



# PAKI - ITI

ROMNEY - ROMTEX - SUFFOLK - SUFFTEX

## 2017



Ram hoggets on winter rotation

### OUTLOOK LOOKING POSITIVE

2017 will be remembered as being unexpectedly better than average as farmers prepared for the worse for lamb and mutton returns, only for the markets to head in the opposite direction. The average price for chilled lamb in July was 20% above last year, 14% above the five-year average and the outlook to Christmas looks positive with forward contracts from some meat processors ranging between \$5.80 and \$6.00/kg. We can all remember 2011 when lamb reached heights of \$7/kg only to come back rapidly as the new season lambs came on line. This year the experts tell us the dynamics are different as global stocks are low – we shall see.

On the Paki-iti front 2017 will also be remembered as

### A FIRST FOR THE INDUSTRY

In a first for the New Zealand sheep industry Paki-iti will be offering for sale only 22th Romney and Romtex rams this season that have been DNA tested using 5000 DNA markers. We have been using this technology for the past four years over 20% of our sale rams, to help identify the best ones to keep for ourselves. By testing 100% of rams for sale will mean that all clients will now benefit.

#### BENEFITS

Greater accuracy – Put simply 5K provides the most accurate

being better than average with a 98% ram sale clearance where we sold and leased to 147 clients throughout New Zealand. To meet potential further demand for rams we will be offering an extra 100 rams for sale across all breeds this season. The success of our maternal and terminal breeding programmes is simple – doing the basics right. Breeding for longevity, structural soundness, robustness and then breeding for productive traits that all add value to clients.

We have made the decision this year to DNA test all maternal sale rams, offering the greatest accuracy in performance and we have also introduced Meat Quality DNA testing into our terminal breeding programme.

prediction of an animal's future performance. Farmers pay good money for rams therefore want to know that what they are buying has figures as accurate as possible to what they are paying for. For the 11 traits, we are selecting for there is a 19% improvement in accuracy in the figures to this new system. This ranges from an increase in accuracy from 1% to 45% for the various traits. DNA testing also provides 100% accuracy of sire parentage of our sale rams.

*Continued overleaf*



## HOW IT WORKS

At present ram breeders rely on estimated breeding values (EBV's) when selling sheep, which is all the evaluated recorded and historical data for the ram and all its relatives. The 5K DNA test uses 5000 DNA markers from each sheep measuring how good the animal is in a range of traits. This molecular breeding value (MBV's) is then blended with all the historical information from the estimated breeding values (EBV) to give a genomic breeding value (GBV).

## WHAT TRAITS ARE MEASURED?

The 5K test gives information on 30 traits for each individual animal. The main traits we are concentrating on are – growth rates, adult weight, fertility, survival, hogget fertility,

carcass eye muscle area, (yield), wool, facial eczema, dags and faecal egg counts (worm resistance).

## FACIAL ECZEMA

The 5k test for facial eczema is now as accurate as sporidesmin testing 9.8 progeny of that ram if a flock has been selecting for FE for a long period of time and is well linked. This equates to about 60% accuracy. This technology is making FE selections very accurate.

## TERMINAL RAMS

We would love to use this 5K technology in our terminal breeding programme, but the technology hasn't been developed yet – we are hoping this won't be far away.

## WHY USE PAKI-ITI RAMS?

### Paki-iti have:

- Sold and leased rams nationwide to 147 clients
- Focused on doing the basics right
- Focused on structural soundness for all sheep since day dot
- 97% of rams offered for sale are fully SIL recorded
- All Romney and Romtex sale rams are 5K tested for greater accuracy – a first for the New Zealand sheep industry

### Paki-iti Romney's and Romtex's

- Bred on hard hill country rising up to 670m asl
- Commercially run, with a survival of the fittest philosophy
- Moderate framed, deep bodied type of sheep
- Scanning 190% at 22th weights of 62kg and MA weights of 65kg and lambing over 150%
- Ewe hogget's scanning up to 107% at 41kg
- Over the past six years a facial eczema flock has been developed
- Member of Romney NZ working closely with nine other breeders for growth and meat progeny trials and genetic linkages
- Continued breeding programme to maintain wool traits
- Romtex's bred from the Paki-iti Romney base
- Paki-iti Romtex's base bloodline T A M 2 9 5 / 1 2 (442 progeny, ranked 8th best sire in NZ out of all breeds for NZMW)
- Seven years of breeding Romtex rams



### Paki-iti Suffolk's and Sufutex's

- Running one of the largest fully recorded SIL black face flocks in the country selling and leasing 400 rams per year
- Focus on ram longevity, more moderate frame with meaty carcasses
- The poor constitution rams have already been weeded out – all terminal ram hogget's are wintered on the hills at Paki-iti

- C/T scanning has been part of the breeding program for the past five years
- Meat Quality now part of the breeding programme
- Each year we offer over 100 terminal ram hogget's for lease
- Surplus terminal ewe hogget's also offered for sale
- Also breeding darker Sufutex's (higher % of Suffolk)
- Member of the Premier Sufutex group – (a group of 12 Sufutex breeders spread throughout New Zealand)



### Ram selling

- Offering at least a 3 to 1 ratio, more likely a 4 to 1 ratio of rams to view
- All rams offered are structurally sound and of good type
- When compared to many other ram breeders Paki-iti's ram prices are considerably less
- Every ram sold carries a guarantee of performance with a 12-month replacement policy
- We select and guarantee satisfaction if clients are unable to personally purchase their rams

## WHY USE ROMNEY'S?

The Romney breed can best be described in a few words – proven, productive, predictable and reliable.

**Proven** – New breeds that are introduced to New Zealand always take several generations to adapt to our farming environment. Mainly it is feet that is the weakness of these new breeds, but can also be poor constitution as some breeds struggle to adapt to the hill country or can have poor survival in their offspring. The Romney has been through all this and has adapted to suit many different farming environments.

**Gene pool** – There is no other breed in New Zealand that has as many recorded ewes. This offers the largest gene pool, which can therefore offer the largest genetic gain.

*Continued on next page*

**Cornerstone** – The Romney was the base in the Coopworth Breed and the Perendale breed and it is little wonder that the Romney is the base breed for most of today's composite breeds. It is also the breed of choice when crossing back over these breeds, because it is simply proven, productive, predictable and reliable.

### WHY USE SUFFOLK'S – PROVEN, PRODUCTIVE AND BLACK

**Guaranteed black** – Not many terminal sire breeds produce lambs that are all genetically marked to prove that they are by a terminal sire. Whether for ease of management on farm or getting a premium when selling store stock, the

Suffolk offers more value than just straight production.

**Hybrid vigour** – improved production through mating a purebred ewe to a terminal sire to produce crossbred lambs is expected to wean 17.8% more weight of lamb than a purebred ewe mated to a purebred ram.

### WHY USE SUFTEX'S – PROVEN, PRODUCTIVE AND TOUGH

The SufTex is fast becoming New Zealand's most popular terminal sire as it produces lambs that have the fast-growing benefits of the Suffolk along with the high yields and toughness of the Texel.

## WHAT IS PAKI-ITI AND WHO ARE THE PEOPLE INVOLVED?

Paki-iti is a family owned company that is based in the northern Manawatu, running an 890ha steep hill country block at Rangiwahia where the maternal ram breeding programme is based and 420ha of better country through the Kimbolton district where the terminal ram breeding programme is based. Romney rams have been bred at Rangiwahia over the last 97 years, with a Romtex breeding programme being added in 2011. Suffolk rams have been bred for the past 22 years with a SufTex breeding programme being added in 2007.

Stewart and Andrew Morton are fourth generation ram breeders who started breeding rams at the ages of ten and eight when they formed a partnership with their younger sister. They pooled their savings and purchased 10 recorded Romney ewes from Paki-iti.

This was their introduction to ram breeding with involvement through the breeding cycle from mating to docking to ram selling and the recording that goes with it.

After school, Stewart worked on several properties in the North and South Islands as well as completing a Bachelor of Applied Science degree in Agriculture at Massey University, while Andrew went to Telford Polytech in



Stewart Morton



Andrew Morton



Dennis Shaw

Balclutha and worked on properties in the North Island.

At the ages of 26 and 24 Stewart and Andrew took over the management of Paki-iti and have continued the tradition set by their father and grandfather of breeding rams suitable for the New Zealand sheep industry.

The Paki-iti operation is well supported by several long serving staff members. Dennis and Kathy Shaw have been with Paki-iti for 36 years, with Dennis managing one of the Kimbolton blocks overseeing part of the terminal ewe flock and whom many would recognise from ram selling. Warren White who is in his 13th year looks after another block that includes running the terminal ram hogget's and Mike Loye who as shepherd at Rangiwahia moves onto a management position after 5 years at the end of October.



Warren White

## PAKI-ITI NOW TESTING FOR MEAT QUALITY

This year we have included Meat Quality in our terminal breeding programme by DNA testing 100 of the ram hogget's. Meat Quality has been a focus in the Australian sheep industry and here in New Zealand with the beef industry addressing the need to add value and so lamb eating quality is the next step for sheep breeders here.

The Meat Quality traits that we are focusing on are pH (how acidic the meat is), intramuscular fat (IMF%) and tenderness

(shear force) as these measure what the consumers want – tenderness, juiciness, flavour and an overall liking.

AgResearch results to date have shown that there is an unfavourable relationship between production and meat quality, as in the higher the performance the lower the Meat Quality. However, there are animals that do have high performance and high Meat Quality, and that is where the beauty of genetics comes in, to be able to select those that have this combination.

## JAPANESE EXPORT



In April 2017 a line of Paki-iti Suffolk ewe and ram hogget's were airfreighted to Miyagi, Japan. This was an area that had radiation poisoning due to the local nuclear reactor leaking during the 2011 earthquakes that devastated much of Japan. This resulted in the purchaser having to slaughter all of his stock. He received compensation from the Japanese government to re stock his property and subsequently ended up in New Zealand purchasing Paki-iti Suffolk's. Due to the severe shortage of breeding sheep in Japan the purchaser plans to import Paki-iti Suffolk's on a regular basis.

Traveling cargo class

## FOUR SHEEP INDUSTRY ISSUES

### IS THE STRUCTURAL SOUNDNESS GOOD ENOUGH IN OUR NATIONS SHEEP FLOCK?

In our role of selling rams we talk to a lot of farmers and a lot of stock agents. During these conversations, more often than not discussion is had at how poor the structure of ram's feet are that is seen around breeder's flocks and how poor farmers find the feet with sires and their ewe flocks. So why has this industry issue got so bad? One theory is that with the widespread use of performance recording there has been a compromise between performance and poor structure.

Gordon Levet, a well-respected Northland Romney breeder believes that there is a group of breeders that have what some would consider a more modern approach to breeding, who base their breeding selections mainly or solely on computer figures and rankings. "The progress they have made in these areas is impressive and credit for this is well deserved. However, some have paid a heavy price for these gains in the form of physical faults that have developed." (source NZFarmer)

The genetic engine we are breeding must be supported by a strong chassis and without a set of functional wheels will struggle to reach it's potential.

### THE CHALLENGE OF BREEDING WHAT THE INDUSTRY WILL NEED

In June, I attended the B&LNZ Genetics forum in Napier, a gathering of sheep breeders from throughout the country who were all there to improve their breeding programmes. What the two days highlighted to me was that as breeders we have a huge challenge ahead of us. If we look ahead to what farmers will need their sheep to be like in twenty years' time with high production, immunity to worms, tolerance to facial eczema, no dags, be immune to flystrike, have low inputs, have high quality meat etc, the challenge is indeed huge. I liken it to be easier to climb Mount Everest in a T-shirt than be able to breed what we need in twenty years' time. But technology is changing and we must continue to change in order for breeders to deliver what farmers will need.

### THE FUTURE OF FOOD PRODUCTION?

According to Rosie Bosworth, a technology futurist, the world is wising up to synthetic products. They are getting more excited and see that the current pastoral based agriculture is a flawed business model, environmentally, financially, and ethically. Synthetic protein is eight times better at calorie conversion, 10 times greater in reduction in greenhouse gas, water and land use and 15 times quicker in production compared to traditional

beef. These technologies are 10 years away but pose a real threat after all we all know the synthetic carpet story.

These alternative proteins aren't just limited to meat, but to dairy as well.

### WOOL – WHAT TO DO?



Current wool prices have dropped in the last 6 months to the lowest price in the last five years and leaves many questioning what to do.

Reduce frequency of shearing? From six monthly to eight monthly and eight monthly to 12 monthly. Possible side effects of change could be more cast ewes, more dags, poorer stock handling, higher incidence of flystrike and also poorer quality of wool in terms of colour and contamination. These all lead to lower stock performance, so is shearing policy and timing more about stock performance than it is about product harvesting?

Go shedding? To achieve a ewe flock that sheds it's wool will take four crosses, with some of the ewes achieving this in three crosses.

Go finer? To receive more for the wool an option could be to shift wool from the coarse micron range to the better returning mid micron range. This can be achieved in two ways, one starve the sheep – with obvious side effects and two, cross a fine woolled breed across the ewe flock. History has shown us that these sheep have struggled to adapt to the environment, the change in intensity of farming and also have lower performance in other traits.

Be careful not to let the return on kg of wool determine the shearing policy when the bigger picture of stock performance is far more important.

## BREEDING VIDEO AND SALE RAMS



Our breeding video has been put together showcasing Paki-iti's Maternal and Terminal breeding programmes, breeding philosophies, where they are bred, type of sheep as well as client feedback. This can be viewed on our website at [paki-iti.co.nz](http://paki-iti.co.nz). Also on our website we will have videos of the rams that we will have for sale this year (posted early November).

### 100% SATISFACTION

We strive to achieve 100% client satisfaction when using Paki-iti rams, from the purchasing of the rams to the performance of the rams and their progeny. If you feel that we have delivered below this expectation we would like to know.

**Here's to a favourable 2017/18 farming season.**

### CONTACT DETAILS

**Stewart Morton:** Ph (06) 328 5772 Mob (0274) 453 110

**Andrew Morton:** Ph (06) 328 2856 Fax (06) 328 2812 Mob (0274) 488 511

Email: [pakiroms@farmside.co.nz](mailto:pakiroms@farmside.co.nz)