Genetic

- Lambplan
- Kidplan
- Merinoselect
- No commercially available databases on dairy goats, dairy sheep or goat fibre

Why genetic analysis and EBV/ASBV?

Performance = Genetics X Environment

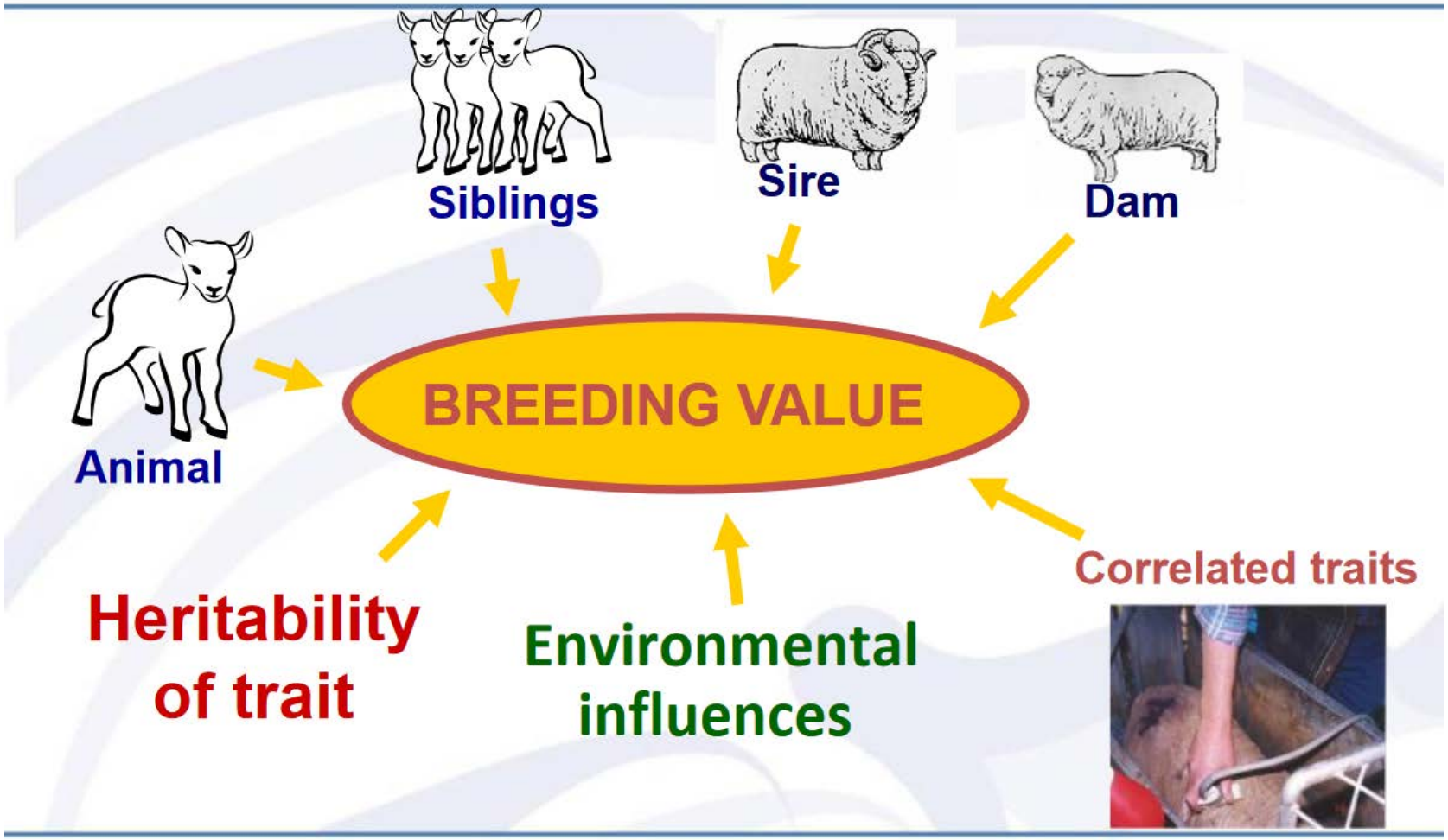
https://www.mla.com.au/globalassets/mla-corporate/generic/extension-training-and-tools/introduction-to-kidplan.pdf

What is needed?

- Collect physical data eg bodyweight, fleeceweight, rearing type etc
- Collect pedigree data – dam/sire, GD/GS, GGD, GGS etc
- Keep stock in management groupings to allow fair comparison

- Submit data to SGA
- SGA review and analyse data and publish EBVs
- Continually updated as more data on siblings, progeny, ancestors etc

Calculating Breeding Values

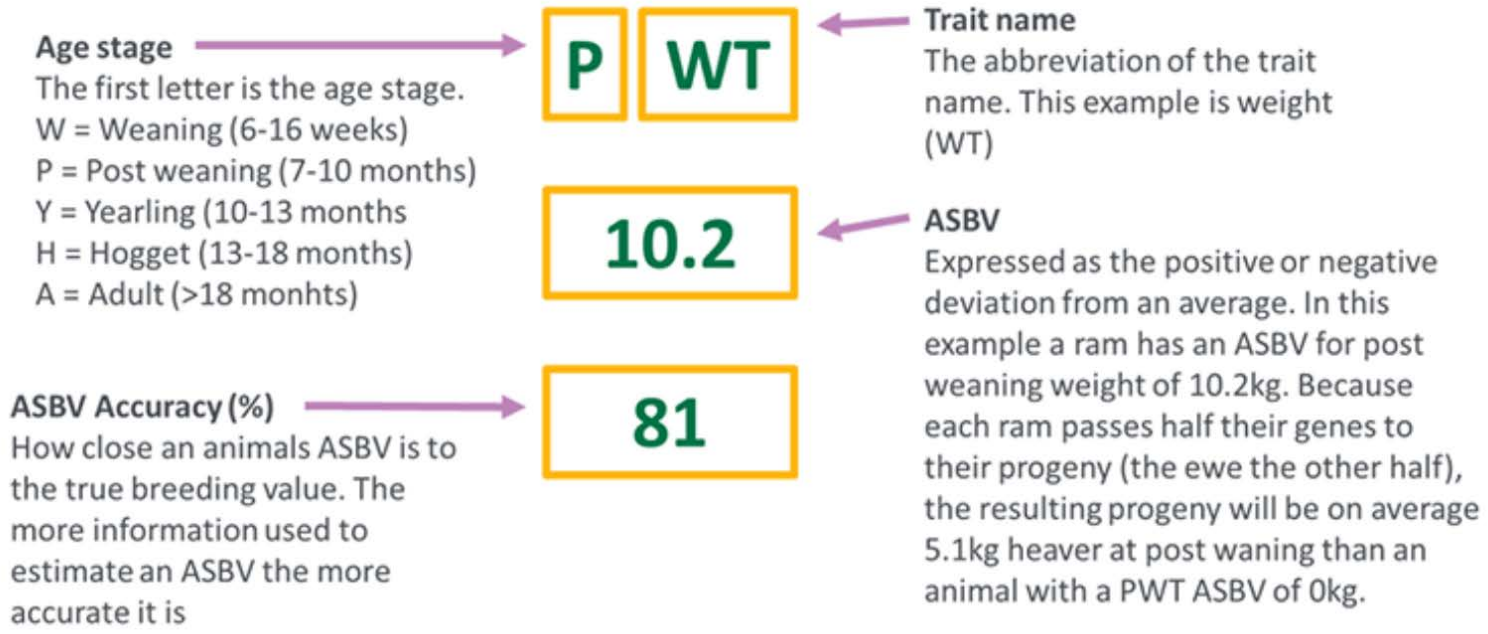


https://www.mla.com.au/globalassets/mla-corporate/generic/extension-training-and-tools/introduction-to-kidplan.pdf

Lambplan

- Meat breed sheep
  - Self replacing
  - Terminal sires
- ASBVs for relevant traits

Figure 1: How ASBVs are typically displayed



https://www.sheepgenetics.org.au/Getting-started/ASBVs-and-Indexes

Indexes

Figure 1: The traits in the TCP index and how they contribute to the overall balance of the index in the top 10% of current terminal progeny

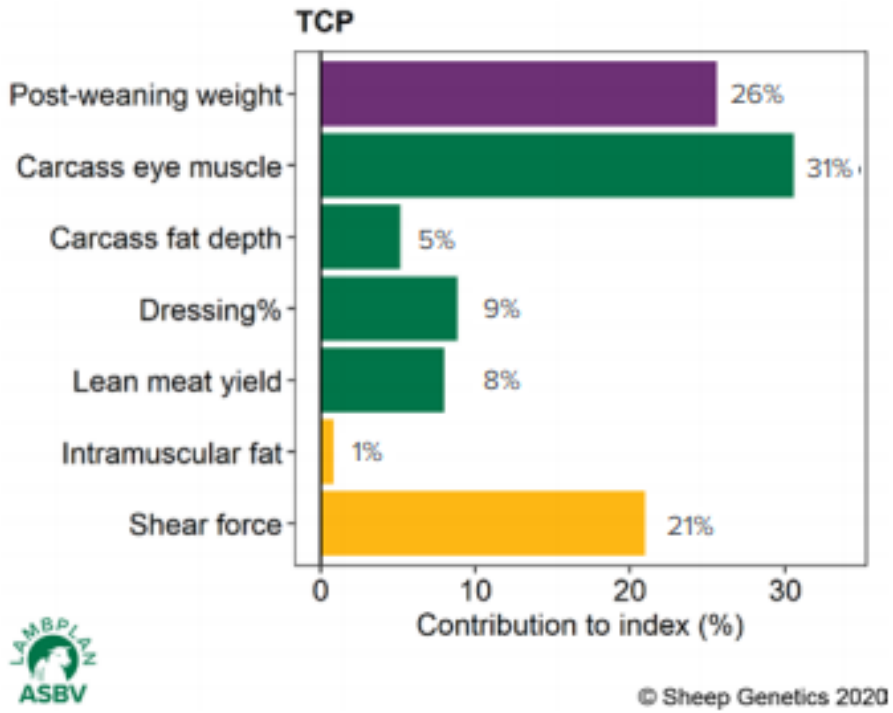
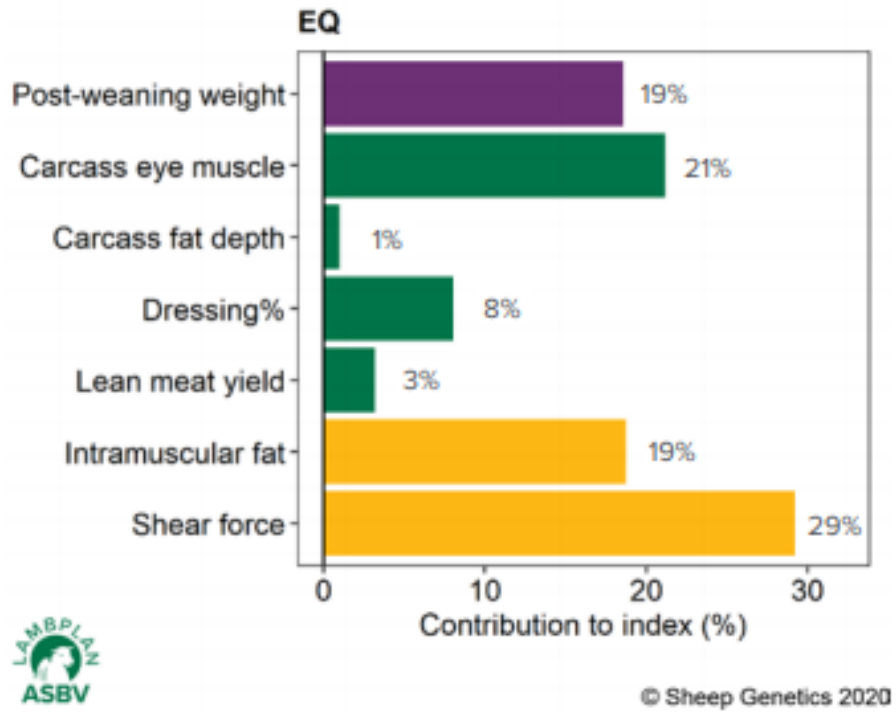
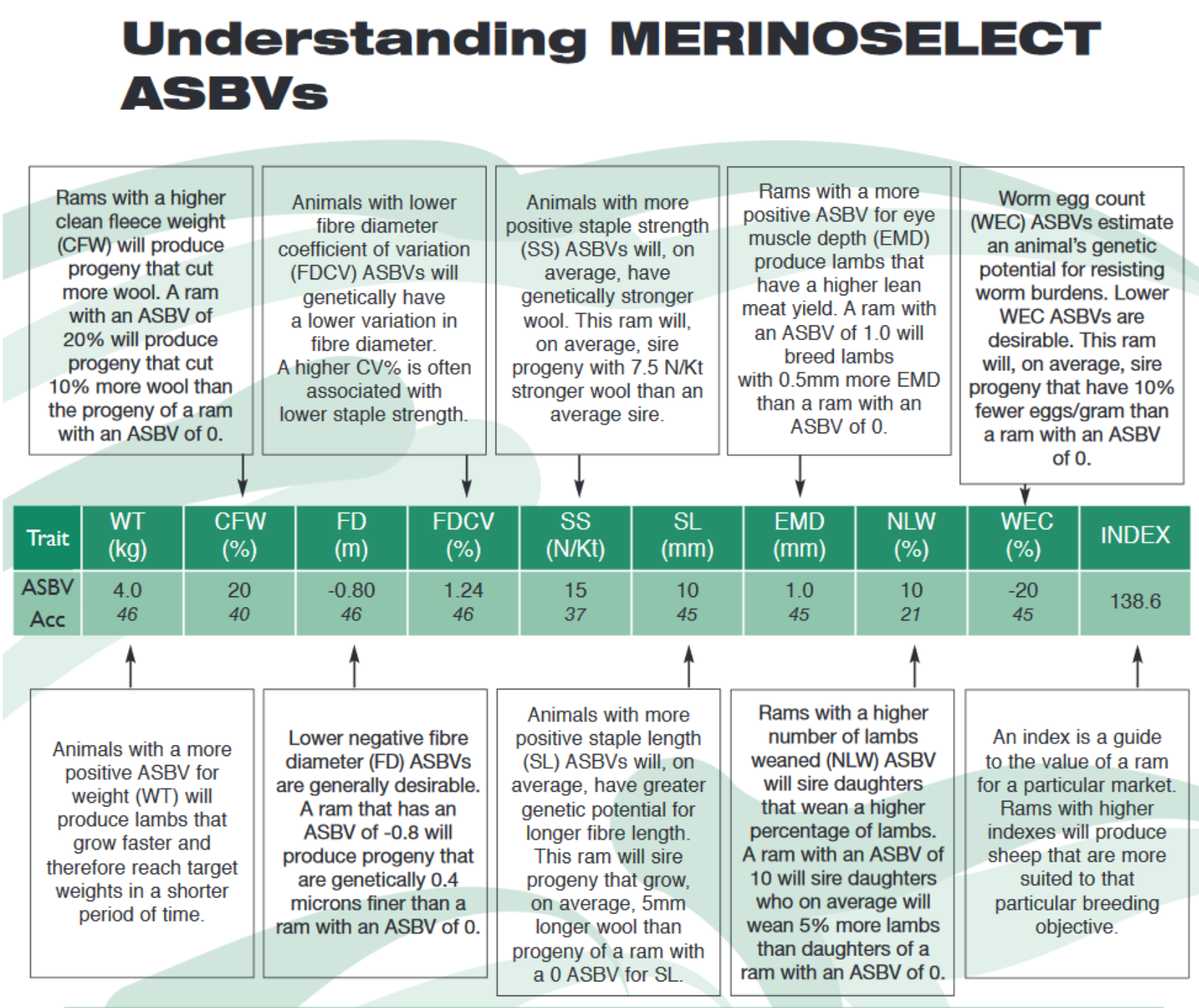


Figure 2: The traits in the EQ index and how they contribute to the overall balance of the index in the top 10% of current terminal progeny

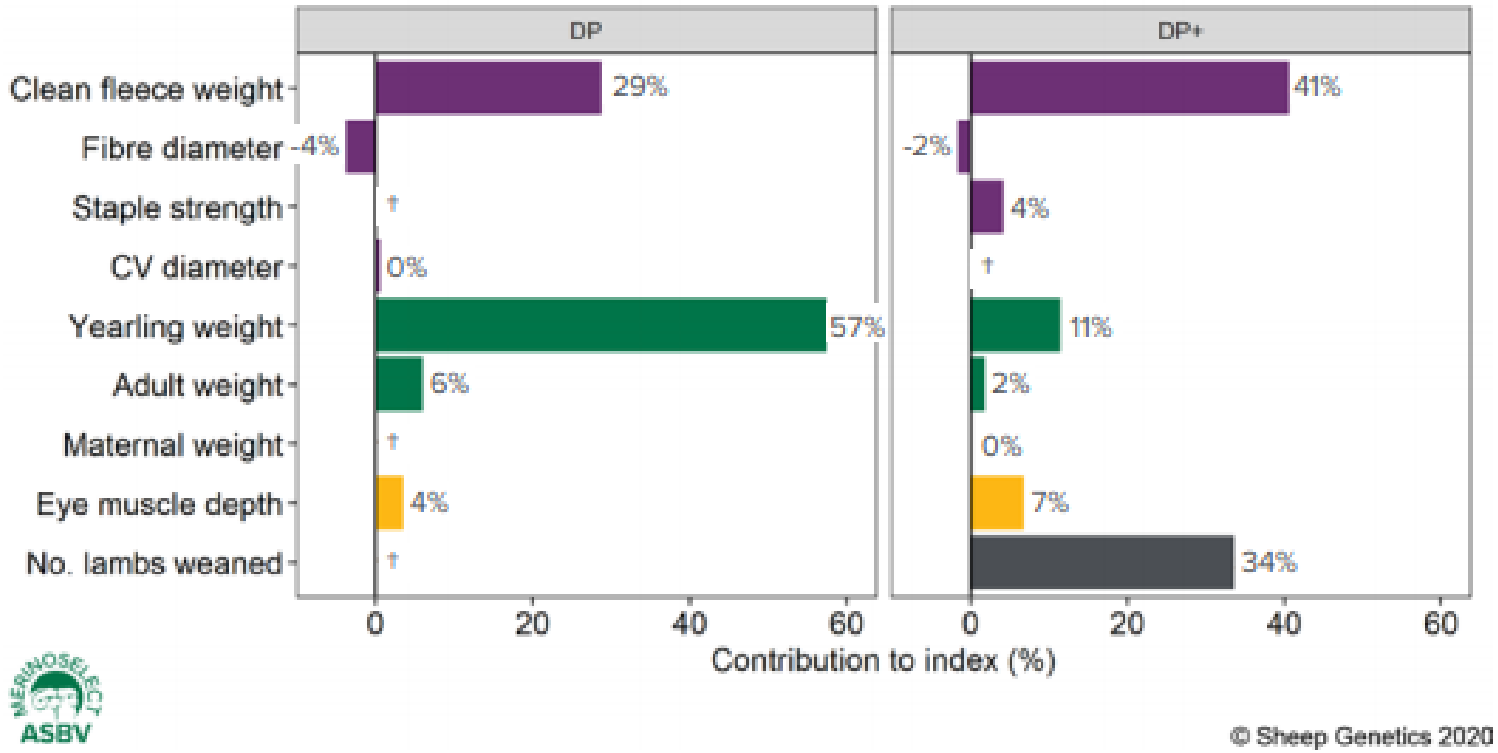


Merinoselect



Dual Purpose Merino index

Figure 3: The traits in the DP and DP+ indexes and how they contribute to the overall balance of the indexes in the top 10% of current progeny



Kidplan

- Similar EBVs available to the ASBVs for meat sheep
- Used for meat breed goats e.g. Boer
- If rangeland goat harvesters want to increase meat genetics in herds can import Boer bucks and release
- Index example
- Look at expected change and monitor

SRC

– Self Replacing Carcase index.

Trait	Relative Emphasis	Gain over 10 years
BWT (Kg)	11%	0.2
WWT (Kg)	**23%**	3
MWWT (Kg)	5%	0.4
PWT (Kg)	**26%**	4.3
PFAT (mm)	5%	0.1
PEMD (mm)	**10%**	0.6
NKW (%)	**14%**	9%
PWEC (%)	6%	-13