



NEW ARM TREE
BORDER LEICESTERS

Newsletter

May 2023

Welcome

To an Autumn edition of our newsletter for 2023, we will also endeavour to get another one out prior to the ram selling season later in the year to keep you updated on what the NA stud is up to.

Communication is important, within and across any business and at times we can be that wrapped up in what we are doing at NA that we do not let you know what is happening or why. So, to counter that we incorporate the information and fill you in via the newsletter.

Topics on the 2023 joining, why we have decided to part ways with the Superborder group, explaining genetic gain NA has made, what is the place of the first-cross in today's modern sheep business and the big "T" by Dr Tim Gole are some of the information covered this time around.

The Australian red meat Industry has a strong reputation both domestically and internationally and the price correction currently being experienced, whilst it may be difficult to adjust to, still has many opportunities and upsides. Across the supply chain from ram sales to the breeding base the price adjustment, will be across the board and the opportunities many.



NA Ram Team 2023



We believe that this team of rams for 2023 is one of the best teams we have put together and will take us and our ram buyers well into the future. Focused on production traits whilst capping Adult Weight (Awt) have been the key drivers behind selection of these sires.

Checking on the Sheep Genetics Search site with information that is publicly available and ranking the 2022 drop of lambs, NA rank second for the Border Leicester breed Nationally and first within NSW.

Tag Number	Sire ID	Bwt	Pwwt	Pemd	Pfat	Mwwt	Con	LS	ERA	WR	IMF	Shear5	Awt	BLX Index
19-0152	NA 180017	0.13	9.3	0.8	0.5	0.93	0.03	-0.01	0.03	0.08	-0.28	0.36	7.3	135.5
20-0414	NA180116	0.2	8.98	1.52	0.51	0.09	0.03	0.04	0.02	0.13	0.02	-0.02	8.78	140.03
20-0415	NA180116	0.2	11.56	1.62	1.06	-0.09	0.03	0.09	0.02	0.14	0.04	-0.81	11.25	144.67
21-0339	INV 190304	0.26	10.45	1.18	1.12	0.88	0.05	0.05	0.03	0.16	-0.09	0.92	12.35	142.34
21-0132	INV 194707	0.36	11.24	1.72	2.62	0.61	0.06	-0.03	0.03	0.1	0.13	-1.39	12.57	139.96
21-0269	INV 194707	0.43	9.67	2.05	2.84	0.71	0.06	0	0.05	0.18	0.14	-3.15	8.8	152
21-0524	NA 200415	0.37	11.31	1.52	0.03	0.34	0.04	0.03	0.02	0.11	-0.38	1.31	9.37	145.75
21-0259	NA 20505	-0.28	8.23	2.33	-0.07	0.54	0.05	0.05	0.03	0.16	-0.17	-0.65	7.58	148.5
21-0413	INV 190304	0.49	12.11	1.15	0.01	0.96	0.05	0.08	0.04	0.21	-0.27	0.73	11.14	156.55
INV 21-8011	GL 190157	0.02	12.15	1.75	0.31	1.13	0.06	0.01	0.05	0.18	-0.49	1.83	11.4	156.8
Glen 21-0148	INV 190147	0.34	10.18	0.73	-0.15	1.26	0.03	0.07	0.06	0.1	-0.72	4.16	10.81	135.56
INV 19-0304	INV 170243	0.53	12.16	1.18	2.85	1.35	0.07	0.06	0.07	0.26	0.24	-0.01	13.14	161.31
Ram Team Average		0.26	10.6	1.5	1.0	0.7	0.05	0.03	0.04	0.2	-0.15	0.27	10.4	146.6
Breed 50 Percentile		0.27	8.04	0.34	-0.11	0.74	0.01	-0.04	0.01	0.01	-0.14	1.21	10.38	116.42

Run Date 15/02/2023

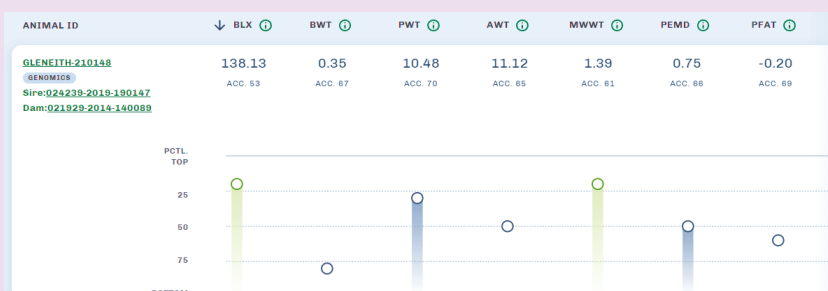
- Top 5%
- Top 10%
- Top 20%
- Top 50%



We are looking forward to see how the progeny from this sire perform.

New Sire Gleneith 21-0148

This sire was purchased late last year at the Gleneith on property sale. As we progress our breeding program sourcing outside sires becomes difficult and hitting our Breeding Objectives more difficult. Gleneith 21-0148 is an outcross offering traits that we can utilise in our sire team.



Why First Cross ewes?

What is the place of the first-cross in today's modern sheep business?

With the rise of composite sheep breeds in Australia we have been asking ourselves at New Armatree what role does the first cross and second cross production system play. As more producers try and breed a sheep that does it all, there is one thing that you get for free in the first cross system that composites will never be able to achieve. That is hybrid vigour.

Hybrid vigour is in the increase in production characteristics of the progeny of crosses between diverse parents, such as the Border Leicester and Merino, such that the F1 progeny are superior to the two parents. Another good example of hybrid vigour at work is in dog breeding. Often pure-bred dogs have shorter life expectancies and have high incidence of genetic defects, particularly when the gene pool is small. The dogs that are tough, hardy and seem to live for ever are the cross bred bitzas! This is hybrid vigour at work.

Whilst hybrid vigour is a great thing that we get for free you can further capitalize on this by genetically selecting the best pure breeds to go into the cross. E.g. the best Border ram and best merino ewe base. At New Armatree we think the opportunities provided by hybrid vigour in combination with the best genetics of the Border Leicester ram is the foundation for a profitable meat production system.

An important aspect of the first-cross system is the wether portion. Whilst reproduction of the first cross ewe is a key trait of this cross being able to easily finish the first cross wether portion remains pivotal.



It is up to seedstock producers like New Armatree to ensure that we are supplying industry with rams that will deliver these outcomes. This provides our clients with the flexibility to sell ewes and wethers over the hook at early ages with good eating quality outcomes.



Ewe Pregnancy Scanning

Sheep Jetting

Sheep and Cattle Contracting



James



0439 709 306

www.newarmatree.com.au

NA Partners

Welcome James Naden from Apex Contracting

James has just completed his second year of scanning at NA and we couldn't be happier. James has had some really big shoes to fill following on from Craig Chad (Double C Contracting), but has slipped in without raising a sweat.

We highly recommend James and welcome him as a partner on our website and in this newsletter.

Follow Apex Contracting on Facebook and Instagram

Interesting Fact

% of commercial ram buyers using ASBVs to purchase rams	2015	2020	2022
	30%	44%	59.9%

**More COMMERCIAL producers than ever before are using ASBVs **

Increasing Numbers

NA has taken the bold step to increase the number of ewes joined in 2023. This step will enable us to offer more rams at the On Property Ram Sale held on the second Thursday of September. All going to plan we will offer a larger selection in 2024

Joining more mature ewes is one step to increasing numbers but also tightening up the ewe lamb joining program to achieve greater conception is the other method. We are endeavouring to get more of these 7-month-old ewe lambs in lamb and extract the most from them not only to increase numbers but also shortening up the generation interval and making the most from the increased genetic gain.



We look forward to pregnancy scanning on May the 16th 2023 to see the results.

SALE
On Property Ram Sale
Thursday 14th
September 2023

Leading Breeder 2023

The Sheep Genetics Leading Breeder 2023 Conference was held during March at Bendigo. Craig and Jack attended this two-day event with the theme of "The role of genetics in sustainability and productivity".

The conference had 4 sessions with three or four presentations in each session. The 4 sessions were:

A panorama view of genetics and updates for our business

From genomics to plate - Engaging with breeders through to consumers

Designing breeding programs

Achieving sustainability outcomes - what role does genetics play?

All sessions were relevant, engaging and a couple were even entertaining! We are all hearing the noise in relation to methane production and environmental concerns. There is a program called "Carbon Neutral by 2030" (CN30). While you might roll your eyes and want to bury your head in the sand, it is an important target and opportunity for seed stock producers.

New Armatree is serious about this CN30 program and we are well on our way to achieving Carbon Neutral outcomes. Selection for moderate framed sheep (lower Adult Weight - Awt), faster growing young sheep (higher Post weaning weight - Pwt) and sheep with higher reproductive performance (Weaning rate - WR), we can produce more lamb earlier from moderate framed sheep. That is, more lamb per kg of methane produced. The next step is to reduce actual methane emissions - stay tuned!

By aligning yourself with seed stock producers who are well down the track on production versus methane, your sheep enterprise is also well placed to be Carbon Neutral by 2030.





Moving Forward

It may come as a surprise to some, and no surprise to others, that New Armatree Border Leicesters has resigned from the SuperBorders group. After much consideration and evaluation of our flock's performance against the performance and direction of the Super-Border group, we decided it was in our interest to leave the group and go our own way.

At New Armatree we believe that it is in our interest, and the interest of our ram buyers, to make use of all information, tools and technology available to improve the genetic gain within our flock whilst maintaining strict physical and structural guidelines.

The introduction of new traits and technology by Sheep Genetics is crucial in moving our business and the lamb industry forward.

From 2023, our sale rams will be identified as being better than breed average which will be your assurance that they are above the 50 percentile band for Border Leicesters on the BLX Index.

We will be aiming to produce a full selection of rams which are above breed average as we have done in the past. One of our objectives is to present a sale catalogue of rams which has an average BLX Index above the 20 percentile band for the breed.

We hope you can appreciate the need for us to make the change and hope you can join us in moving forward with reliably measured and recorded genetics. We will continue to support you with marketing your first cross lambs with the well recognised "Sired by New Armatree" logo.

The BIG "T"



At NA we have used Teasers (The big "T", see picture) but only using wethers. The simple inconvenience of using wethers resulted in their short-term use for us, even knowing all the benefits. Inconvenience in a number of ways - vets out to view the wethers and then apply drugs using specified timeframes, not being able to sell into the food chain and running the wethers with the flock rams has its associated problems.

For Flocks Sake, aka Tim Gole, suggested the utilisation of rams not suited for sale yet vet checked to be vasectomised and used as teasers. In 2023 we used 9 rams across the commercial maiden merino ewes and backed them up to the Border Leicester ewe lambs a week later.

Having Just scanned these ewes the results have become evident, with the majority of the maidens scanned in lamb within the first half of the five week joining.

We would like to extend to our ram buyers the opportunity to purchase Teasers from residual rams that did not make any sale grade. These rams are fit to use as teasers only, in that testicle size may not be even or correct firmness and are usually sold in the sale yards as a meat only sale.

At a cost recovery venture, we can offer these rams at meat value plus the cost of the operation that Tim preforms.

We were surprised at the cost in that it is very reasonable and the fact that these rams will be retained within the flock team for the next 4 to 5 year period makes the proposition economically viable.

If you are interested let us know plus numbers at or after the on-property ram sale and we can let you know when they will be available.

As we all know sheep are seasonal with max repro potential in March-April (Evolutionary - so they can lamb in the nutrition of spring). What that means is that if you are joining before early Jan your sheep will be susceptible to the effects of seasonality.

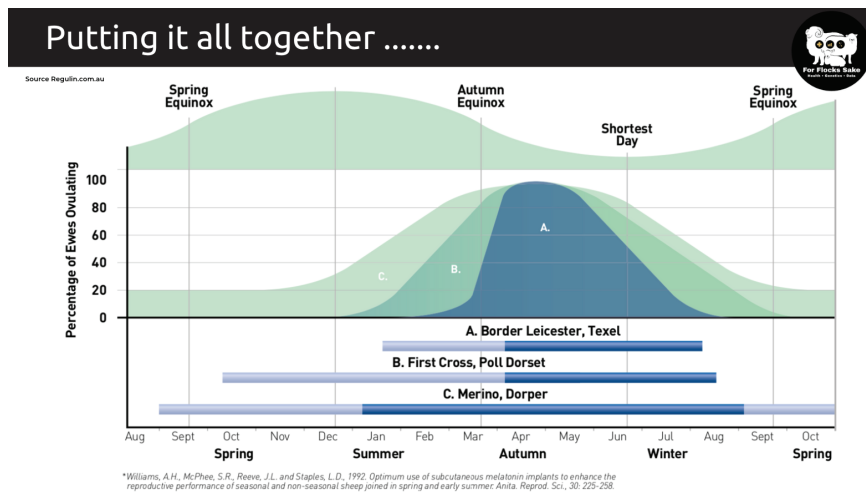
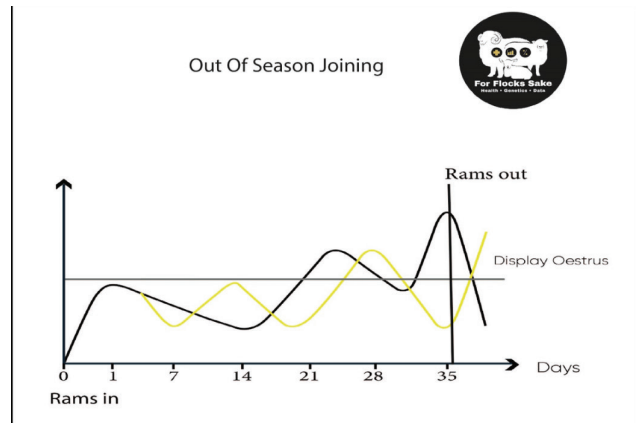
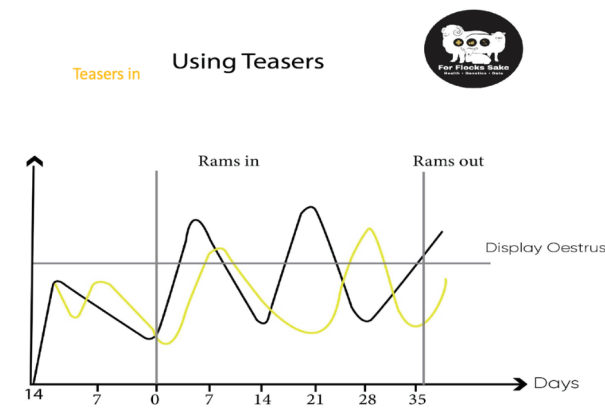
How much depends on your breed of sheep and time of joining. In this out of season joining there will be ewes who's reproductive engine is just idling. When rams go into to these ewes they have a "silent heat" which is like the engine turning over. Some of these ewes have a second silent heat and the rest go on to cycle normally.

Does this cost you? These ewes only get one cycle to join in the joining period. Which means either they miss getting in lamb or they have a later lamb. If a lamb is growing 250g/day being born a cycle later could cost the business \$12.43 per head (based on \$6.50/kg). For ewe lambs it's a similar story regardless of time of year as the repro engine is just starting to turn on.

At FFS we always ask ourselves - can we control this? Yes we can. By utilising teasers 2 weeks before joining out of season or with ewe lambs our ewes will have their "silent heats" before the real rams go in. Which means our teasers gets the ewes turning their repro engines over so they are in a position to have multiple cycles within the joining period - See diagram. So the result of using teasers is a tighter joining and more consistent reproduction rates.

Rams that are vasectomised make the best teasers as they can be used multiple times in a year, for multiple years and can be sold for meat value at the end compared to wethers hit with testosterone which cannot. Nutrition is by far the biggest driver of repro rate but if you have that covered and looking for other controllable then vasectomised rams can offer a lot of value.

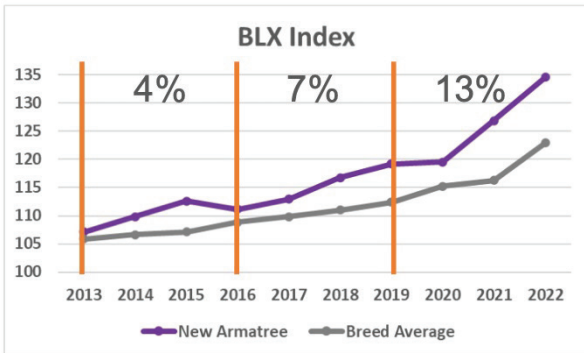
FFS is partnering with New Armatree to provide vasectomised rams for clients who are looking to make every ewe a winner.



*Williams, A.H., McPhee, S.R., Reeve, J.L. and Staples, L.D., 1992. Optimum use of subcutaneous melatonin implants to enhance the reproductive performance of seasonal and non-seasonal sheep joined in spring and early summer. Anita. Reprod. Sci., 30, 225-258.

Genetic Gain over the past 9 Years

The graph shows our genetic gain since 2013 up to 2022. We have divided the graph into three major steps and changes that the stud has taken to increase this gain over time.



4% gain from 2013 to 2016

We engaged a stud advisor to assist at critical times of the production calendar. Times like ram selection and mating groups which drive any stud, also this removes the emotion from these decisions and keeps everyone focused on the studs Breeding Objectives.

We were, at that point in time, recording all groups of animals. It is Important to record both ewe and ram lamb progeny of the stud to give the full picture especially in regard to muscle, fat and scrotal measurements in the ram lambs.

At this point in time, we were still showing sheep.

The first quarter of 2015 the index was changed taking in Adult Weight and some reproduction traits.

7% Gain from 2016 to 2019

After researching many software programs, we invested in BreedElite. Developed by producers initially from Kangaroo Island and expanding nationally, this development and refinement continues to the present day. Adding to the software we purchased the BreedElite Smart Drafter which also helped deliver on improving genetic gain.

We commenced Genotyping ram lambs plus using the selected ram lambs within the breeding program.

These SMART Breeding Objectives are all outlined on our website www.newarmatree.com.au and compare us with the breed Average and where our aim is within the next 3 years.

I have attached our BLX Index Breeding Objective from our website, and as you can see, we have already exceeded our Target. When we set this target the flock was sitting at just over 127 on index and we have been pleasantly surprised that by selection of sires based on production traits, we have exceeded our target.

It will be interesting to see where we sit on this graph in the next couple of years and at the time of review in 2026.

We developed SMART Breeding Objectives.

S= Specific

M= Measurable

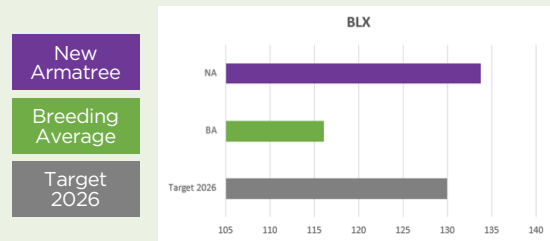
A= Achievable

R= Relevant

T= Time bound

Index Target

BLX: To continue to improve the BLX index at a faster rate that the industry.



13% gain from 2019 to present

The stud has used MateSel to deliver the optimum mating outcomes whilst managing co-ancestry for the stud. We use this program in conjunction with visual appraisal of both the ram and ewe to be mated.

We ceased showing which stopped a lot of white noise for us. White Noise in that the show ring rewards the early born and largest animals whilst our Breeding Objective is to cap Adult Weight. Antagonistic or white noise.

Further refinement of Breeding Objectives.

Undertaking AI and ET programs

Focusing on future traits such as Eating Quality and capping Adult Weight.



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