

AN INITIATIVE OF

# Making More From Sheep



Australian Wool  
Innovation Limited



Department of Agriculture and Food



## The New Ewe

Jason Trompf

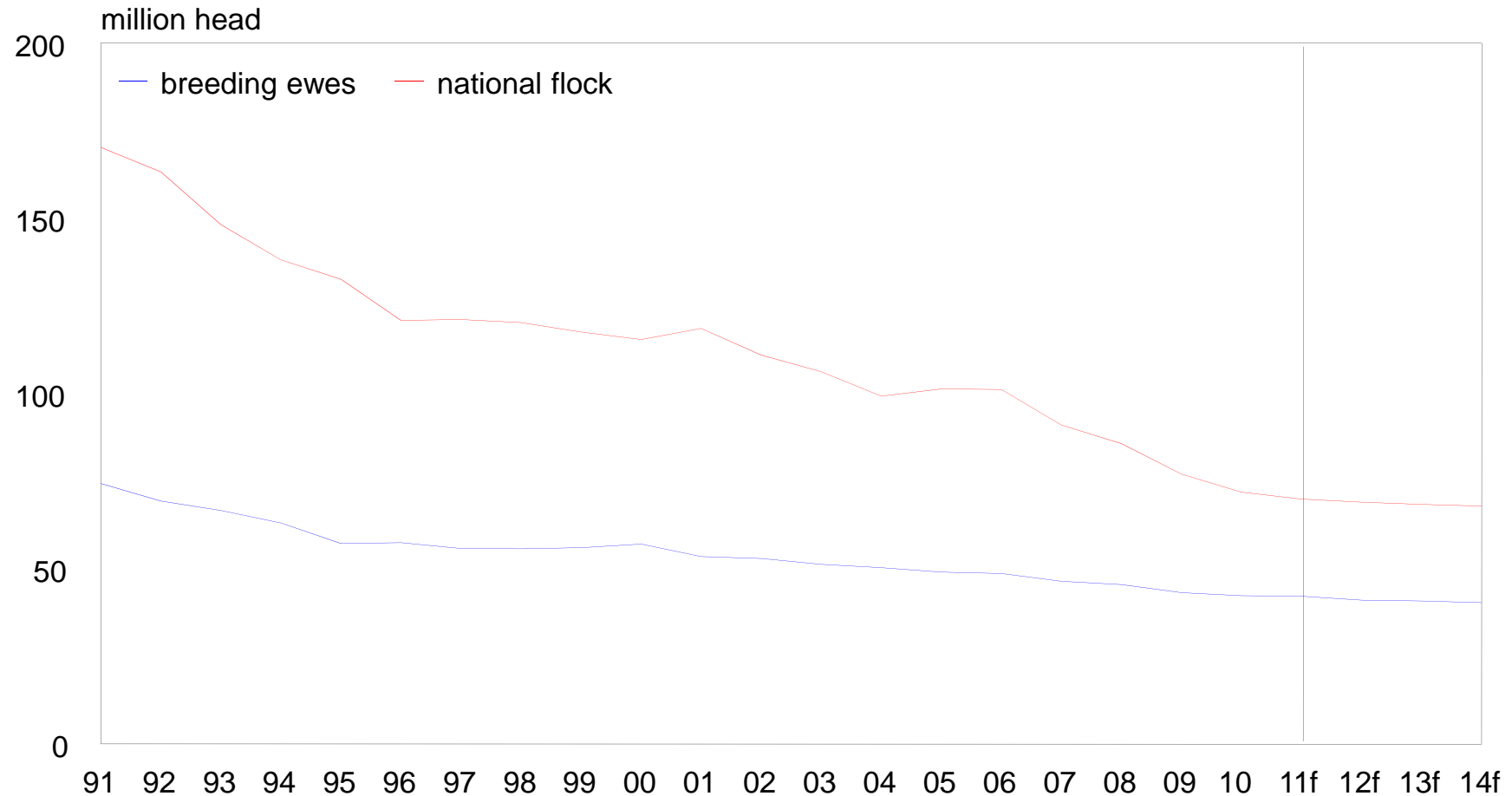
EVENT  
PARTNERS:



EVENT  
SUPPORTERS:



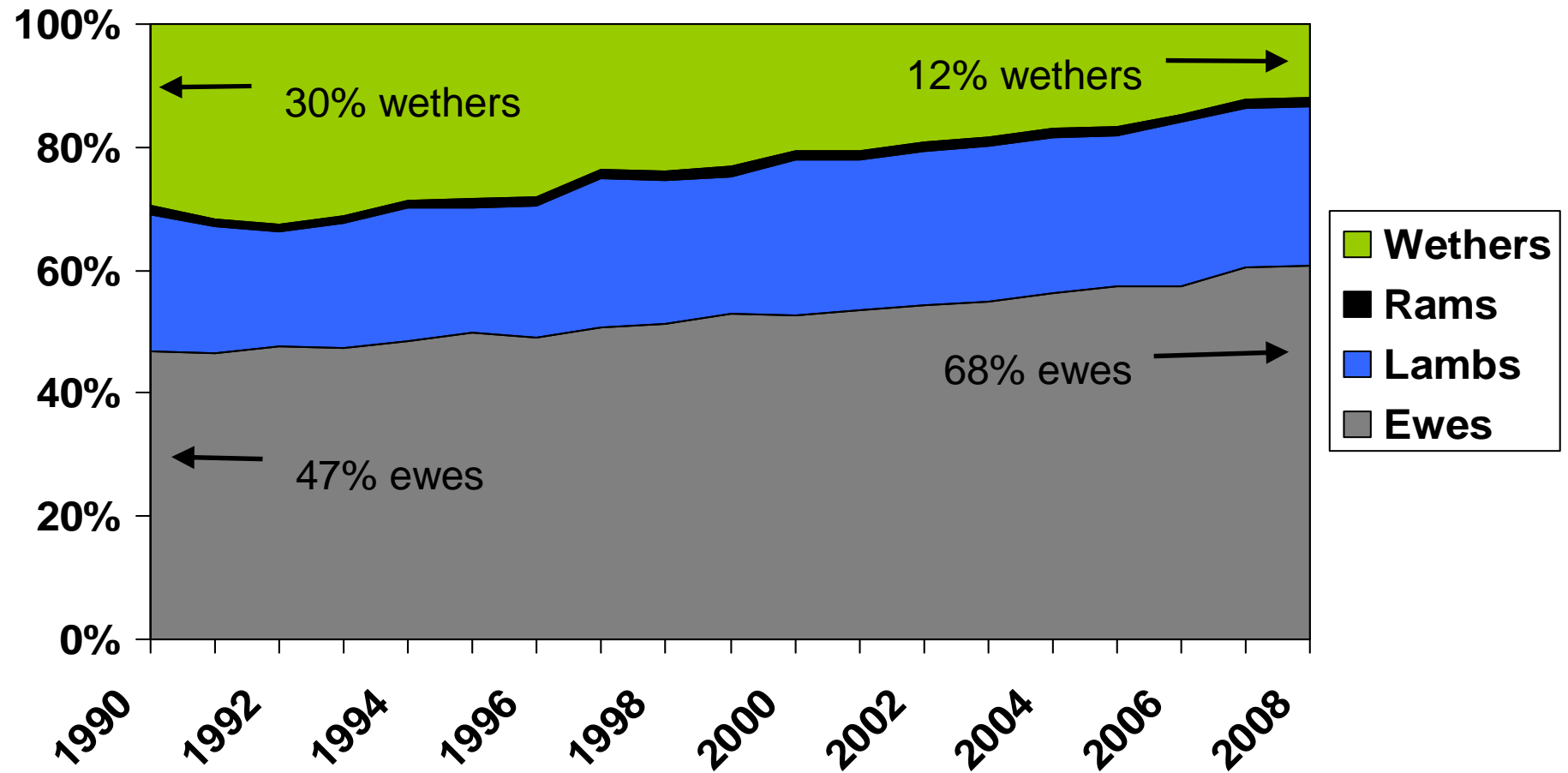
# National & breeding ewe flock decline



Source: ABS, MLA forecasts



# Ewes & lambs on the rise



Source: ABARE  
AgSurf,  
Kimble Curtis



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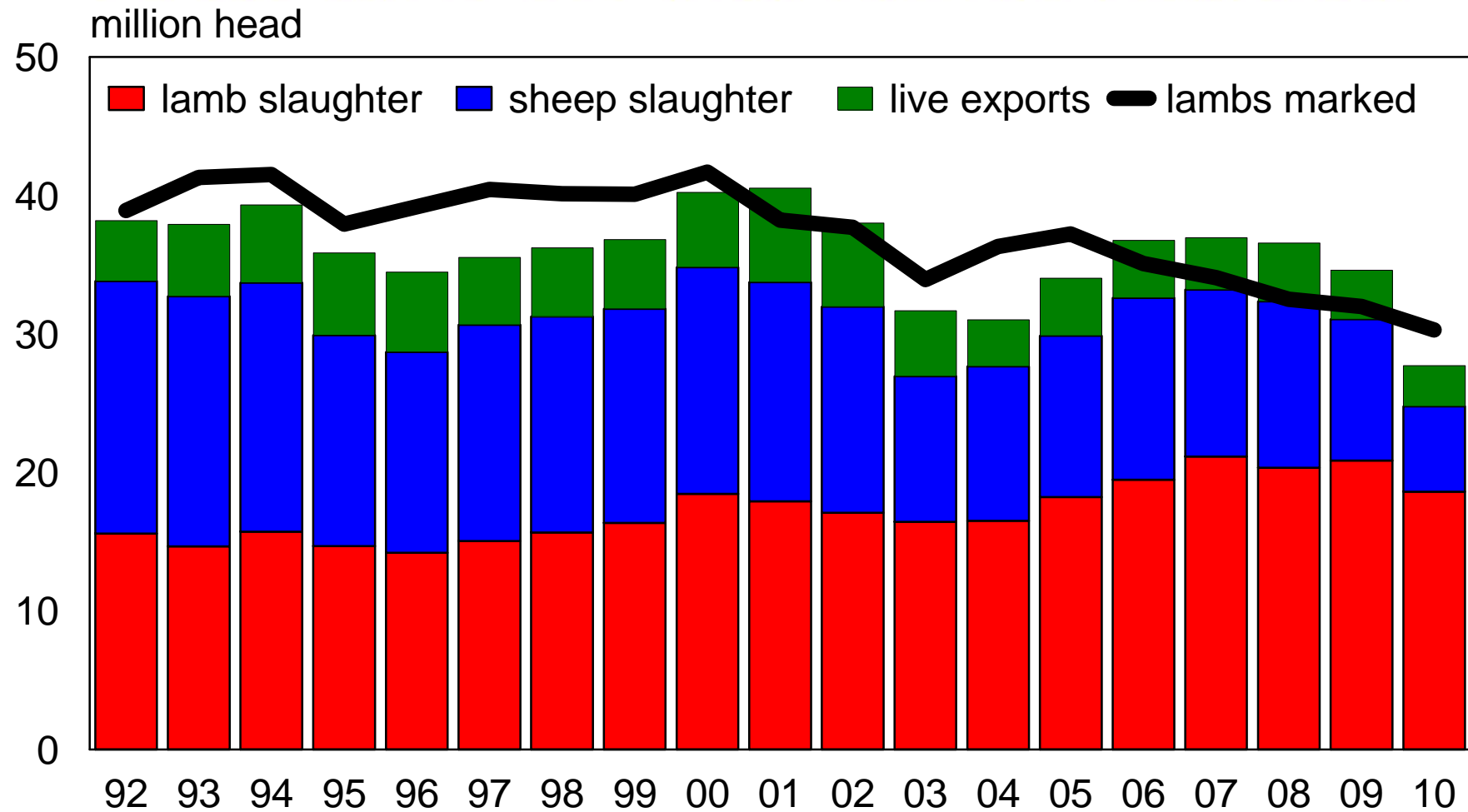
# Why the right ewe matters!

	Broiler	Pig	Cattle	Sheep
Weight of dam	3	180	550	60
Weight of carcass	1.5	45	180	22
Progeny/year	240	22	0.95	0.80
Weight of carcass per yr/dam wt	120	5.5	0.30	0.30
<b>Where the energy goes</b>				
<b>To Dam</b>	<b>4</b>	<b>16</b>	<b>70</b>	<b>70</b>
<b>To Progeny</b>	<b>96</b>	<b>84</b>	<b>30</b>	<b>30</b>



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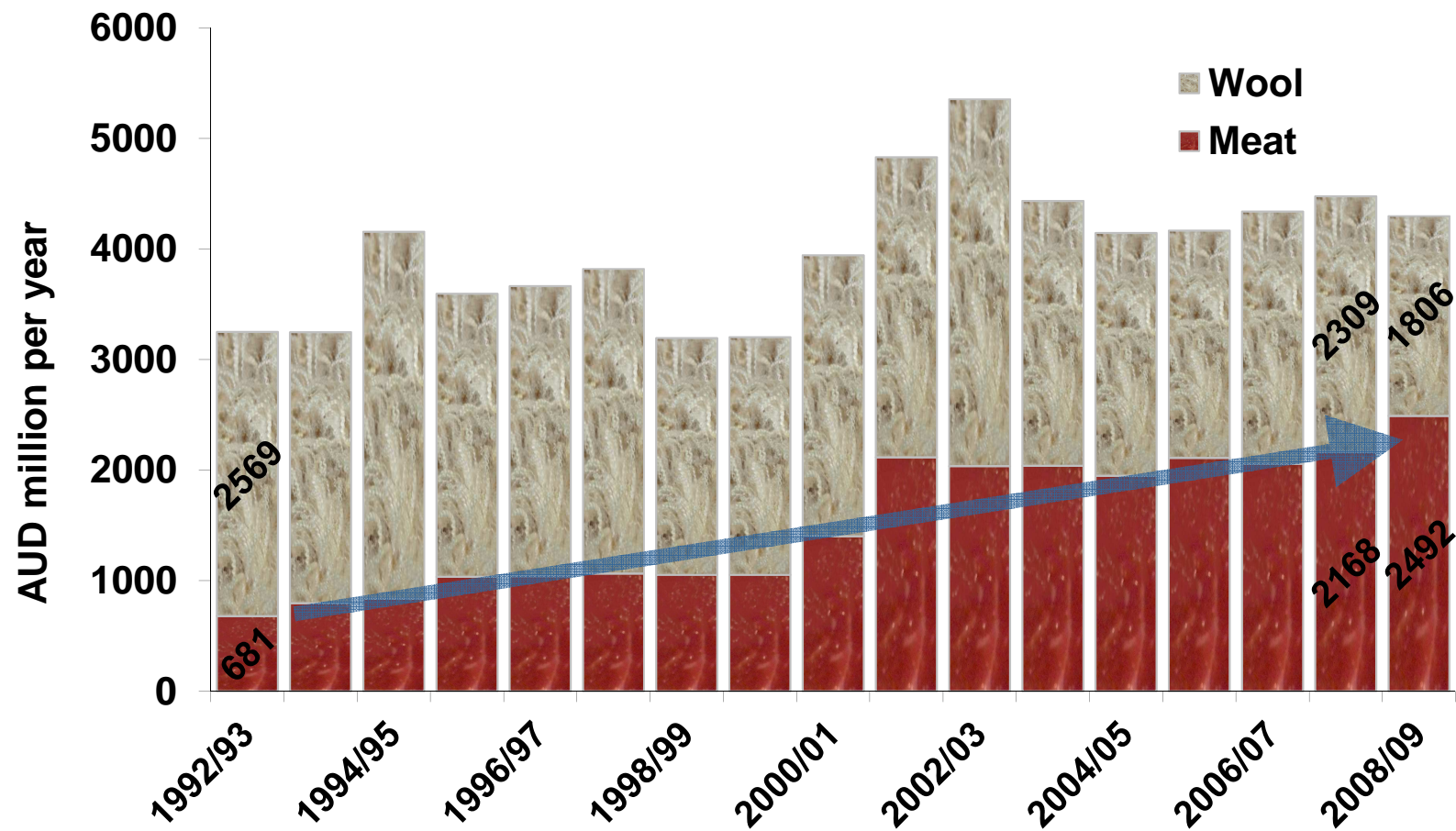
# Total turn-off and lambs marked



Source: ABS, MLA



# Gross value of production



Meat includes lamb, mutton and live export

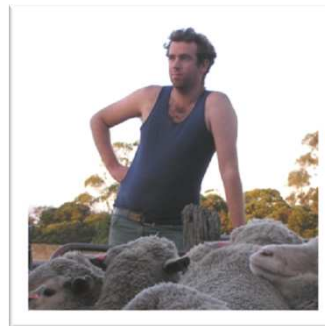
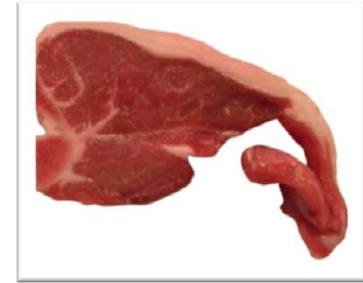
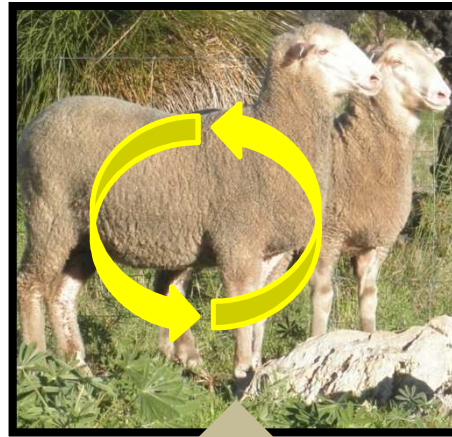




Energy

Role of genetics...

Product



Labour and  
management



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# Q1. What do you most want to improve in your sheep?

- 1) Growth rate
- 2) Weaning %
- 3) Wool cut
- 4) Micron
- 5) Carcase- lean meat yield
- 6) Resistance to fly strike
- 7) Resistance to worms
- 8) Doing ability





# The ewe of the future could have:

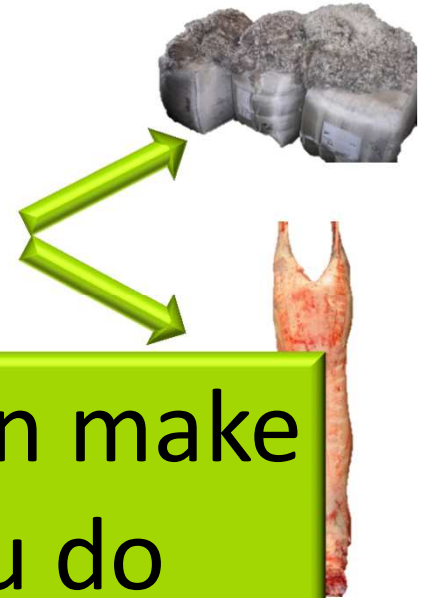
- more wool
- finer wool
- more stylish wool
- better wool strength
- better wool length
- lower CV
- higher washing yield
- better structure
- less horns
- faster growth
- better muscling
- more lambs
- less wrinkle
- barer breeches
- less worms
- less dags
- better resilience
- less flystrike



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# But what should it have?

- That depends on:
  - Your production system
  - Your crystal ball

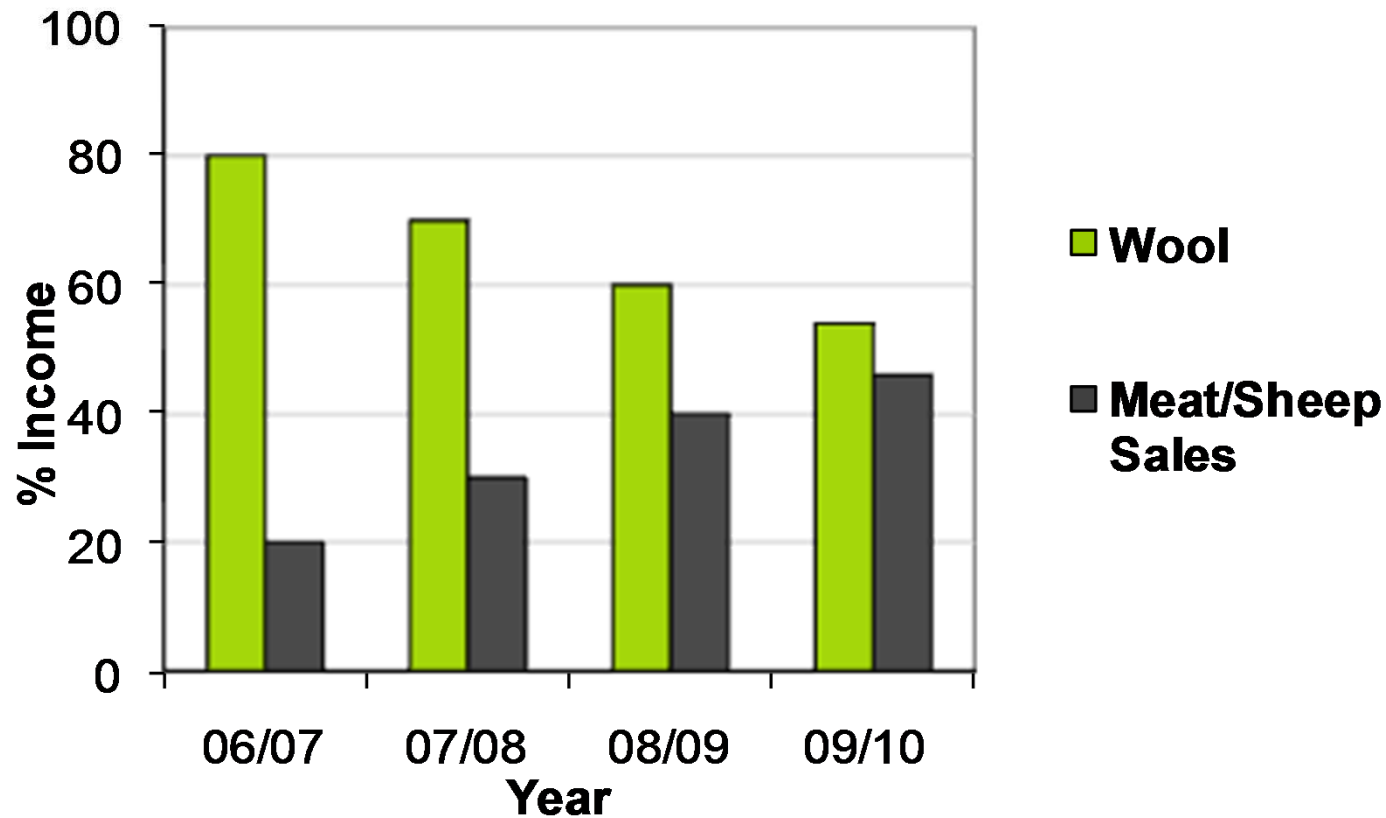


These are decisions only you can make  
– and it is important that you do



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# Income from wool versus sheep sales







# Wool and reproduction

the valuable bi-product

Ewe fleece value = \$25	
Meat Price \$/kg	Extra lambs required to break even
\$3	>50
\$4	>50
\$5	37



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# Which is the best ram?



It depends!!



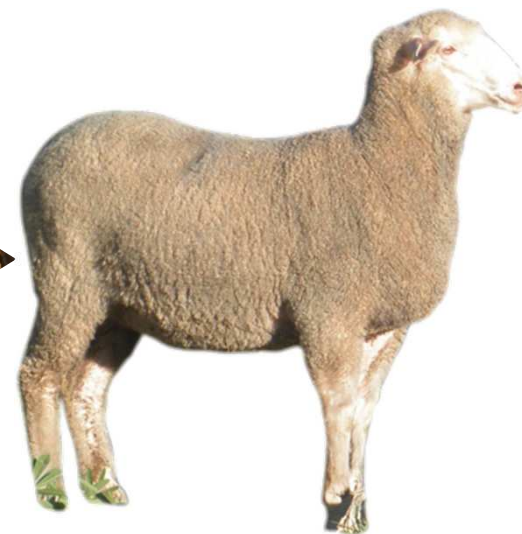
## Q2. When buying rams what is the majority of your selection based on?

- 1) Wool style- quality/colour
- 2) Wool measurement- micron, CV, wool cut
- 3) Size
- 4) Low wrinkle
- 5) Reproduction potential
- 6) Carcase attributes





We buy bags of genes (and a delivery system)



To produce profitable sheep



# Tools to help make that decision

- Australian Sheep Breeding Values (ASBVs)
  - ASBVs are available for all of the traits that matter to your back pocket
  - They work
  - There is money in it



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### Q3. What percentage of Merino rams are sold with ASBVs?

- 1) 15%
- 2) 30%
- 3) 45%
- 4) 60%
- 5) 75%
- 6) 90%





# So why aren't they everywhere?

"My clients don't ask for them"



"My ram supplier doesn't have them"



# Breeding for lambs

- ASBVs for Number of lambs weaned (NLW)
- Huge range in sires (over 30 lambs per 100 ewes)
- Plus get other things going in your favour
- Growth, muscle and fat
- Wrinkle, face cover etc





# Yearling weight (YWT)



## YWT



An extra 1kg here

2 more lambs here /100 ewes

-5.1

2.5

YWT (kg)

10.3



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# Post-weaning weight (PWT)



**PWT**



**An extra 1kg here**



**Mated as lambs**

**8 more lambs here../100ewes**



**...& 10 less days here**

**-4.5**

**1.1**

**PWT (kg)**

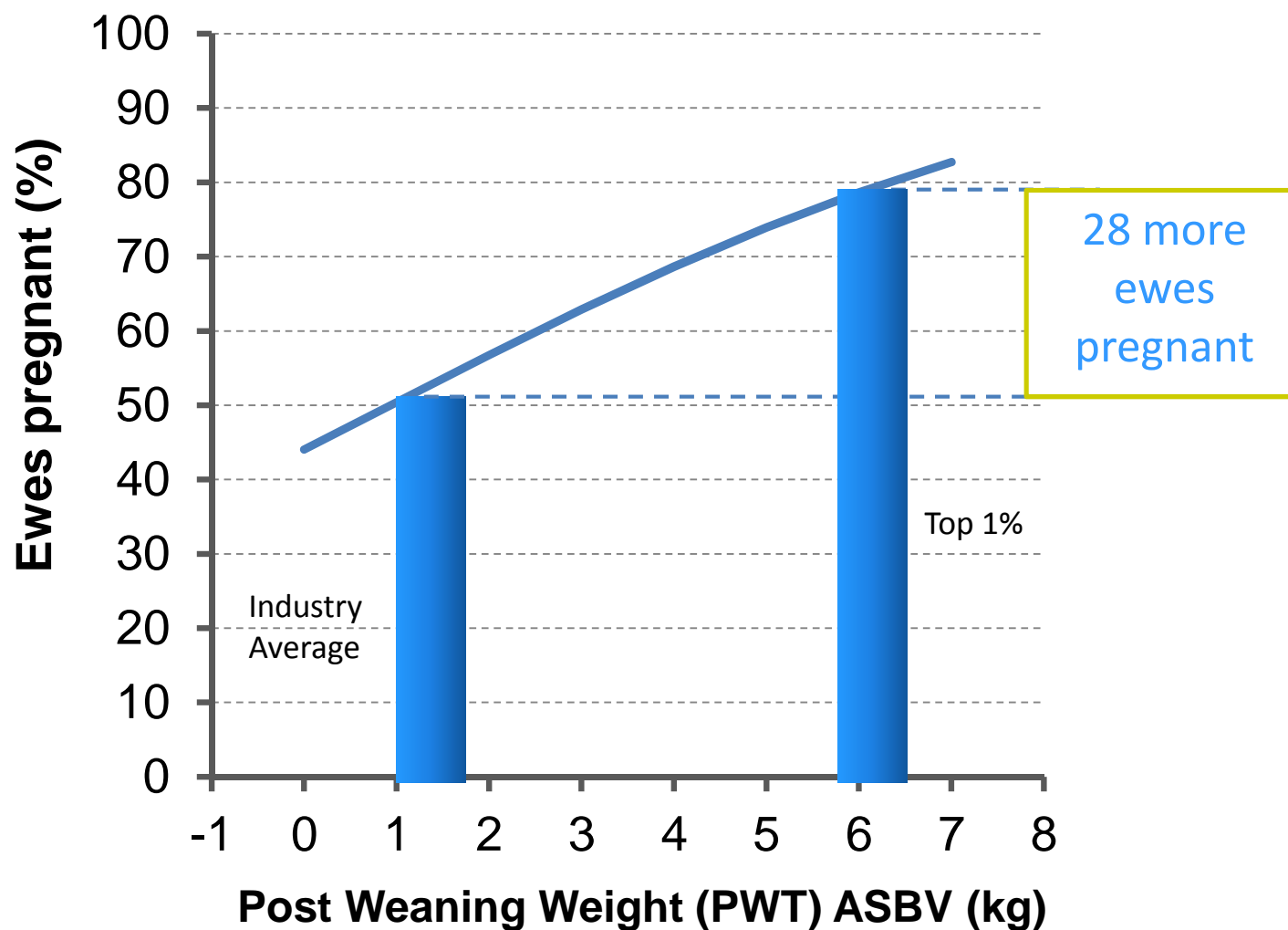
**6.6**



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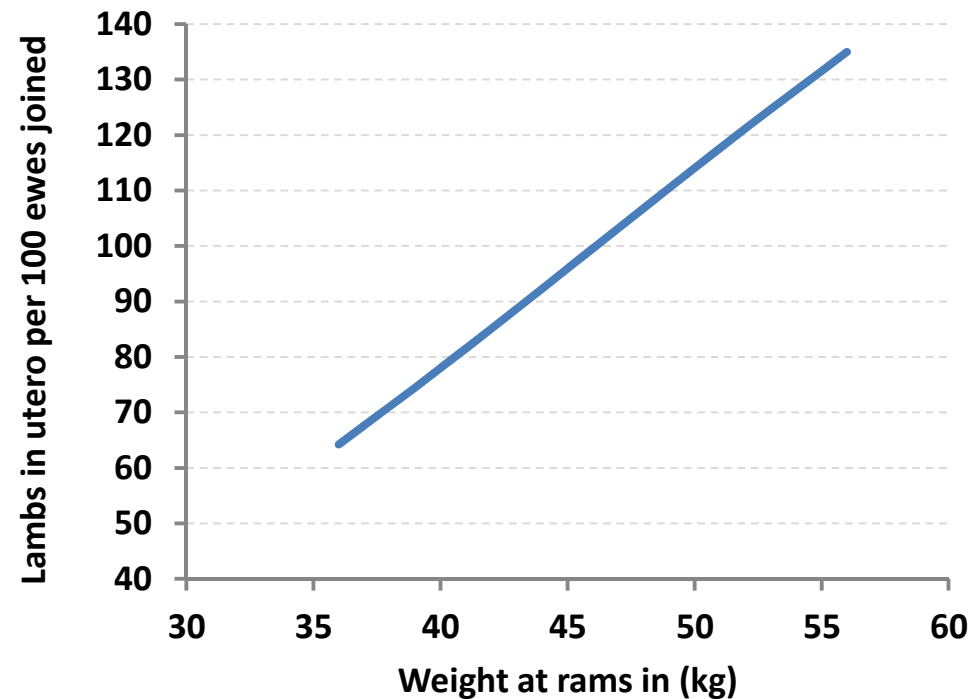
# Growth & mating ewe lambs





# Merino ewe lambs

## Impact of joining weight



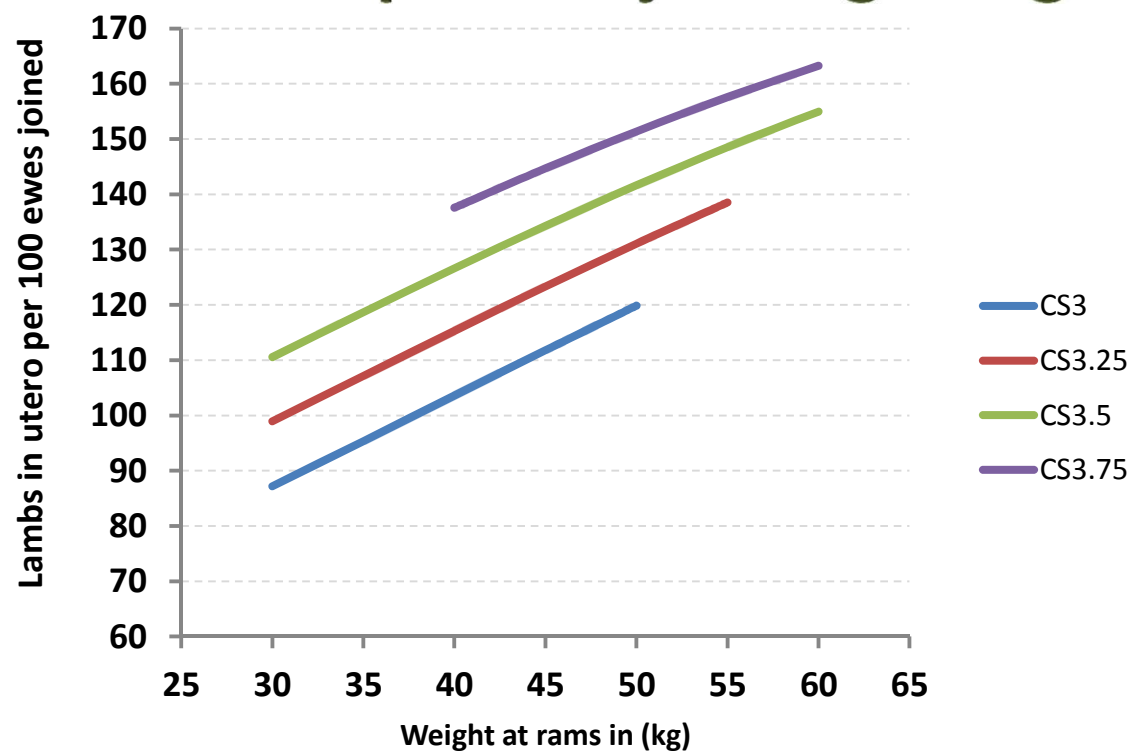
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# Composite ewe lambs

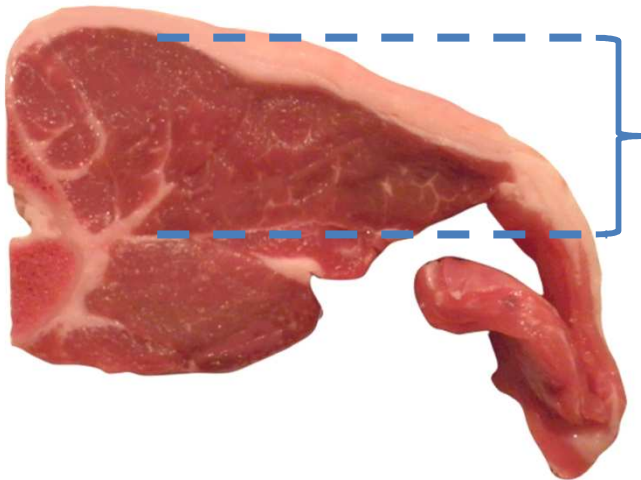
## Impact of joining weight and CS



# Yearling eye muscle depth (YEMD)



## YEMD



An extra 1mm here



Means 6 more lambs here

-1.4

0.4

YEMD (mm)

2.2



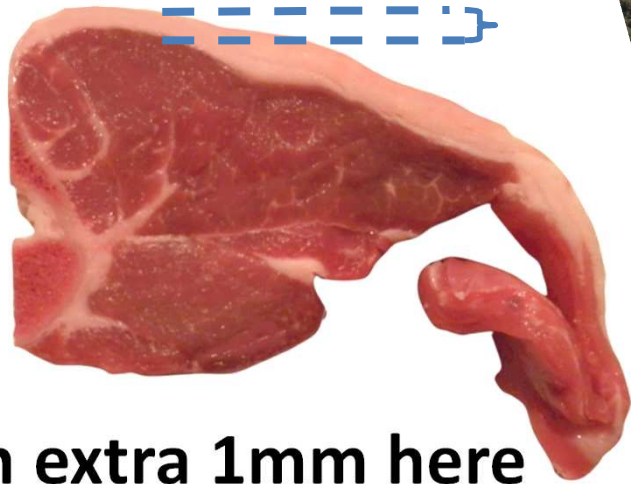
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# Yearling fat depth (YFAT)



**YFAT**



An extra 1mm here



**0 more lambs here**



**OR**

**25 more lambs here**



**-1.3**

**0.1 YFAT (mm)**

**1.3**

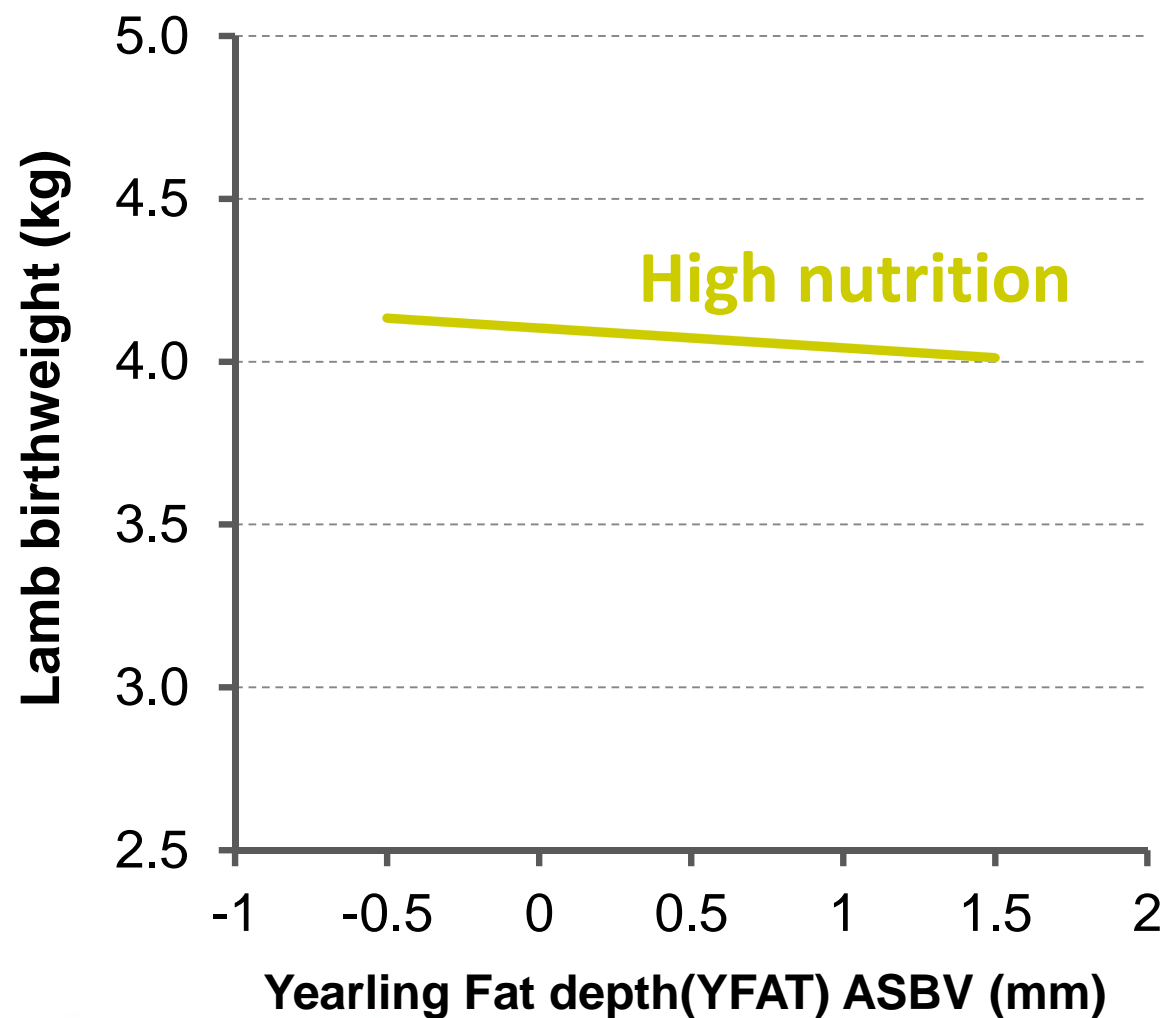


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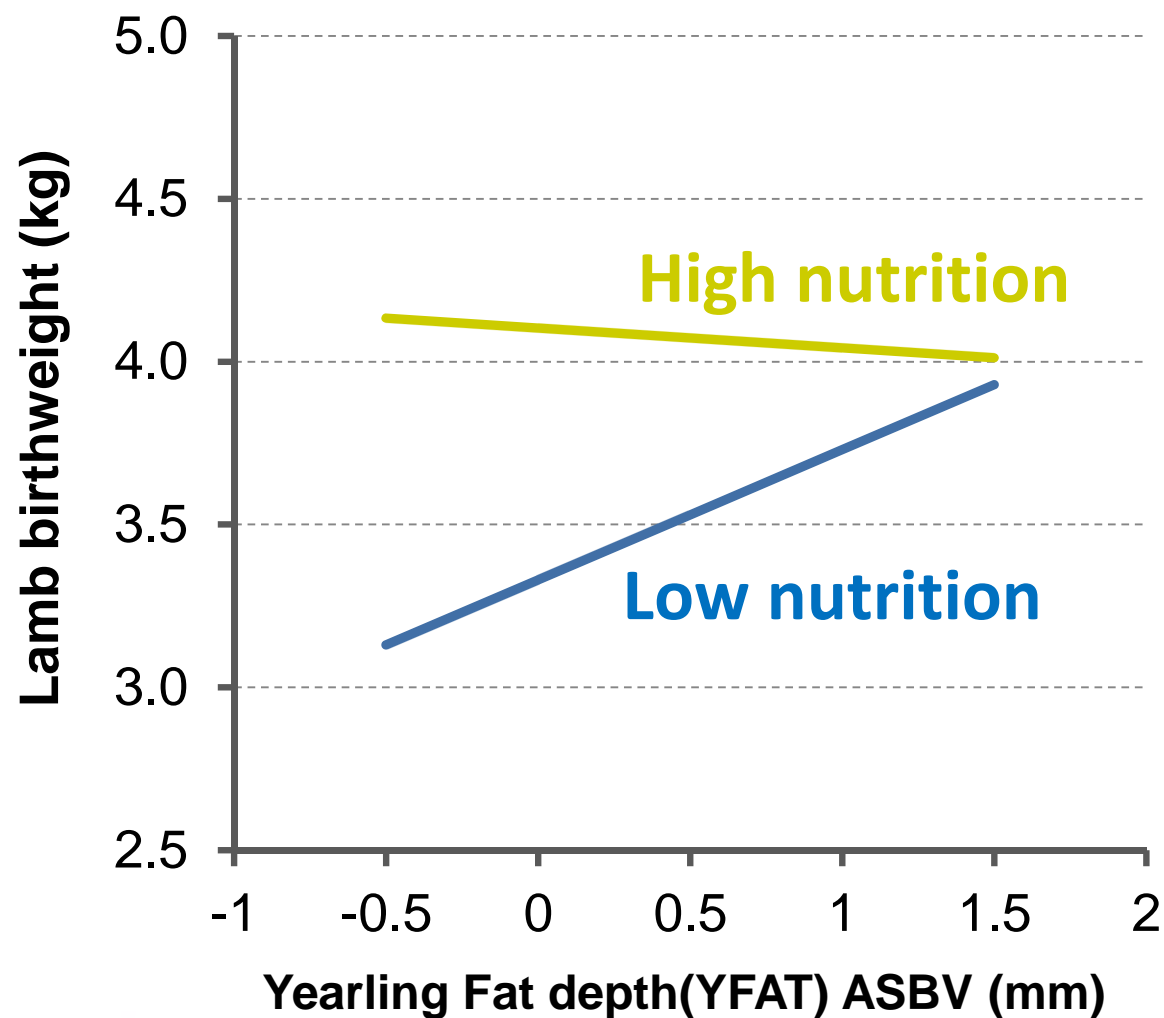


# Reproduction & fat

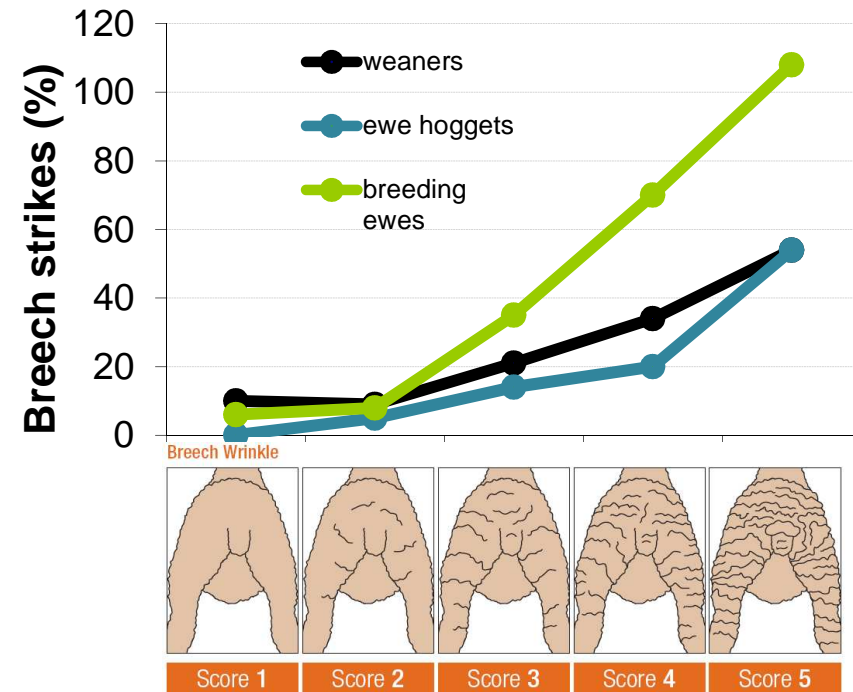
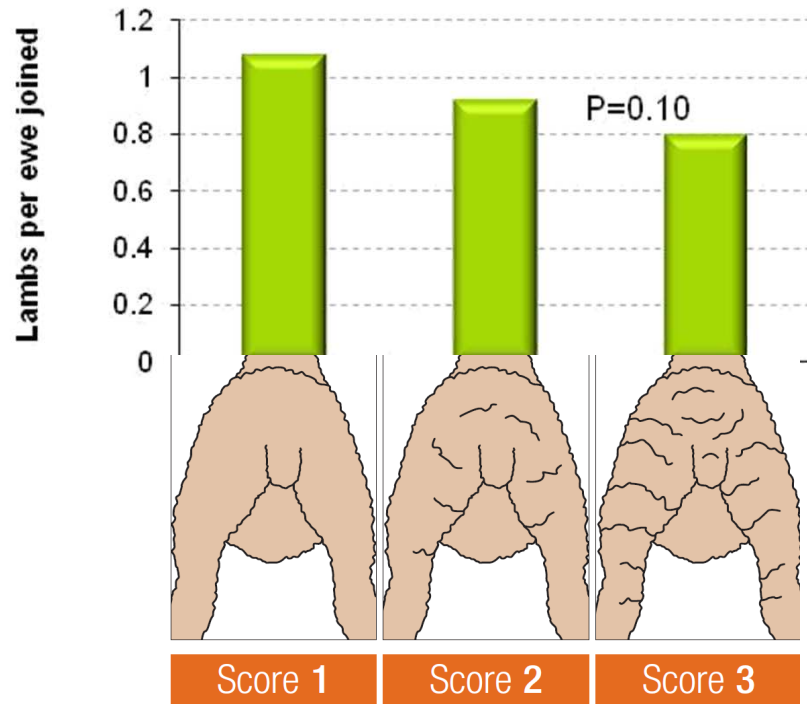




# Reproduction & fat



# Less wrinkle, more lambs, less flies



Johan Greeff  
unpublished

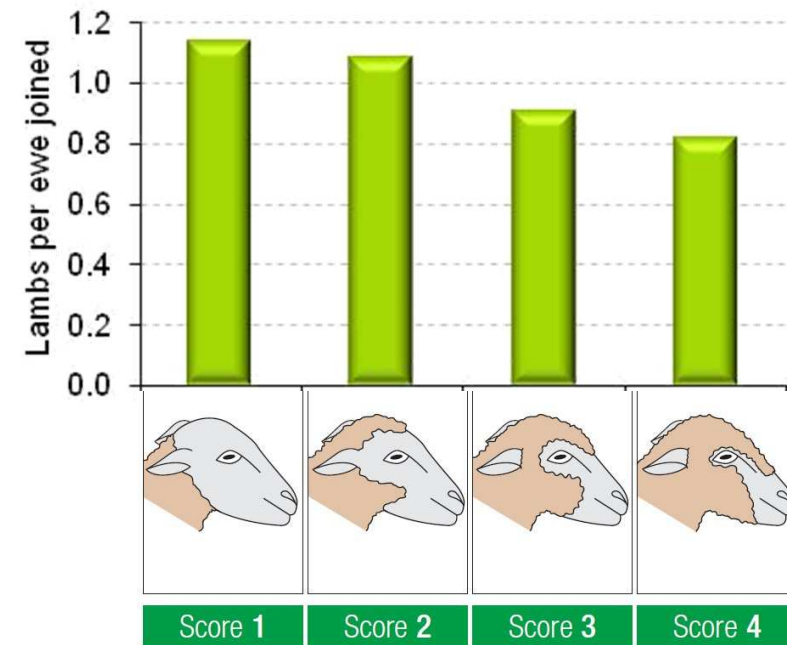
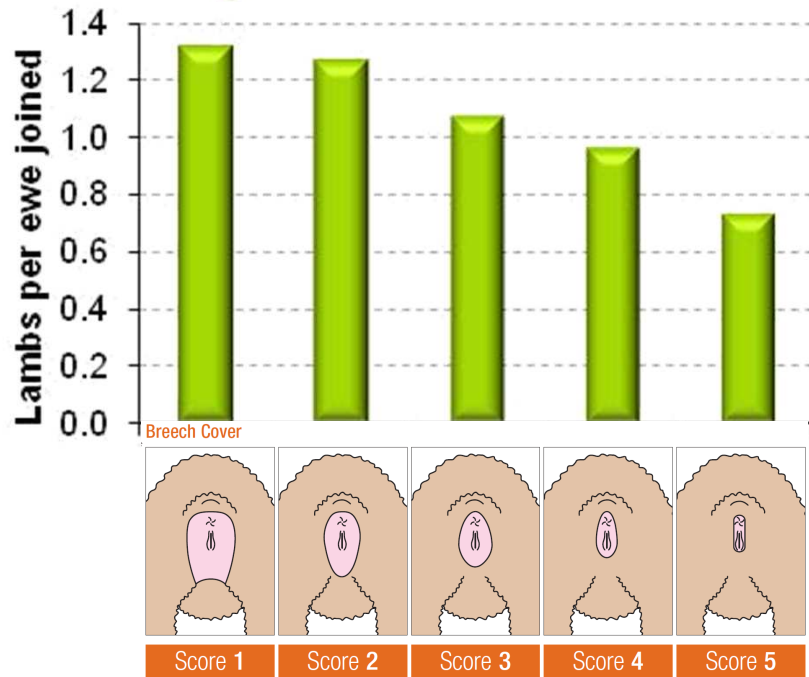


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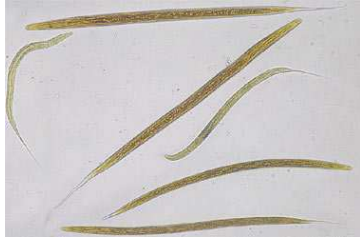
# Clean points - more lambs



**Johan Greeff**  
unpublished



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# Healthy \$heep

- Large genetic variation in sheep resistance to internal parasites
- Use WEC ASBVs as much as possible to breed more resistant sheep
- Reduce reliance on chemicals





- ↑ operator comfort
- ↑ operator safety
- ↑ Consumer perception
- ↑ efficiency of labour use
- ↑ efficiency of production
- ↑ dollars & people happiness



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We can improve comfort, safety, perception, labour use, production and profitability of sheep?



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# THE BLUE PRINT

- ✦ Fertile at 7-8 months
- ✦ Weaning heavy twins
- ✦ Well muscled
- ✦ Resilient to tough times
- ✦ Wrinkle and dag free
- ✦ Worm free
- ✦ Polled
- ✦ Bare head and legs
- ✦ Quality wool





A photograph of two white sheep in a field. The sheep in the foreground is looking towards the right, and the one behind it is also looking right. They are standing in a field with tall grass and some low-lying plants. A wire fence is visible in the background.

The future is bright: **Future Park 099337**  
Poll Merino, 30kg at weaning, 70kg at 10 months  
and was 50 days pregnant with twins!



**WWT: +5.5 kg**

**PWT: +7.1kg**

**PEMD: +1.6mm**

**PFAT: +0.5mm**



# The New Ewe

- **Fertile-** 3% SIL per kg ewe body weight
- **Efficient-** kg lamb : kg ewe  
(wean 100% ewe wt at 12-14 wks)
- **Resilient-** ability to maintain production-  
in feed limited environments  
contract and expand quickly  
under parasite challenge
- **Growth-** Weaning Wt /Post Weaning Wt



# Get on board...the genetics express



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