



WHARETOA GENETICS

Superior Genetics for Greater Profitability

Specialist breeder of Maternal and Terminal Sires that produce fast growing and high meat yielding lambs.



Never before have any of us seen the prices we are receiving for lamb and mutton. The projected outlook is strong, and some are predicting that prices will go even higher. This gives us plenty of motivation to produce as much as possible on our farms to cash in on this opportunity.

Everybody's perception of the impact of genetics on final financial results varies. I agree with the scientists who say that genetics and nutrition contribute 50/50.

3 years ago, AbacusBio evaluated the genetic merit of our recorded flocks. The results are still very relevant. By using superior genetics and mating up to 40% of your flock to high genetic merit Terminal Rams an increase of up to 35% EBIT can be achieved. As a sheep farmer this (the genetic make-up of your flock) is one of the few things that we are in control of 100%. A copy of this report is available on our website.

Chris and I hope that you find this Newsletter informative. As always, we are available to discuss your breeding programme and how Wharetoa Genetics can help you meet your goals.

We thank you for your continued support and look forward to hosting you on our Open and Sale Days.

Very best wishes for the season ahead.

Garth and Chris Shaw



Texel ewe and lambs



Meatmaker x Suffolk



Wharetoa Maternal

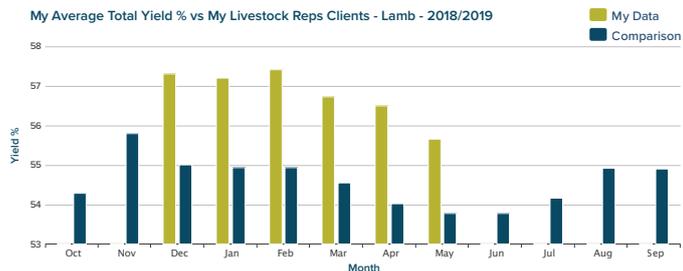
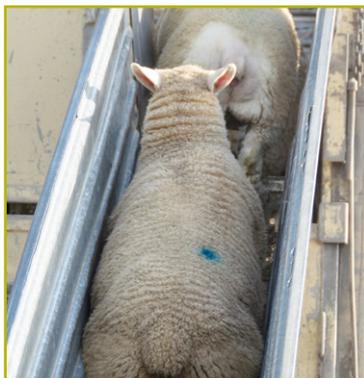
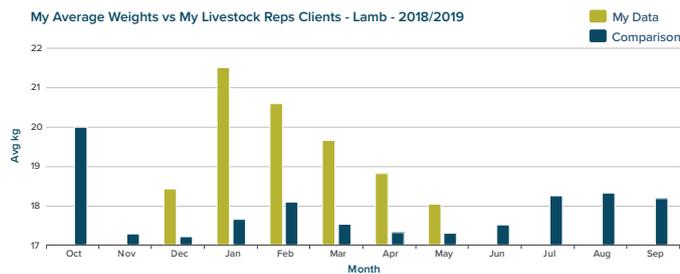
Proven by Performance.

Lambs

We continue to use our ram lambs over our Texel X Coopworth (Wharetoa Maternal) commercial ewes. This is a good way to judge the productive performance of our Maternal and Terminal genetics. All lambs are processed by the Alliance Group and carcasses go through the Viascan to assess meat yield.

Last year in a very difficult season for finishing lambs our export lambs average carcass weight was 19.5 kg, 3% were sold as stores and our mean kill date was December 17.

The bar graphs below show the performance of Wharetoa's lambs for weight and meat yield with the average of my Alliance livestock rep's clients as a comparison.



Freezer Ewes

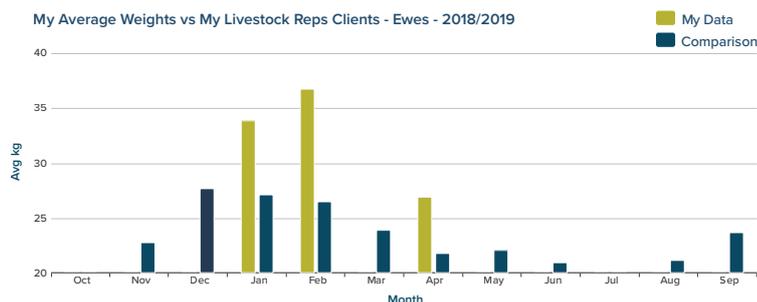
With mutton at \$6.00/kg, significant financial gain can be made by killing heavier ewes.

The difference in value between a 27kg ewe and a 35kg ewe is;

$$8\text{kg} @ \$6/\text{kg} = \$48$$

$$\text{Over 500 ewes} = \$24,000$$

The bar graph below shows the performance of Wharetoa's ewes (weight) compared with the average of My Alliance livestock rep's clients.





Mean Kill Date

Having an early mean-kill date enables farmers to save valuable feed and gives the opportunity to generate more income.

Genetics have a major influence on lamb growth and meat yield and half of the genetic make-up of a lamb comes from the ewe. So, to successfully achieve an early mean-kill date, it is important to have superior growth and meat genes in your ewes.

It is also important to have a lamb with the conformation that it can be killed at 16kg or (if the season allows) at 23kg.

Body Condition Score

Body Condition Score (BCS) is increasingly being used by sheep farmers to aid higher production.

With the selection we have done on meat yield over the years, there is now an additional bonus of the ewes retained for replacements having better conformation and constitution than previously. They are able to maintain a consistent optimum BCS of 3.50 – 4.00.

Here at Wharetoa Genetics we strive to breed Maternal and Terminal rams that will enable our commercial clients to achieve an early mean-kill date AND have a commercial flock of productive ewes that maintain a consistent Body Condition Score of 3.50 – 4.00.



Technology

DNA:

The use of DNA technology enables us to have more accurate breeding values and to identify superior sires at a younger age.

In the future, all production traits will be identified by DNA.

With the identification of the pedigree (Mum and Dad), we also get the Myomax status. So, we will be culling all non Myomax carriers (male and female) of our Suftex at weaning. This is how significant genetic gain can be made for meat yield.

This technology comes at a significant cost which we regard as an investment to identify and supply our clients with genetically superior rams.

ON FARM AUCTION: Friday December 20, 2019

Why use ShepherdComplete?

What it means to be a Zoetis ShepherdCOMPLETE Breeder, and why our investment is for you – our valued ram clients!



I want to highlight to Garth's clients, a few points about the rams in the Wharetoa upcoming sale. Because of Wharetoa's recent investment into ShepherdCOMPLETE with Zoetis - the rams you will be looking at have a few more strengths than in previous years.

1. Accuracy of their figures

Garth's Wharetoa Maternal and Suftex flocks are now fully DNA parent recorded. We now know that what you're buying, is exactly as per the paperwork in your hands! SIL data shows the average pedigree error is about 9% and most errors occur on the sire side. Correct pedigree ensures the accuracy of the rams figures (Breeding Values) and if you are one to use the figures to help your selections – we want you to be assured that they are as accurate as they can be! DNA parentage also gives Garth peace of mind that if he needs to use more than one ram in a mating group, or if a bunch of ewes are lambing on the same day – he knows he has got the sire and the dam correct.

Correct pedigree, along with the increased accuracy from Sheep5K, means you can rely on Wharetoa's figures as a good prediction of the rams' future performance.

2. Lamb Survival

Lamb survival is always one of Wharetoa's key objectives, as I know it is for a lot of commercial farmers – for many reasons! By using DNA parentage, instead of tagging lambs at birth – Garth estimates he has increased his own survival by at least 10%! This is similar to what we have seen in other flocks adopting DNA parentage. A stud breeder increasing survival is important for a number of reasons;

- from a welfare standpoint, of course.
- it also means they have a larger selection of rams for sale and,
- more ewe lambs available to select any replacements from to increase selection intensity (important for genetic gain)

but:

- It also means Wharetoa are now lambing in conditions that are more reflective of commercial breeding programs. Now, if a ewe is culled on her survival figures – it is more reflective of her mothering ability and the lambs vigor – as opposed to interrupting their bonding time by tagging lambs. Survival figures for Wharetoa are now are much more commercially orientated, rather than being affected by stud breeding conditions.

3. Performance goals

Inside Garth's ShepherdCOMPLETE package with Zoetis is another tool in the toolbox called Sheep5K. This is a genomic tool which analyses a rams DNA and predicts his potential future performance. Sheep5K ensures the best decisions are made as to which rams are used to sire the next generation.

Garth's sire selection is now based on:

- a. Structure
- b. Measurement of their own performance + performance of their relatives, and now
- c. Genomics

First, a ram must be structurally sound to perform his task. He is then selected on his own performance data (phenotype) and – thanks to Sheep5K® genomic technology – he can also be selected on yet-to-be seen performance data. A ram lamb can now be assessed as if he already has 5-100 progeny on the ground, depending on the trait. Fact: Sheep5K® flocks go nearly 50% faster than the industry average. So if Wharetoa are reaching their performance goals faster – by buying Wharetoa rams, so are you!

4. MyoMAX

Now that all lambs born have a DNA sample to verify their parentage, all lambs also get a MyoMAX test. The MyoMAX gene is known for increasing carcass weight and muscle yield. Garth can now use this result as another criteria for his ewe replacement selection, along with ensuring all sale rams also have a MyoMAX result. Animals that carry a single copy of MyoMAX will see an increase in muscle yield of 5% and double MyoMAX carriers will see an increase of 10%! When you buy a ram with a double copy, it ensures that ALL of his progeny will at least carry one copy of MyoMAX.

Johanna Scott,
NZ Genetics Lead, Zoetis



"Your flock's performance is a mix of genetics and management. I've invested and done everything I can on the genetics side – so if you have targeted your ram selection towards traits you care about, then the influence of your management input will be that much more effective".



Genetic Trend Graphs (GTG)

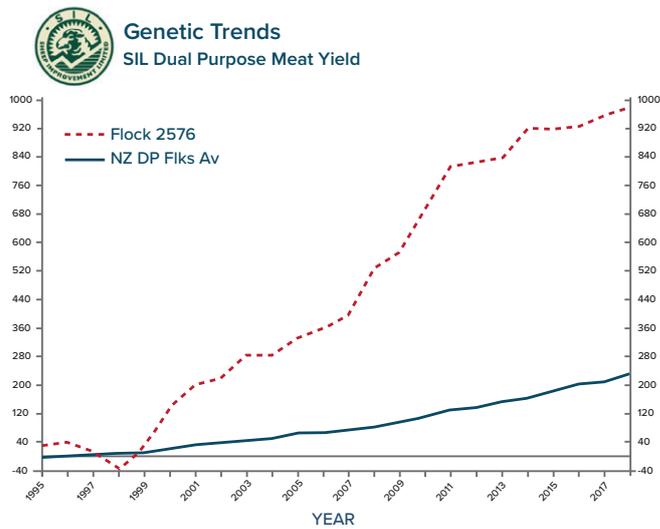
Genetic trend graphs show the genetic gain of a flock over a period taking out all environmental influences.

The genetic gain of your flock will follow the same line as that of your breeder but will just be a few years behind. SIL uses a huge amount of historical data to generate Genetic Trend Graphs. The longer a flock has been recorded on SIL, the more accurate the Genetic Trend Graphs are.

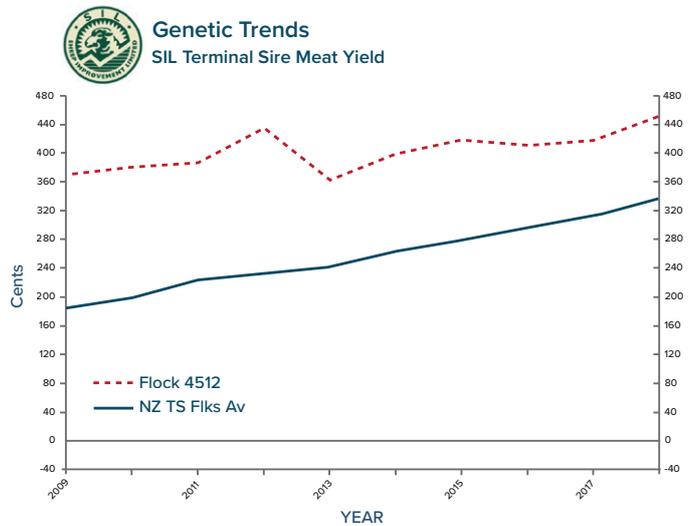
The Genetic Trend Graphs for all our breeds (excluding Suffolk X Meatmaker which is incorporated in the GTG for the Meatmaker) are on our website.

Please note; Our Suftex flock is a relatively young flock on SIL so there is not a lot of historical data for evaluation yet (you will see that the GTGs for this flock starts in 2007). I do believe that their genetic merit is better than the graphs show, and therefore continue to use them over our commercial ewes.

Maternal (Texel) 2576



Terminal (Meatmaker) 4512



OPEN DAY: Friday November 29, 2019, 10am – 3pm

Wharetoa Maternals

The Maternal breed with serious growth and meat genes.

Reflecting on the last 12 months.....

Over the last year we have had some extreme weather events. These extreme conditions have put added pressure on our farming businesses. Our Wharetoa Maternal ewes have handled these conditions remarkably well. On January 4, 2019 we weaned the WM 2018 born lambs (560 lambs all twins and triplets). The results were:

- Average age; 104 days
- Average weight; 41kg
- Growth weight (birth-weaning); 346 grams/day
- Ewe body condition score at weaning; 4.50

From mid-March to the end of April 2019 (ewes went to ram 12 April 2019):

.... the ewes lost 1 body condition score (8kg)

End of June 2019; scanned 194%

These figures demonstrate the excellent conformation and constitution of our Wharetoa Maternal ewes to take them through the environmental extremes experienced over the last 12 months.

Because we are putting emphasis on growth and meat, we have chosen to exclude Adult Size from the Maternal Index.



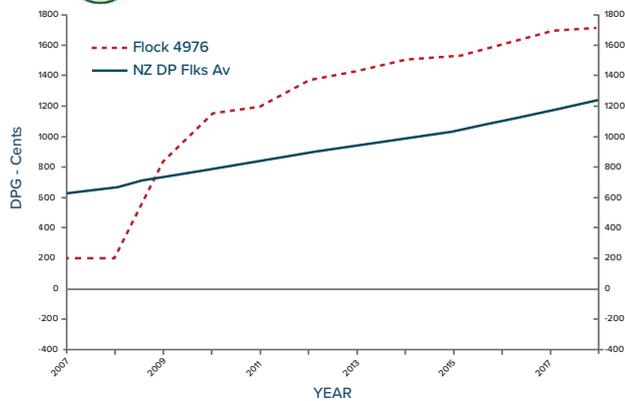
In the report by AbacusBio (2016) on the efficiency of our genetics for the commercial farmer, the observation was made that while our Wharetoa Maternal ewes may be slightly bigger (75kg cf 70kg), their increase in production will easily offset the extra feed that they eat.

This year we have produced Genetic Trend Graphs for the Wharetoa Maternals using both Maternal and Terminal REV's.

GTG Wharetoa Maternal (Flock 4976)



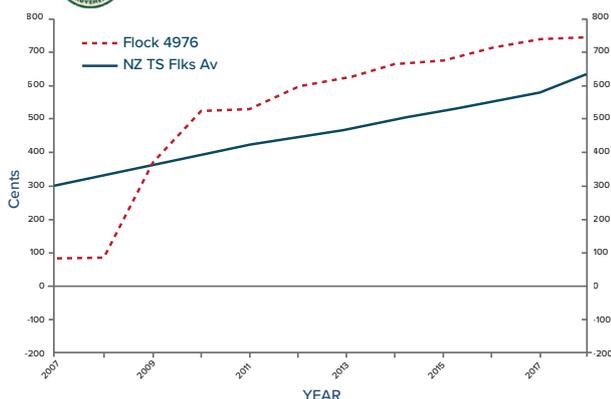
Genetic Trends
SIL Dual Purpose Lamb Growth



GTG Wharetoa Maternal NZ Standard Terminal Worth (NZTW) (Flock 4976)



Genetic Trends
SIL Terminal Sire Lamb Growth



Wharetoa Genetics Breed Profiles

Wharetoa Genetics has 6 different breeds of sires for sale. I do believe that each has a distinctive role to play in the NZ sheep industry.

Terminal



Meatmaker (Poll Dorset x Texel)

Selected for Terminal goal traits (growth, meat, survival).

- Fast growth rate
- High meat yielding
- Exceptional muscling
- Myomax



Meatmaker x Suffolk

Selected for Terminal goal traits (growth, meat, survival).

- Fast growth rate
- High meat yielding
- Black colouring for ease of identification
- Myomax



Suftex (Suffolk X Texel)

Selected for Terminal goal traits (growth, meat, survival).

- Fast growth rate
- High meat yield
- Excellent muscling
- Black colouring for ease of identification
- All Myomax carriers
- DNA Shepherd Complete

Maternal



Wharetoa Maternal

Maternal breed with serious growth and meat genes.

- Bred for maternal goal traits
- Exceptional stabilised Texel X Coopworth
- Produces fast growing high meat yielding progeny
- High fecundity
- Exceptional Conformation (to retain BCS)
- DNA Shepherd Complete



Coopworth

Bred for Maternal goal traits.

- Multipurpose / dual purpose maternal breed
- Some ewes are mated to Texel rams to generate sires to use in our Wharetoa Maternal flock
- Pure Coopworth rams are available



Texel

Bred for maternal goal traits.

- An ideal sire for maternal cross breeding to increase/improve – survivability of lambs
- Tolerance to internal parasites
- Ewe conformation (better BCS)
- Strong meat characteristics in maternal ewes

January 2019: we purchased 2 sires by UK sire Vorn Yardstick (ranked 1st for both Maternal and Terminal index in SIL NZ across flock analysis).



OPEN DAY

Friday November 29, 2019, 10am – 3pm

All Sale Rams will be yarded for inspection.

2019 Commercial lambs sired by Suftex rams and Wharetoa

Maternal rams will be yarded for inspection.

ON FARM AUCTION

Friday December 20, 2019

12 Midday. Inspection from 10am.

• Lunch and Refreshments •

**PROVEN Breeder of High Meat Yielding and Fast Growth
Rate Maternal and Terminal Rams**



Warwick Howie 027 437 5276
Callum McDonald 027 433 6443


WHARETOA GENETICS

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www.wharetoagenetics.co.nz

Garth & Chris Shaw, Wharetoa,
RD4, Balclutha, South Otago

T/F: 03 415 9074

M: 027 273 7037

E: wharetoa@farmside.co.nz

Facebook: Wharetoa Genetics

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