



New genomic tool for merino producers

What is Smart Flock Select?

Smart Flock Select is a Merino-only, within flock, genomic selection tool. It describes the genetic merit of your sheep for key production traits, helping you:

- Select animals that best match your breeding goals
- Rank sheep within your flock more accurately
- Remove low genetic merit animals early

This means better breeding decisions, stronger flock performance, and improved profitability.

With one simple DNA test, you can assess wool, growth, carcase, health and welfare traits all at once. You'll gain maximum knowledge to make your selections, focus on young stock with proven merit, and breed sheep that are better aligned to your business goals.

Key benefits of Smart Flock Select

Uses the Genomic Reference Population – no Sheep Genetics membership needed	No phenotypes required – one DNA test does it all	Suitable for both commercial producers and studs
Works for rams and ewes	Multiple applications: • Select your own rams with more confidence • Improve ram selection in multiplier flocks • Choose better ewe replacements • Target sheep for different supply chains	Stud advantage: multiplier effect – better rams deliver many more high-quality progeny
Captures hard-to-measure traits like reproduction and meat quality		Decisions can be made earlier in life, with higher accuracy

Cost-Benefit of using Smart Flock Select

Research shows genomic testing delivers 2–3 times more value than using phenotype alone. Multiplier flocks especially benefit due to the large number of animals influenced by a few sires.

Selection Scenario	Phenotype Only	GBV (80% accuracy)
Multiplier flock – rams	\$141	\$377
Multiplier flock – ewes	\$59	\$156

Table 1: The value of information collected from two selection strategies, phenotype only and GBVs.

What's included

A minimum number of 20 animals must be tested to provide results which include:



Understanding Smart Flock Select Results

Results are delivered in two parts:

- 1 Parent Verification (if requested) and Poll Status – emailed after lab processing complete.
- 2 Genomic Breeding Values (GBVs) and Flock Profile – emailed after the next MERINOSELECT analysis (runs fortnightly).

GBVs results use an easy 1–10 score:

- 1 = Top 10% of the flock
- 10 = Bottom 90% of the flock
- An accuracy will be provided for each trait
- Results are individual but can only be compared within flock

lpid	ycfw	ycuv	ysl	pwt	ywt	yfat	yemd	yfd	ydcv	ebwr	pwec	wr	cs	FW Index	WP Index	SM Index	ML Index
2025180030	3	4	8	4	2	7	5	5	8	5	9	1	3	3	4	8	4
2025180560	2	3	8	2	2	9	9	1	1	9	5	6	1	2	3	8	2
2025180830	3	6	3	2	1	10	10	4	6	5	6	2	2	3	6	3	2
2025181000	1	10	3	1	1	10	10	9	7	2	10	7	2	1	10	3	1
2025181020	1	10	2	1	1	10	10	7	9	7	10	9	1	1	10	2	1
2025181030	9	1	10	3	3	7	9	3	4	6	2	9	5	9	1	10	3
2025181040	2	9	4	8	8	9	10	8	9	6	9	6	6	2	9	4	8
2025181110	1	9	6	1	1	9	5	8	7	5	8	7	2	1	9	6	1

A Flock Profile report is also provided. This can be used to benchmark your current genetic position in the industry. It's important to note that the results you receive are not Australian Sheep Breeding Values (ASBVs). The Flock Profile provides average breeding values and percentiles compared only to flocks using MERINOSELECT.

Traits and indexes

Smart Flock Select reports on 13 traits & 4 indexes:

Trait	Units	Interpretation
Yearling Clean Fleece Weight (YCFW)	%	Flocks with a higher clean fleece weight value will on average genetically cut more wool than flocks with lower values.
Yearling Fibre Diameter (YFD)	µm	Flocks with a lower fibre diameter value will on average be genetically finer than flocks with higher values.
Yearling Coefficient of Variation of Fibre Diameter (YDCV)	%	Flocks with a lower coefficient of variation value will on average have genetically less variation in fibre diameter than flocks with a higher value.
Yearling Curvature (YCURV)	°/mm	Flocks with a lower curvature value will on average have genetically lower fibre curvature than flocks with a higher value.
Yearling Staple Length (YSL)	mm	Flocks with a higher staple length value will have on average a genetically longer staple length than flocks with a lower value.
Post Weaning Weight (PWT)	kg	Flocks with a higher post weaning weight value will on average be genetically faster growing than flocks with lower values.
Yearling Weight (YWT)	kg	Flocks with a higher yearling weight value will on average be genetically faster growing than flocks with lower values.
Fat Depth (YFAT)	mm	Flocks with a higher fat value will on average be genetically fatter than flocks with lower values.
Yearling Eye Muscle Depth (YEMD)	mm	Flocks with a higher eye muscle depth value will on average have genetically thicker-muscled animals that will produce more lean meat than flocks with lower values.
Early Breech Wrinkle (EBWR)	score	Flocks with a lower breech wrinkle value will on average be genetically less wrinkly than flocks with higher values.
Post Weaning Worm Egg Count (PWEC)	%	Flocks with a lower worm egg count value will on average have genetically better worm resistance than flocks with higher values.
Weaning Rate (WR)	lambs/ewe joined	Flocks with a higher weaning rate value will on average genetically wean more lambs per ewe joined than flocks with lower values.
Condition Score (CS)	score	Flocks with a higher condition score value will on average have ewes that are genetically in higher condition at joining.
Fine Wool Index (FW)	index	Flocks with a higher value will be genetically more profitable in the production system described by the Sheep Genetics Fine Wool Index than flocks with lower values.
Wool Production Index (WP)	index	Flocks with a higher value will be genetically more profitable in the production system described by the Sheep Genetics Wool Production Index than flocks with lower values.
Sustainable Merino Index (SM)	index	Flocks with a higher value will be genetically more profitable in the production system described by the Sheep Genetics Sustainable Merino Index than flocks with lower values.
Merino Lamb Index (ML)	index	Flocks with a higher value will be genetically more profitable in the production system described by the Sheep Genetics Merino Lamb Index than flocks with lower values.

Solutions for all producers

How do Neogen's Smart Flock products compare?

Smart Flock Elite is Neogen's premium, most comprehensive product. It delivers the highest accuracy and allows comparison across flocks and breeds.

Smart Flock Select is designed as a simpler, cost-effective Merino-only option. It uses genomic information only (no phenotypes, no Sheep Genetics membership required) and provides within-flock comparisons.

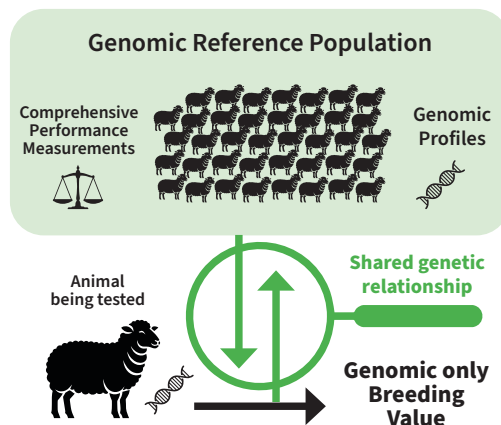
	Smart Flock Elite	Smart Flock Select	Smart Flock Profile
Sheep Breed	All breeds	Merino only	Merino only
Level of comparison	Individuals across flocks and years	Individuals within flock and across years	Flock Average
Sheep Genetics Membership	Yes	No	No
Level of Precision	★★★	★★	★
Data used	Performance and genomic	Genomic only	Genomic only
Number of Traits	17+ traits and breed specific indexes	13 traits and 4 indexes	13 traits and 4 indexes

How are Genomic only Breeding Values calculated?

Genomic-only Breeding Values are calculated using the Genomic Reference Population – animals with both performance records and genotypes.

When you test your sheep:

- Their genotype is compared with the reference population
- Shared genes predict which traits they will pass on
- This gives you a reliable estimate of their genetic potential. To express reliability, an accuracy is provided for each trait.



The genomic testing process and timeline

