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For five generations the Litchfield family has run its renowned Merino stud, "Hazeldean", Cooma, NSW under the maxim that 'genetics drive profit'. Hazeldean Pty Ltd – now running 45,000 sheep and managing landholdings in four states – is an old stud with a fresh attitude.

The stud was founded in 1865 and selection based on measured performance began at "Hazeldean" in 1954 under the direction of Jim’s grandfather, James Francis, and later his father, James. So it is little surprise that the fifth generation Litchfield to take the helm of the hefty enterprise, Jim Litchfield, says a single genetic database will drive the wool industry towards a brighter future.

"There is a diversity of opinion among stud Merino breeders as to the value of objective measurement but I’m certain the single genetic database will deliver much to Merino breeders wanting to choose sires based on specific traits," Mr Litchfield said.

"Buyers must know what one ram or one bloodline is capable of delivering over another in terms of productivity per head.

"Until we get this sort of specific information, which is impossible to deliver without the use of numbers, the industry will continue to endure the glacial rate of progress that has been a feature of the breed for the past 50 years."

"Hazeldean’s" track record in gains made via objective measurement is impressive: the stud has dropped its fibre diameter by two microns in 10 years and ewes now cut 7.5 kilograms in fleece weight, so we place a 12% premium on the value of fibre diameter when we calculate our index.

"We also want to increase staple strength. As staple strength and coefficient of variation of fibre diameter (CV) are correlated traits we include in our index calculation an emphasis on lower CV. This system ranks animals on their capacity to reach our breeding objective as quickly as we possibly can."

The Litchfields also select for fertility, worm resistance, growth rate and carcass value.

Mr Litchfield says visual selection to remove obvious faults is paramount before selection pressure is applied to improve productive characteristics.

He says it took about 10 - 15 years for his clients to make the best use of the figures provided when buying seedstock but he believes the single SGA database will make it easier for producers generally to use objective measurement.