

CHARLIE AND FIONA MASSY, “SEVERN PARK”

BOBUNDRA VIA COOMA, NEW SOUTH WALES

- MERINO STUD AND COMMERCIAL FLOCK
- RIGOROUS VISUAL ASSESSMENT COMBINED WITH WIDE RANGE OF OBJECTIVE MEASUREMENT
- OVER A 12 YEAR PERIOD REDUCED FIBRE DIAMETER BY FOUR MICRONS
- WEANING RATES HAVE INCREASED AND LESS FLYSTRIKE AND FLEECE ROT

“I believe that we can combine biology, ecology and good information on genetics so we can endure the constant pressures on farming and so ensure our future. SGA will give industry more enhanced and precise informational tools with which to do this.”

Charlie Massy describes himself as “a bit of a scavenger of valuable and relevant gene packages.”

Mr Massy has taken the theory and practice of Merino breeding to another level by incorporating the needs of wool processors and garment manufacturers in sheep selection.

Mr Massy says the 1,820ha Severn Park Stud on NSW Monaro Plains is at the forefront of the ‘Soft Rolling Skin’® approach to Merino breeding, and the property will run up to 7,000 head in a ‘normal season’, though the base flock consists of 2,500 ewes and followers.

“We’re working with Dr Jim Watts and we know from processing performance evaluation there is enhanced fabric quality in the wool coming from these sheep,” Mr Massy said.

“The second component of the breeding approach here is to work with major gene effects to implant carcass and growth gene packages onto the plain SRS® bodies. There is also heavy selection and genetic construction on fertility, disease resistance and constitution aspects,” he said.

“In the past, we’ve tried to combine meat and wool without really understanding the basis of how it works, and – as an industry – we’ve not really progressed as much as we could – and in some cases gone backwards.

“Whereas now, with knowledge of the SRS® major gene effects and the identification of factors such as superior eye muscle, growth and fertility, disease resistance and eating quality, we can put it

all together in mating programs. SGA will facilitate this,” he said.

Mr Massy has been working closely with the Merino Genetics Services unit at MLA to identify the required gene ‘packages’ and embed and multiply them through artificial insemination and embryo transfer programs.

“In a 12 year period we knocked four microns off fibre diameter across the flock, with only a very slight reduction in fleece weight. In essence, we took the sheep from typical medium wools of 22.5 microns down to fine wool sheep of 18.5 microns.

“But at the same time, fibre quality has vastly improved, the animals are bigger and more robust, our weaning rates have increased and we have vastly less problems with flystrike and fleece rot.

“Through MLA’s Merino Genetic Services, we are now weighing and scanning stock every year for weight gain, eye muscle depth, fat depth and faecal egg counts. On the fleece side, we objectively measure fibre diameter, standard deviation of fibre diameter, fleece weight and other fibre quality aspects, as well as benchmarking skin physiological traits.

“On top of this we impose rigorous visual assessment to ensure the animals are functional and we don’t lose important non-measurable traits,” he said.

Mr Massy says he’s not afraid to look around other flocks to source complimentary genetics.

“We will bring in genetic packages based on objective measurement through



EBVs from other studs around Australia. You could say I’m a bit of a scavenger of valuable and relevant gene packages – which is what good animal breeding is all about really.

“We work out what we need and what other studs’ genetic material can deliver – but to do that we need proven performance data.

“We have 15 years of full pedigree information on up to 1,000 ewes. This information drives our database and is our most valuable Intellectual Property.”

Mr Massy says productivity progress across the Merino industry has been minimal to static but also it is complicated by the gene and environment interaction in a widely variable pastoral situation.

“However, I believe through using good objective information, the sheep industry has the capacity for productivity improvement equivalent to that seen in other domestic animal breeds.

“I’m not an extreme quantitative geneticist – I just believe that we can combine biology, ecology and good information on genetics so we can endure the constant pressures on farming and so ensure our future. And SGA will give industry more enhanced and precise informational tools with which to do this,” Mr Massy said.