

AN INITIATIVE OF

Making More From Sheep



Department of
Primary Industries and
Regional Development

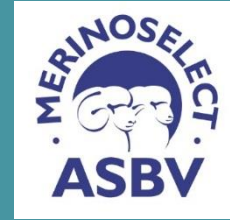


Australian Wool
Innovation Limited



Getting a Jump with Genetics

Daniel Brown (Luke Stephen)

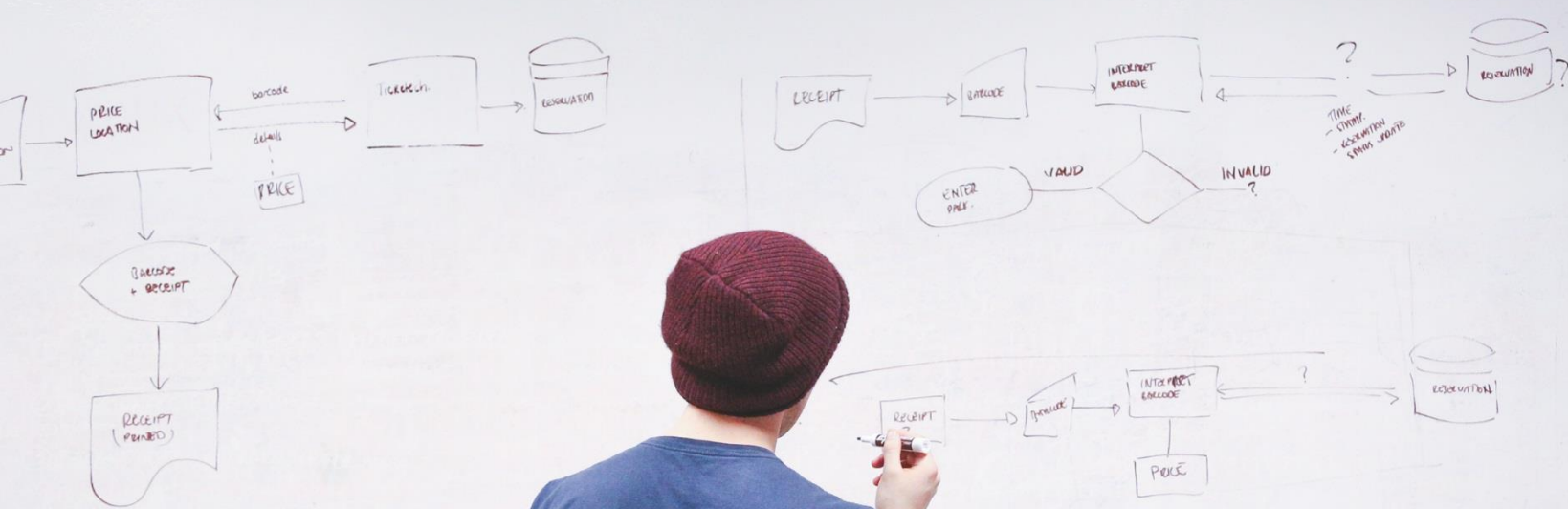


EVENT SUPPORTERS:



Today's agenda

- Formulating a plan
- Using your plan
- Getting help with your plan

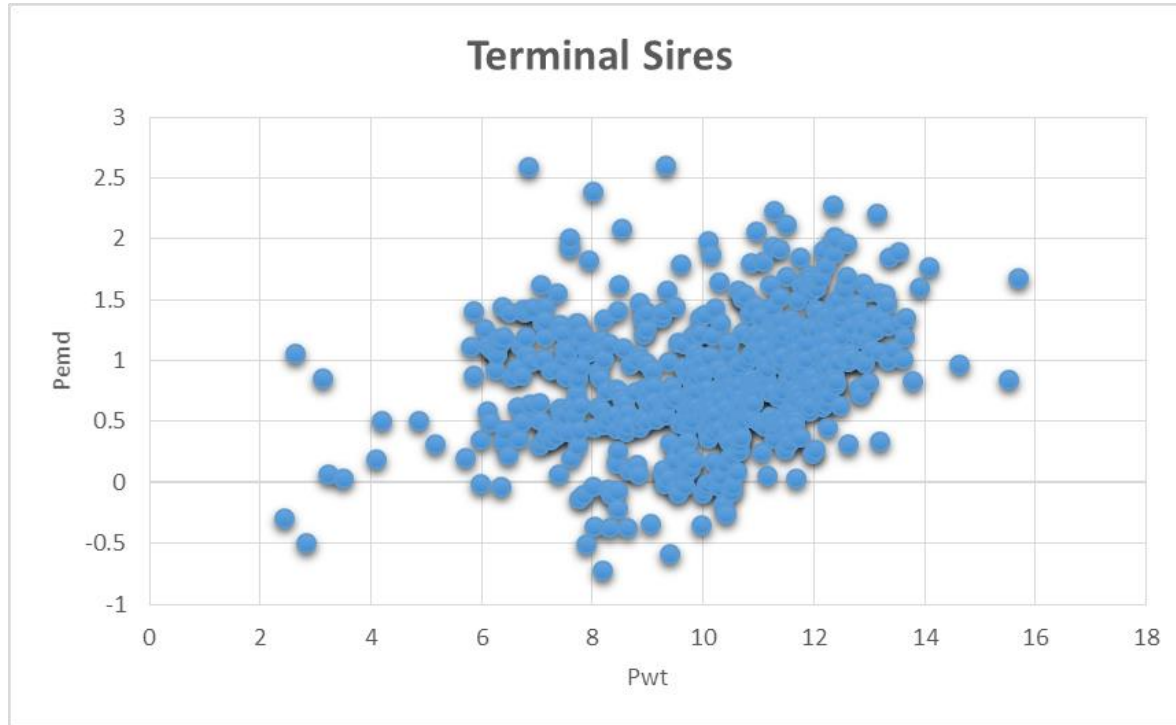


HAVING A PLAN

Knowing your starting point

- Identifies opportunities
- Helps make smarter decisions
- Highlight what is important to you

Knowing your starting point



Knowing your system

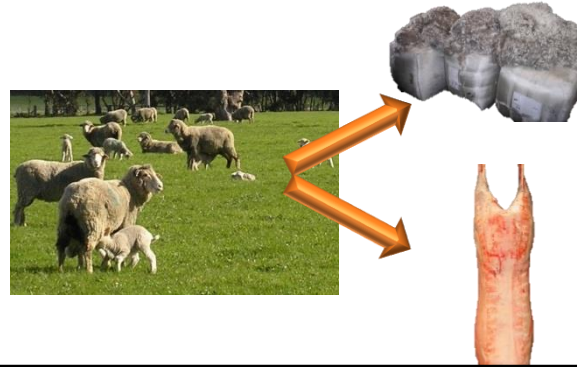
1. Money Makers

2. Money Breakers

3. Environmental and other limitations

Which traits are for YOU?

- That depends on:
 - Your production system



These are decisions only you can make

—

and it is important that you do!

Fleece Values higher importance



Merino and Maternal Production Systems

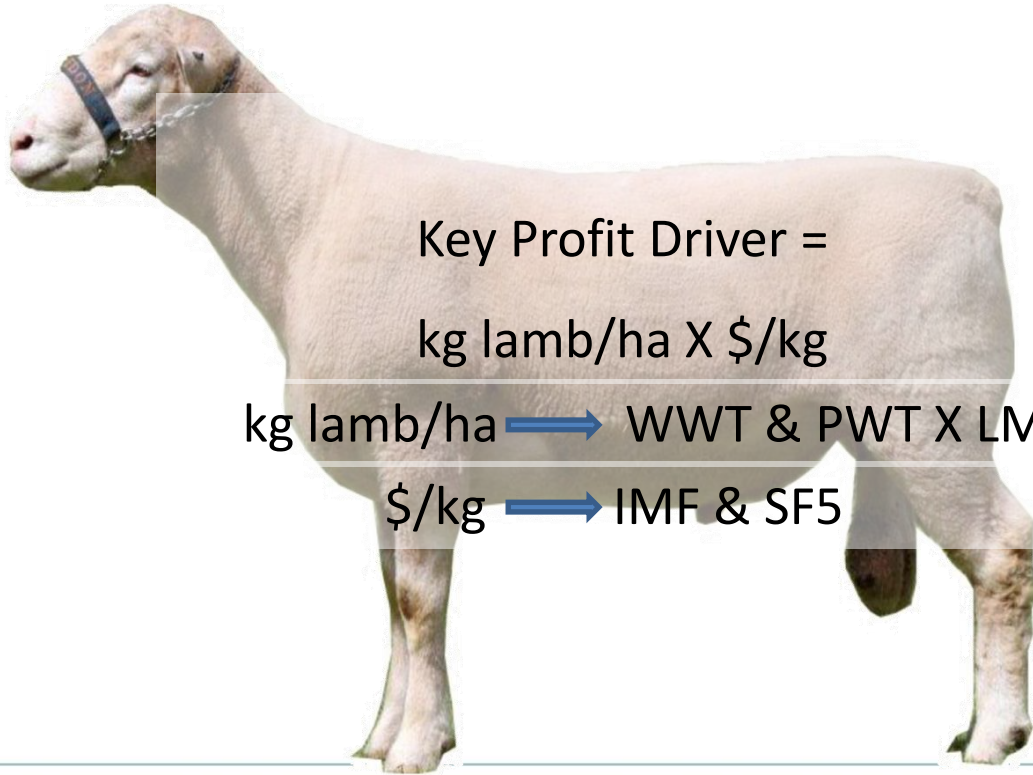
Changing Profit Drivers



Fertility Rate higher importance



Terminal Sire Production Systems



Key Profit Driver =

kg lamb/ha X \$/kg

kg lamb/ha \Rightarrow WWT & PWT X LMY

\$/kg \Rightarrow IMF & SF5



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KK-5888

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OFF MRC M- M+ $\frac{1}{x}$ \div \times - +
√ % CE 1 2 3 =
4 5 6
7 8 9

Annual income: 380,000
480,000
are effective rates. Look on our website for annual income.
Return 5% on
Total investment return 17% on
in 18 yrs
1,027,500
I will be
at the time
Cash

Weighing them up

Money Makers

Product Quantity

- Growth
- Fleece Weight
- Weaning %

Market Specifications

- Carcase
- Fibre Diameter
- Staple Strength
- Staple Length

Money Breakers

Maternal efficiency

- Adult size

Market Specifications

- Fat

Welfare traits

- Birth weight / Lambing Ease
- Wrinkle
- Dag
- Worms



Sheep connect NSW

Making More From Sheep



Department of
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GOVERNMENT OF
AUSTRALIA



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MEAT & LIVESTOCK AUSTRALIA

Environmental limitations

Seasonable limitations

- Feed availability
- Parasite challenges
- Rainfall pattern and variability

Your farm enterprise

- Risk and stocking rate policies
- Labour availability
- Sheep in farm system

Document your plan

Breeding Objective

First step choose an index

What is an Index?

- Combines the ASBVs for several traits into one value
- Available to suit a range of different breeding programs
- Quick selection guide to narrow down which rams to look at
 - Still important to look at the individual ASBVs

Bringing you plan together

Identify the most suitable index

Merino

Maternal

Terminal

FP+

BLX

Lamb Prod

+EQ

MP+

MCP

Carcase Plus ~ LE

DP+

MCP+

Lamb 2020 ~ LEQ



Superior selections

USING YOUR PLAN

Using your plan

- Go through your current battery to identify requirements:
 - Updated figures
 - Structural and visual assessment

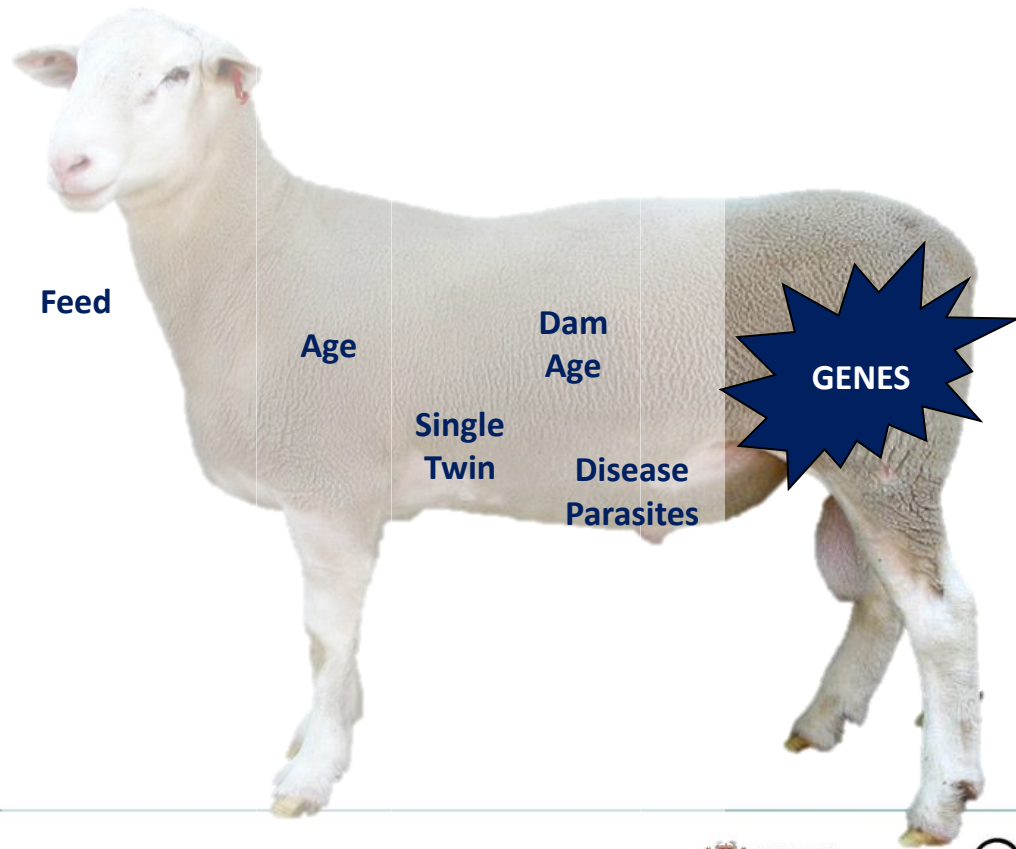
- Identify Superior genes

We Buy Genes



To produce more profitable sheep

What impacts a sheep's performance?



What impacts a sheep's performance?



Key Points about ASBVs

- ASBVs allow us to rank animals based on the genes they carry
 - Not the environment they have been raised in
- Identify what traits drive profitability in your business
- Match those traits to the right ASBVs for selecting rams



Breeding for lambs

- ASBVs for Number of Lambs Weaned (NLW)
- Huge range in sires (over 30 lambs / 100 ewes)
- Plus get other things going in your favour
 - Growth, muscle and fat
 - In Merinos: wrinkle, face cover etc



Healthy Easy Care \$heep

- Large genetic variation in sheep resistance to internal parasites
- Use WEC ASBVs as much as possible to breed more resistant sheep
- Reduce but not remove reliance on chemicals
- Wrinkle, Fat/EMD and DAG





**WHY
IDENTIFY
SUPERIOR
GENES?**

Using your plan

Which Gate / Sales



Which Pens



What you can choose from!

	Number of rams	Range between Studs	Range within Studs
Merinos	975	\$14	\$19
Maternals	536	\$10	\$29
Terminals	1254	\$9	\$6

What you can choose realistically?

	Range between top 20% & bottom 20%
Merinos	\$9.00
Maternals	\$10.90
Terminals	\$3.30

What could this mean for your flock?

Initially ~\$4,500 / yr / 1000 ewes joined

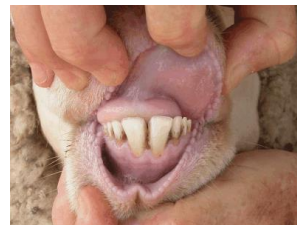
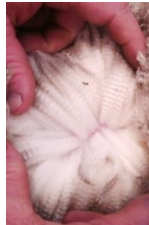
After 5 years (using better sires each year) this compounds to ~\$8,750 / yr / 1000 ewes joined

What progress are the sellers making?

	Top 20%	Bottom 20%
Merinos	\$2.50	-\$0.35
Maternals	\$2.34	-\$0.29
Terminals	\$0.89	-\$0.06

The basics haven't changed!

- As much as ever before making sure a ram looks right is important.
- It must be:
 - sound and have good structure
 - suitable for your farm
 - wool quality ‘fit for purpose’
- This can differ between people and regions



Don't forget your ewes!

- They provide half the genes!
- Phenotypic selection valuable
 - Current flock performance
 - Genetic gain
- Massive variation in performance exists
- Use any data you collect

**WHERE DO I GET
HELP?**



Having a plan

- Flock Profiling-Sheep CRC
- Rams Used
- Merino Bloodline Performance
- Merino Lifetime Performance project/AMSEA sites



SHEEPCRC



RamSelect^{Plus}

Using your plan

- RamSelect
- Sheep Genetics
- Private service providers
- Stud breeders

RamSelect ^{Plus}



Workshops/Training to attend

- Bred Well Fed Well
- Ramselect
- Sheep classing workshops
- Profitable Grazing Systems
- Making More From Sheep

Key Messages

- Understand profit and cost drivers ➡ Breeding Objective
- Identify ASBVs and index
- Utilise variation between and within sales
- Ensure the ASBVs are better each year
- Balance visual and objective selection