CASSILIS PARK

performance to bank on

Our purpose at CP is to breed an animal that guarantees the best possible profit per hectare by utilising the positive meat and wool characteristics of the Merino breed. This requires **balancing traits** like body size, growth, wool cut, micron, and fertility.

A suite of Breeding Performance Indicators are used to maximise the most profitable traits for a **commercial merino enterprise**, namely:

- Increased fertility & mothering ability - more sheep to market!
- Improved growth rate & carcass traits - rapid turnover & better conception!
- Soft handling, long stapled, bright medium wool - guaranteed higher prices!

The task of balancing these traits is being achieved by utilising the latest technology whilst being careful to maintain the stud's long established history of breeding affordable 'true to type' medium wool merinos. The innovative technology currently employed to achieve the best possible breeding outcomes include:

- DNA testing (Pedigree, Foot Rot Resistance, Poll Factor)
- Pedigree Match Maker
- Electronic Animal Identification – breeding and performance recording software (better decisions)
- Autodrafter, XRS Stick Reader, Barcodes
- Fleece Weighing and Testing
- Lifetime Ewe Management system implements – optimum condition score management of females
- Worm Egg Counts & Larval differentiation – incorporated into a breeding index (started 2013)
- Estimated Breeding Values and Indexing
- Artificial Insemination (Cervical and Laparoscopic) and Embry Transfer
- Pregnancy Scanning (Twins)

PERFORMANCE BENCHMARKS:

ACTUAL FIGURES	CALCULATIONS
Average adult ewe body weight 65 kg	Weight at Body Condition Score 3, off shears
Average adult fleece weight 7.1 kg	Fleece weight 10-12% of ewe body weight
Average adult ewe micron 19.5	Range limit ± 10% from average
Target 110% weaning	150% Scanning over entire flock
High vigour & strong early growth	Lamb weaning wgt 50% of dam @12 wks of age

Breeding Objectives – Snapshot:

- Decisions made to maximise profit and ease of management
- Commercial focus – no hand feeding of females (exception twin bearing ewes at lambing)
- Wether lambs 48 kg @ 10 months of age (with grazing crop or grain)
- Ewe lambs to reach 43 kg by 8 months of age (no hand feeding)
- plain bodies
- minimal neck wrinkle
- no face cover
- water proof wools & soft skins
- uniformity – true to type

FERTILITY FOCUSED:

Fertility Scoring - Since 2005 all twin born lambs have been identified at Cassilis Park. A fertility score has been incorporated into our selection criteria using ewe scanning and weaning records. Every ewe's breeding performance is now recorded and scored as a percentage. To remain in the stud a ewe must wean at least one lamb every year.

High Fertility Group (HFG) - Ewes born as twins have preference for entry to this flock, but they must first rear twins to weaning age. Maiden ewes that conceive twins at 12 month of age will also enter this group. Only rams born as twins will be eligible for mating in the HFG.

MANAGEMENT STRATEGY:

- Commercial focus with large mobs
- Time controlled grazing – 90 to 120 day pasture rest periods in non-growing season. Sub division of paddocks to between 8 and 15 Ha in size
- Use of Grazing Charts to match Stocking Rate with Carrying Capacity – ensures sustainable grazing management
- Regular monitoring of worm burdens – no overdrenching
- Combine grazing of sheep and cattle for pasture management and worm control
- Utilise Electronic ID for more information recording with improved accuracy
- On farm trials – 2014 ewe conception & weight gain trial using selenium/cobalt pellets and Multimin.

THE FUTURE:

- Increased selection emphasis on carcass muscling - eye muscle scoring on stud ewes
- Increased emphasis on fertility & weaning rate – conception >95%, (>150% total held)
- Weaning 120% on ewes joined
- Joining ewe lambs @ 8 months of age with 75% conception
- Incorporation of production EBV's & Indexing - continued involvement in industry trials
- Integration of selected poll genetics into the flock