







#### Getting a Jump with Genetics Daniel Brown (Luke Stephen)





EVENT SUPPORTERS:







# Todays agenda

• Formulating a plan

- Using your plan
- Getting help with your plan









# Knowing your starting point

Identifies opportunities

• Helps make smarter decisions

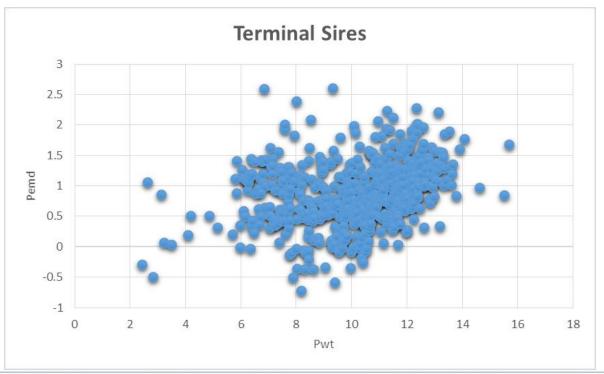
• Highlight what is important to you







# 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

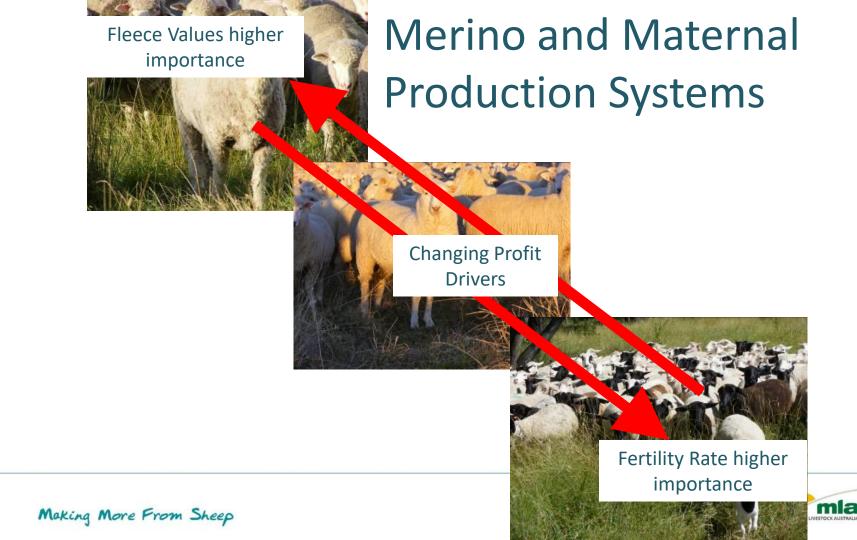
#### and it is important that you do!



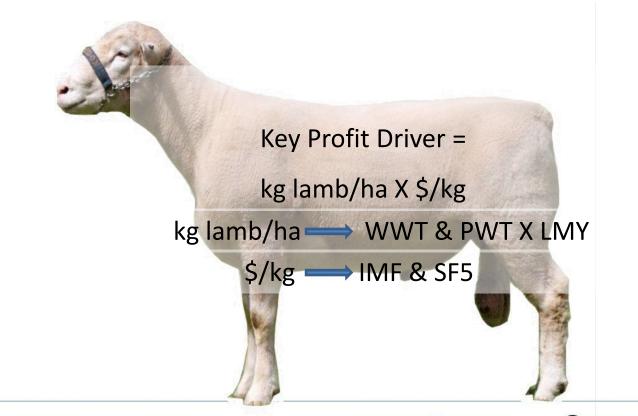








#### **Terminal Sire Production Systems**











# 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















# **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



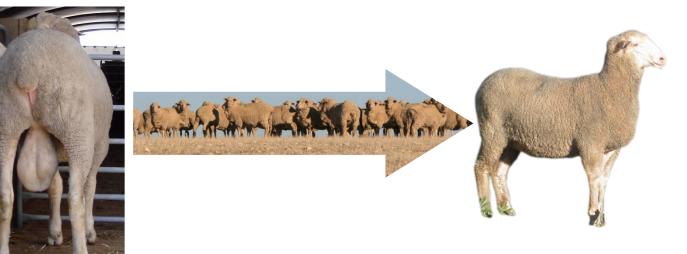




Making More From Sheep

aW

## We Buy Genes



#### To produce more profitable sheep









#### What impacts a sheep's performance?



Making More From Sheep

AWI Australian Wool Innovation Limited



#### 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?

	Тор 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















# Using your plan

RamSelect

• Sheep Genetics

• Private service providers

• Stud breeders













# Workshops/Training to attend

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







# Key Messages

- Identify ASBVs and index
- Utilise variation between and within sales
- Ensure the ASBVs are better each year
- Balance visual and objective selection





