some of our wool processed into tops, craft yarns, commercial yarns and various woven and knitted products has been an exciting journey so far. The product is fully traceable, ethically produced, 100% Australian processed and marketed as Leahcim Wool "Farm to Yarn to You", with the main outlet at Hummocks Station, one of South Australia's pioneer sheep stations.

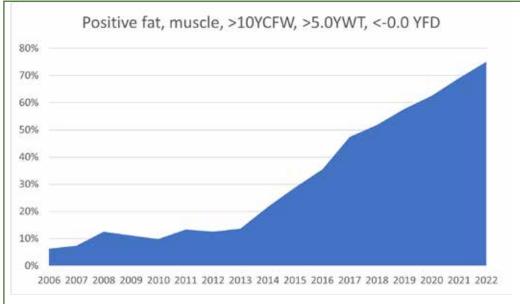
Leahcim's data is available on the Sheep Genetics website and will be available on every sheep for sale in 2023. All Leahcim sheep are genomics tested for parentage identification and genotyped to maximise tractability and allow us to select for hard-to-measure traits, which will maximise our genetic gains. Leahcim continues to measure a large range of phenotypic traits to increase the accuracy on our overall data. Leahcim is one of few studs within Sheep Genetics that has the highest rating of five stars for data quality.

The Days of Breeding a Dual Purpose Merino is Over

What we expect of our animals now is so much greater with more traits collected than ever before. On top of the wool and carcass production traits that we have been collecting for over 30 years, we now have welfare traits, eating quality, fertility and parasite resistance.

As we increase the selection pressure on these new traits it is important not to lose sight of the main production traits, which many commercial producers still hold at the forefront of ram selections. In breeding merinos, it is a constant battle of selecting for traits that are antagonistic to another, and it is as important to measure the negative of the intended direction. This is why it is important to move everything forward in balance, when it comes to traits.

In the graph below (graph 1), you can see what percentage of that entire drop sit above the outlined production traits. Now if we were to look at the averages of those years, they wouldn't be as vastly dissimilar as this graph may indicate. What Genomics and MateSel has done, has enabled us to make better breeding decisions to improve our flock as a whole and take everything forward in balance, rather than have sheep at either end of the spectrum in regards, ie, carcass animals and wool animals.



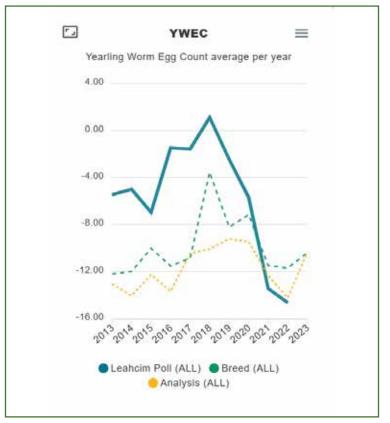
Graph 1: Simple production traits, goal posts will change in time. Note 2012 was when matesel, and genomics were adopted

It is easy to breed a wool animal with no carcase and on the other hand have a carcase animal with no, or poor wool quality. What one can do is maintain these two lines and it will give you a reasonable average, but averages unfortunately do not tell the whole story.

As well as improving our balance of these production traits, it is also important to keep improving them individually. What drives us is the continual challenge to produce a better product year on year.

These production traits have been collected for many years now and are stable in terms of how far we can push them, so it is a matter of fine tuning them. For example, we know from experience, and you only have to search on the SheepGenetics website to get a +30 YCFW animal. It will have a negative impact on other traits. Prove us wrong if you find one!

It is very exciting to see how we have been able to shift some of the newer traits we have been targeting. For example, see below (graph 2) for how we have managed to transform our worm resistance in a matter of 4 years. Before this we simply weren't collecting the data, so we had no idea where we sat within the industry. But wet years highlighted the issue of worm susceptibility within the Australian merino flock, and something we thought needed to be addressed as a seedstock producer.



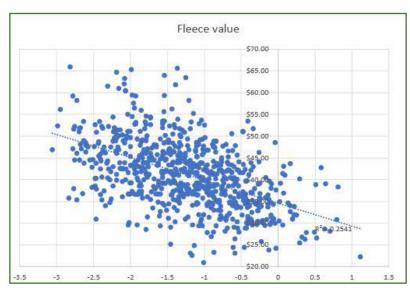
Graph 2: Yearling worm egg count average per year comparison

YFD v YCFW

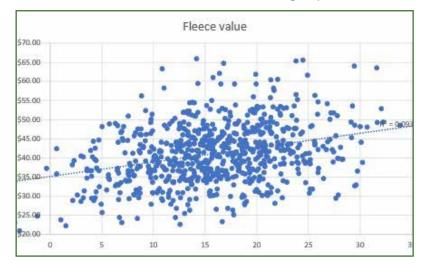
We talk about balance a lot in our breeding objective, and the word is very "cliché". Almost as much as conformation and constitution in the Stud Merino directory. But we think it is important to note that in balance, we don't always mean looking at every trait, sometimes if people are looking to increase their wool production you need to understand the relationship and the balance between certain traits. The relationship and balance between Micron and Fleece weight is an interesting one, and one that should not be overlooked.

When it comes to ram selection many people will single out the YCFW figure as the sole trait for wool production. Through the skin biology work and years of collecting data, as well as sitting down and doing some simple calculation on cylinders x surface area (cylinders being wool follicles), we know it is very easy to increase fleece weight through increasing micron. What this doesn't necessarily mean is an increase in Fleece Value.

Below are two graphs that show the correlation between fleece values and YFD (graph 3) and fleece values and YCFW (graph 4)



Graph 3: Showing the correlation between YFD and Fleece value of a group of animals with a correlation of 0.25



Graph 4: Correlation between YCFW and fleece value at a correlation of 0.09

This is a dataset of 800 ewe lambs born at the same time, shorn at 12 months old with 6 months wool. Valuations were taken off of the AWI market report late June based on Micron intervals.

What this illustrates is that the correlation between YFD and fleece value is 0.25, which is much greater than the correlation between YCFW and fleece value which sat at 0.09.

Just important to keep in mind when purchasing rams and making breeding decisions. Wool is a premium product that is paid for accordingly. We believe in maintaining that "balance" of profitability with quality, as well as quantity.

Below is a list of sires that will feature in the 2022 drop Poll Merino Sale catalogue:

						•			-					
Tag	<u>YWT</u>	<u>YFAT</u>	<u>YEMD</u>	<u>YCFW</u>	YFD	<u>YFDCV</u>	<u>YSL</u>	<u>EBWR</u>	<u>WR</u>	IMF	EBCOV	YFEC	<u>SHRF5</u>	LDAG
182185	9.3	0.1	-0.4	20.7	-2.2	-1.4	12.0	-0.6	0.02	-0.6	0.2	-45.8	1.6	-0.2
182259	6.6	0.0	-0.1	25.2	-1.8	-1.6	12.3	-0.4	-0.10	-0.4	-0.1	-14.9	-1.1	-0.4
182295	8.2	0.4	2.4	17.7	-1.9	-2.1	11.4	-0.9	0.13	-1.1	-0.5	0.7	1.5	-0.1
202278	10.0	0.1	0.4	27.9	-1.8	-1.4	14.7	-0.6	0.04	-0.3	0.0	-29.0	-0.5	0.3
202362	8.5	0.3	1.6	15.6	-1.9	-3.1	10.7	-0.9	0.06	-0.7	-0.4	19.0	-0.3	0.0
202651	14.0	0.2	1.3	24.4	-0.2	-2.1	16.6	-1.0	0.12	-1.3	-0.6	-56.9	3.1	-0.4
203002	8.2	0.8	1.5	18.9	-1.9	-0.7	10.8	-1.0	0.04	0.4	-0.3	-25.0	-4.6	0.5
203053	7.1	0.3	1.3	21.6	-2.4	-2.0	16.5	-0.8	0.14	-0.5	-0.2	-1.8	1.3	-0.1
203061	13.7	0.9	2.5	18.6	-0.8	-1.7	10.6	-1.2	0.2	-0.6	-0.7	-34.5	-2.1	-0.8
203075	9.9	0.5	0.9	22.9	-2.1	-2.3	13.1	-0.8	-0.01	-0.4	-0.7	-12.1	0.7	-0.3
203142	8.0	0.3	0.3	10.9	-2.4	-2.4	12.0	-1.1	0.05	-0.3	-0.7	-4.2	-0.3	-0.5
203185	5.8	0.7	2.7	24.4	-1.8	-1.1	10.0	-1.0	0.18	-1.1	-0.6	-12.7	-0.1	-0.2
203376	7.5	0.1	0.0	18.8	-1.4	-1.2	14.8	-0.9	-0.04	0.0	-0.1	23.6	0.3	-0.4
203446	7.9	0.8	1.8	25.3	-0.6	-2.0	16.4	-1.0	0.11	-0.7	-0.3	-30.9	-1.7	-0.1
203627	8.3	1.2	2.2	14.7	-0.3	-1.2	12.0	-1.3	0.19	-0.5	-0.3	-21.3	-0.2	0.0

White Suffolks Rise To The Top

Over the last few joining's in the White Suffolks we have invested heavily in industry leading genetics. This has led to our flock average for the 2022 drop sitting in the top 20% of the database (for TCP).

This years sale rams will feature rams from a Poll Dorset ram Linton 160625, White Suffolk ram Bundarra Downs 205932 as well as our own sires outlined below:

Tag	<u>wwt</u>	<u>PWWT</u>	<u>PFAT</u>	PEMD	<u>TCP</u>	LEQ
200035	11.1	17.4	0.0	3.6	162	161
200094	9.2	16.4	-0.1	2.8	159	164
200563	11.3	16.8	-0.5	4.5	167	153
210013	11.6	17.0	0.0	3.7	163	162
210152	12.6	18.7	-1.2	2.3	160	156
210208	10.2	16.6	-0.2	3.9	165	167
210249	10.8	16.0	0.3	3.6	157	159
210389	12.8	19.2	-0.6	2.7	160	159
210473	11.7	17.0	0.0	3.9	160	157
BD205932	10.3	15.9	-0.1	3.0	157	159
L160625	11.9	18.5	-0.3	2.6	171	178

After classing the "22" drop ram lambs recently, we couldn't be happier with how they look for make and shape, with the data to match. The sale team averages are outlined below, with the catalogue not confirmed yet. This is the average of the top 150 classed White Suffolk rams:

<u>wwt</u>	<u>PWWT</u>	<u>PFAT</u>	PEMD	<u>TCP</u>	LEQ
11.2	17.1	-0.2	2.9	155.9	150.9

This year whilst attending the Australian Sheep and Wool Show in Bendigo and Hamiltion Sheepvention we will be displaying White Suffolk rams also. This is the selection of rams that will be on display:

Tag	<u>Sire</u>	<u>wwt</u>	<u>PWWT</u>	<u>PFAT</u>	<u>PEMD</u>	<u>TCP</u>	LEQ
220087	200035	10.6	16.8	-0.4	3.2	160.3	160.3
220103	L160625	12.0	17.8	-0.8	2.9	168.3	166.2
220300	L160625	12.9	20.2	-0.7	3.1	170.0	165.6
220305	L160625	12.8	19.3	-0.9	2.6	166.1	169.8
220436	200094	9.2	16.7	0.4	3.0	157.6	160.3

2022 Sales Leahcim Poll Merino

Sale Summary

	2022	2021	
Offered	300	300	Thank you to all
Sold	300	300	clients for purchasing
Тор	\$24,000	\$18,000	Leahcim Genetics.
Av	\$3,402	\$3,240	



Pictured is the \$24,000 top price ram at the Leahcim Poll Merino Ram Sale purchased in partnership by the Gunallo and Ridgway Studs with Richard Miller, Gordon Wood & Simon Aldridge (Nutrien), Alistair Michael (Leahcim) & Brad Schroeder (Gunallo Stud).

Leahcim White Suffolk

Sale Summary					
	2022	2021			
Offered	121	132			
Sold	121	118			
Тор	\$21,000	\$3,000			
Av	\$1,630	\$1,354			

Thank you to all clients for purchasing Leahcim Genetics.



Pictured with the \$21,000 top price ram at the Leahcim White Suffolk Ram Sale are Alistair and Andrew Michael and auctioneer Gordon Wood. Ram purchased by Valma Stud.

New Zealand Trip & Wool Tour

Andrew Michael

In June, Rosemary and I had a trip to New Zealand which has been a long time coming, we had it booked pre-covid but for a number of reasons having it delayed was a benefit. Over the last three years our interest in the supply chain for wool processing has become an important part of our business and the shift in products for both meat and wool traceability and transparency has become enormous.

It was our first trip to NZ, with the first week spent travelling the South Island admiring the scenery and checking out all the wool shops we could find. Week two we joined a wool tour group of twenty-three people including Rod Miller and Tony Bradfield from AWN as our tour guides.

The tour started in Queenstown with two days at Earnscleugh Station, attending a bull sale on the first day and the second day sheep and wool presentations from Alistair Campbell, the owner of Earnscleugh and Mark Ferguson from NextGen Agri. Earnscleugh genetics, both beef and sheep are driven by data, with the Campbell family having some of the lowest micron sheep in the sheep genetics data base. The take-home messages from this visit was that it is achievable to have extremely low micron wools (13 micron) with good fleece weights and carcase traits. These very valuable products that are demanded from a specialist market and can be achieved by using advanced technology, especially breeding values. Alistair mentioned that he pulls out the original Jim Watts CSIRO information on skin biology and wool production every five years to remind himself about the science behind maximising wool production and quality.

The next stop was Christchurch where we visited New Zealand Merino, who are a partner with AWN as a global supplier of Ethical and Sustainable Wool under the ZQ brand to the international markets. The take home messages here was the world is demanding environmental care, animal welfare and wellbeing and the importance to understand how wool growers view their place in the world. Firstly, the message from all our site visits was that mulesing is Not accepted with their customers and that climate positive products like natural wool is where they are targeting in the future. The other marketing perception is how farmers should brand themselves as growers not farmers. The word farming is associated with mining and the associated implications.

New Zealand Merino sees a grower as:

Mother	Manager
Father	Builder
Agronomist	Host
Environmentalist	Medic
Meteorologist	Mentor
Entrepreneur	Coach
Accountant	Best Mate
Engineer	

The tour then moved to Wellington in the North Island where we visited Wool-Yarn of New Zealand which was the pinnacle for us as it covered many stages of the wool processing pipeline. Andy May and Jimad Kahn presented to the group and then took us for a tour through the wool plant. Wool Yarn process wool on consignment from scouring through to finished yarn, with mainly wool but also blend using possum, silk, cotton, and a very small number of synthetics. It was great to feel products from 13 micron to 29 micron.

The final leg of our trip was to Auckland where we visited

Icebreaker offices then onto an outlet to inspect and purchase some woollen products. Icebreaker and New Zealand Merino markets are high end fashion with an extreme focus on the end consumer, especially regarding sustainability, environment, products that are climate positive, animal welfare, and with most products, next to skin wear.

The one sad point of the trip was the lack of wool processing left in New Zealand with nearly all 1st, 2nd and 3rd stage processing done in China, India and Bangladesh, with only the finishing of products in New Zealand. It would be great if our Australian wool industry could do more manufacturing here, as many people told us in New Zealand that advanced wool processing technology has allowed wool processing to require minimal staff.

Leahcim Wool - Farm to Yarn to You

Rosemary Michael

I think I can say in all honesty, my journey with Leahcim Wool over the last 12 months has dominated my life.

There's not a day goes by where I'm not doing something with wool. Wether it is hand dying, weaving, knitting, crocheting, winding skeins, labelling, or packaging. And every day I'm reminded about the 1st bale of wool I sent for processing, just for my own curiosity and interest! This year we have sent another 5 bales for processing, bringing our total amount of Leahcim Wool for processing to 2 and a half tonnes.

We love to take our Leahcim Wool – Farm to Yarn to You out to the public and share with them our story and beautiful product. Its heartening to know there are a lot of people out there that are so aware of being able to purchase a natural wool product that has been grown in a clean, green, and sustainable way, and most importantly this has all been achieved in Australia.

On the day we returned home from our New Zealand wool tour we had an appointment with Silver Fleece (our commercial knitters) in Adelaide to look at some of our new woollen products, with a new colour range, and our first look at our light weight jumpers. To say we were excited was an understatement, the products are amazing, soft and have unbelievable brightness in colours all from our 17.5-micron wool, fully traceable, maximum animal welfare and wellbeing standards, fully processed in Australia with minimal carbon footprint and climate positive. The trip to New Zealand gave us a great insight into where wool production and product are heading into the future.

My highlight for this year would be getting the restoration work completed at Hummocks Station and getting the Leahcim Wool – Farm to Yarn to You store set up.

The restored store at Hummocks Station will become our outlet for Leahcim Wool products. The store will open on

allocated days (check our Facebook for opening times). Leahcim Wool will be displayed off farm at Bendigo Sheep and Wool Show, Hamilton SheepVention, Keith Stud Merino Field Day, YP Field Days at Paskeville in the ANZ marquee, Festival of the Lamb, Mintaro, and next March Fibre Feast in Adelaide.

You can follow me on Facebook @leahcimwool if you like. I'm not good at social media, I'm still trying to improve so I can tell our story and show you some photos of my exciting journey with our beautiful Leahcim Wool.

Hummocks Station

History of Hummocks Station

Hummocks Station history dates back to the mid 1840's when it was first leased by Captain John Ellis, it covered about 250 sq miles and was nestled between the Clare, Hummocks and Barunga ranges and now towns of Port Wakefield and Red Hill . In 1869 Mr Robert Barr Smith and John Maslin purchased Hummocks Station and by then was running about 25,000 sheep. The main Hummocks Station building (Homestead, Trap Shed, Store, Shearers Quarters and Stables) were built in the 1860's.

A few other statistics,

- In 1895 Hummocks Station blade shore 34,500 sheep
- Every 10 weeks the boundary riders were issued from the store:
 - 1.200lb of Flour
 - 2.40lb of sugar
 - 3.28lb of salt

4. 5lb of tea and were supplied sheep meat from the station.

- In 1879 Barr Smith loaded wool on to the newly completed railway line adjacent to the homestead destined for Wallaroo, to be loaded onto a ship bound for England for processing.
- In 1835 Australia had about 2 million merino sheep which produced 2 million kilograms of wool at approximately 23 micron (1 KG per sheep per year).

Our Michael family have farmed adjacent land since February 1873, and with the use of the world's best science and technologies. That same land now runs our Leahcim White Suffolks and our Leahcim Poll Merinos that produce 6 kilograms of 16–18-micron wool with outstanding meat quality and production.

Heritage Tourism Grant Opening of Hummocks Station Trap Shed and Stables

In early 2022, Hummocks Station secured a grant through Wakefield Regional Council to restore some of Snowtown's valuable, local heritage.

Hummocks Station received \$50,000 through the Department of Environment and Water to support a \$150,000 restoration of our heritage-listed Trap Shed and Store and the old Stables. The restoration work commenced in March/April 2022, and we had 12 months

to complete the work. After 12 months of working tirelessly alongside as many local trades people we could employ, the restoration work was complete.



The renovated Trap Shed



The renovated Stables

Friday May 19th 2023 was our opening day to show our politicians, council representatives, local business and trades people, family and friends the transformation of this 170+ year building.

The morning started in the newly renovated Stables, with Andrew Michael extending a warm welcome to our distinguished and invited guests, family, friends, and supporters.

Les Pearson, Public Relations, Economic Development and Grants office for Wakefield Regional Council delivered an Acknowledgment to Country for the Traditional Custodians of the Land.

Andrew Michael then gave a brief history of Hummocks Station and the Heritage Tourism Grant.

Jason Strong, managing director of MLA (Meat and Livestock Australia) from Brisbane, spoke on Technology within the Red Meat Industry to help achieve the goal of CN30 (Carbon Neutral by 2030) and Sustainability in Agriculture into the Future. Cathy Barton and Sophie Oates – Silver Fleece Adelaide, talked about their passion of wool, especially locally grown, quality wool. Silver Fleece is a proud South Australian business (70 years and still going), machine knitting jumpers for schools all around Australia, knitting all the Australian Cricket jumpers and much more, and now being involved with knitting our Leahcim Wool.

Adele Fiene – ANZ Bank State Manager, spoke about sustainability and passion in farming. Adele was joined by Tom Rundle - ANZ Regional Executive SA Central Region, Georgia Cooper – ANZ Agribusiness Relationships Manager, Clare branch and Denny Polden – ANZ Agribusiness Relationships Manager SA Yorke Peninsula and Eyre Peninsula Region, based in Clare.

Senator the Hon. Don Farrell – Minister for Trade and Tourism spoke on his recent trip to China; the aim of his trip was to work on improving relationships and trade between Australia and China. He also spoke on tourism and how pleased he was to see Hummocks Station and the potential it has to bring tourism to Snowtown and surrounding areas.

Hon. Zoe Bettison MP – Minister for Tourism spoke on tourism in our area, the influence of Covid and increased numbers of local tourists, and also her visit to Hummocks Station 3 years ago.

Penny Pratt MP, Member for Frome, was also in attendance, and a special mention was made to David Speirs, Leader of the Opposition of South Australia, and a previous member of our State Liberal Government, because it was David Speirs who signed off on the original heritage grant. Everyone then moved to the newly renovated Trapshed where Rosemary Michael gave a brief history of Leahcim Wool, "Farm to Yarn to You" and the Hon. Zoe Bettison MP declared the completion and opening of the renovated Trapshed and Stables by cutting through the slither of Top (Wool) and opening the doors. All guests were welcomed to walk through the Trapshed to see the reception area,

and store.



Leahcim Wool on display inside the renovated Trap Shed The Silver Sharks Aerobatic Team, comprising of James Hart from Port Lincoln, John Buttrose from Gawler, and our own Stewart Michael from Leahcim, Snowtown, thrilled the crowd with some aerobatics and formation flying. Although it was a slightly tamed down performance, because of low cloud and light rain at the time, it was still enjoyed by all and left many in awe.

A light lunch was served in the Function Centre – Lunch was kindly sponsored by ANZ Bank and supplied by Bute Corner Store.

