

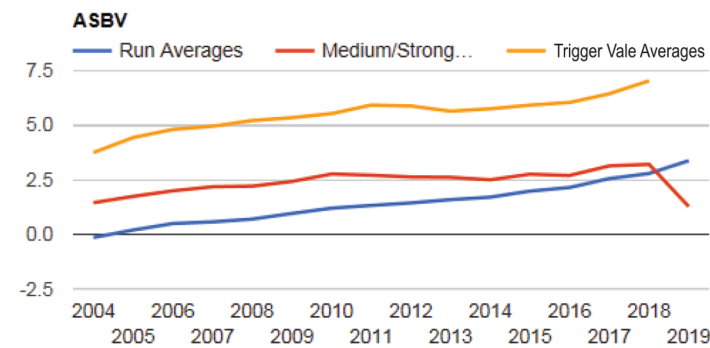
TRIGGER VALE JUST DOESN'T TALK DUAL PURPOSE WE DO DUAL PURPOSE!!

It never ceases to amaze me how many Merino studs use the term Dual Purpose in their marketing and promotional campaign's yet when questioned about what they are doing to improve the carcass attributes of their genetics you quickly learn the answer is very little. At best the answer is usually some mother statement about having "quick growing wether lambs that can be turned off before they cut their teeth". The reality is if as an industry we are going to develop a real dual-purpose animal that supplies quality wool and lamb products targeting customers ever increasing demand for quality, ethically produced traceable products we require seed stock operations to develop advanced breeding programs to achieve this.

At Trigger Vale we have had a breeding program that has an equal weighting of wool, carcass and maternal traits for over 50 years. With the availability of ASBV's to the Merino industry for over 20 years we have used this tool extensively to ensure we have lead industry in the vital carcass traits like Growth, fat and muscle (refer genetic trend graphs 1, 2 and 3).

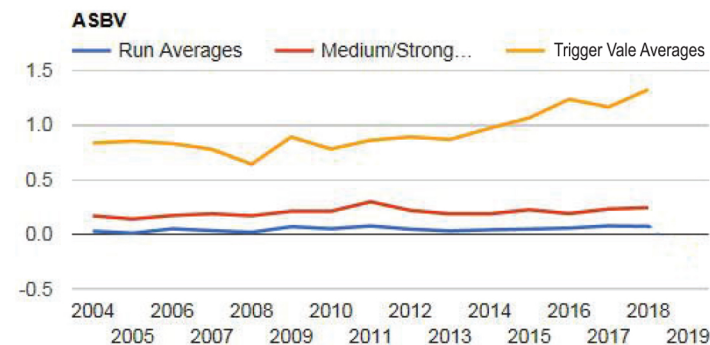
Graph 1

PWT Genetic Trends



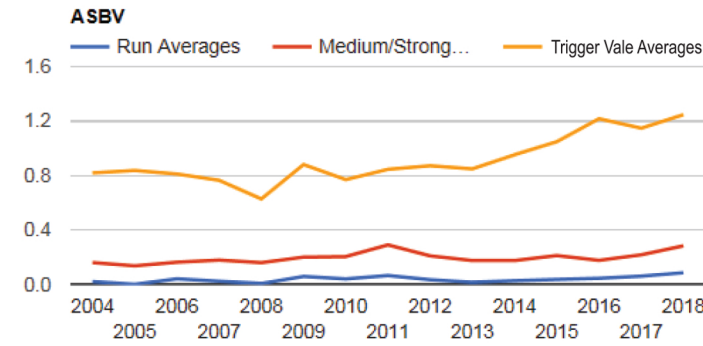
Graph 2

YEMD Genetic Trends



Graph 3

YFAT Genetic Trends



Over the past 5 years the development of genomics and ability to now get breeding values on carcass quality traits like Red Meat Yield, Intra-muscle fat (juiciness) and Shear Force (tenderness) has meant we have been able to incorporate these traits into our program. Trigger Vale has once again been an early adopter of these tools having collected DNA samples on over 20% of all young rams and more importantly have had several stud sires selected to be in Industry's Information Nucleus flock (INF). This is beneficial because all the progeny in the INF gets killed and the actual phenotypic data on these hard to measure carcass traits are captured.

To further our understanding and progress the carcass attributes of our genetics in 2017 Trigger Vale applied and was successful in getting a MLA/MDC co-funded grant within their Fast Track program. The capital cost of the Trigger Vale Fast Track trial was in total over \$70,000 with Trigger Vale contributing 25% and industry through MDC (Levy payers) funding contributing 75%. The project was designed with the aid of Dr Mark Ferguson to generate Meat Eating Quality (MEQ) and carcass yields data on 3 influential Trigger Vale Sires and compare them with 3



This photo illustrates the importance of carcass shape. The carcass 3rd from the right was sired by Trigger Vale 130981 and has a "U" full shape to it. The two carcasses either side of it are sired from two other industry sires used in the project and have a more leggy "V" shape. Buyers want the U shape.

other outside Merino sire types. These included Leahcim, Anderson and Merinotech. For all of the six rams it was essential that they had similar ASBV's especially in the traditional carcass traits like Growth, Fat and Muscle.

The single biggest factor to the trials outstanding success was ram clients Russel and Ricky Luhrs from Cavendish Victoria agreed to host the trial. The Luhrs passion for breeding a truly balance dual purpose Merino resulted in them becoming equally as passionate about the trial as ourselves and meant the attention to detail and accuracy of capturing the vital performance data required to successfully conduct such a trial was obtained at an industry "best practice" level. They selected 120 of their older bloodline ewes which had no relationship with any of the Sire lines used in the trial and 20 were Allied to each sire. The lambs were then grown out under commercial conditions with normal measurement like weaning and post weaning weight, fat and muscle scanning and full genomic testing for parentage and MEQ traits undertaken. The lambs had a finally weight taken and Ricky gave them all a on the hoof carcass shape measurement before they travelled to JBS Bordertown to be killed. Organising the kill and the intricate planning required in obtaining the meat samples needed for further Laboratory testing was a major undertaking and I can't thank Dr Peter McGilchrist (Senior Meat Science Lecturer, UNE) enough for organising this. Our team spent nearly two full days ensuring each animal ID was kept during the process of killing and sampling each of the 89 carcasses in the trial. Racheal Withers (SARDI) was the team leader and her expertise and relationship with JBS was vital to the success of gathering the meat samples and data required. Jarrod Lees a Postdoctoral Research Fellow from UNE assisted Racheal while myself, Ricky and another ram client Peter Hawkins along with his daughter Tara and son in law Rob were the lackeys doing whatever we were told. During these two days I gained an amazing insight into firstly the commercial process and challenges faced by a company like JBS to operate an abattoir and secondly what is involved and the attention to detail required to obtain accurate meat samples to obtain actual phenotypic data for IMF, Shear Force, Ph levels and red meat yield from DEXA technology.

The actual detailed scientific results of the trial are two complexed and involved to go into detail in this newsletter but in summary what we achieved is a much clearer picture of what the impact of what Trigger Vales industry leading growth, muscle and Fat genetics will have on the Meat Eating Quality of our own and clients lambs. It has given us an incredible insight into the processes required to obtain phenotypic data vital to making sure that not only will Trigger Vale clients have industry leading growth and meat yield in their lambs but also high levels of customer satisfaction and hopefully in time a significant price premium. This project has just "wet the appetite" for significant further work in this area as part of the Trigger Vale breeding program. When this is viewed in conjunction with our ongoing selection pressure for elite above average cutting wools and improved maternal performance when Trigger Vale states that we have a true dual purpose Maternal breeding objective, you better believe it. On closing I would like to thank MLA/MDC for co funding this project along with all the industry people and Trigger Vale supporters who helped bring it all together.



5 month old trial lambs at Luhrs-Cavendish, VIC



Post weaning scanning - trial lambs - Chris Parker & Ricky Luhrs



Taking PH samples on the trial lambs



The team collecting meat samples for lab testing



Some of the Trigger Vale sired loins - note the visual IMF (marbling)