

The New Ewe

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The New Ewe

“the Merino is a dangerous monomaniac, and his one idea is to ruin the man who owns him. With this object in view he will display a talent for getting into trouble and a genius for dying that are almost incredible.”

Banjo Paterson

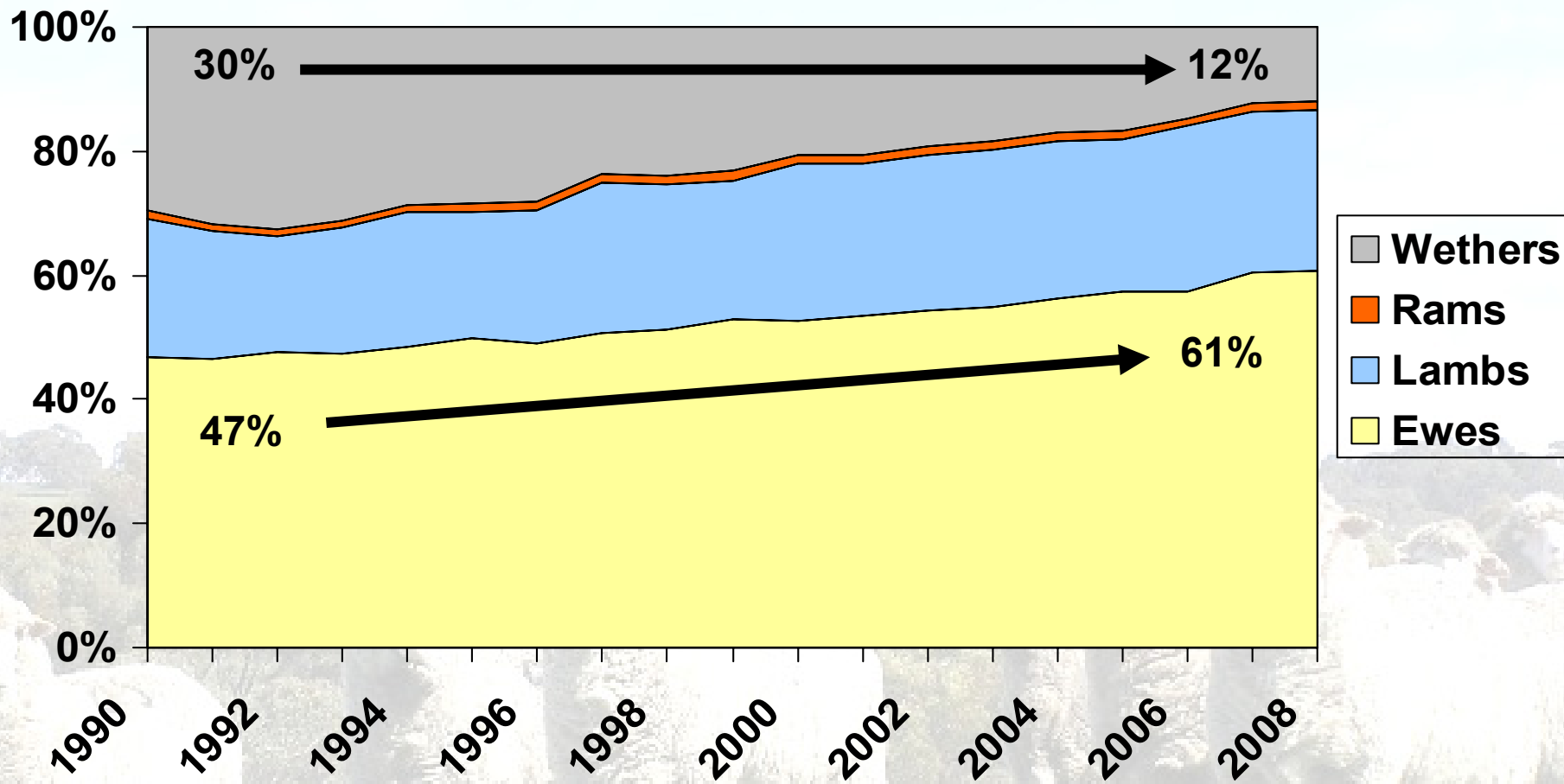


The New Ewe

- Demand for sheep meat
- Profitable and low risk
- Ewe is the engine room, biggest earner, largest cost



The New Ewe



Source: ABARE AgSurf, Kimble Curtis

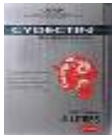
FUTURE EWE BLUEPRINT



**More lambs
&
better survival**



**Rapid lamb
growth**



‘Easy-care’

- Less flies
- Worms
- Horns, cover
- Chemicals
- Labour



**Carcass
quality**



**Quality
wool**

ACHIEVING THE BLUEPRINT

Australian
Sheep

Breeding

Values

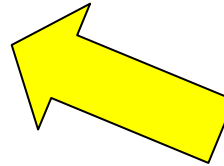
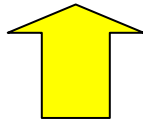


ACHIEVING THE BLUEPRINT

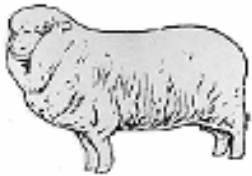


Trait information

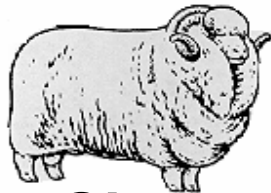
- Correlation
- Heritability



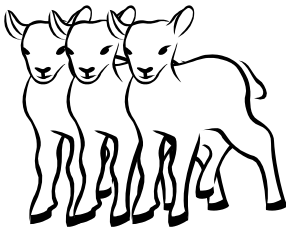
Pedigree



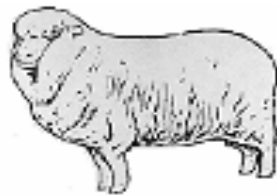
Dam



Sire



Siblings



Relatives

Measurement

- Birth, weaning weight
- Muscle and Fat depth

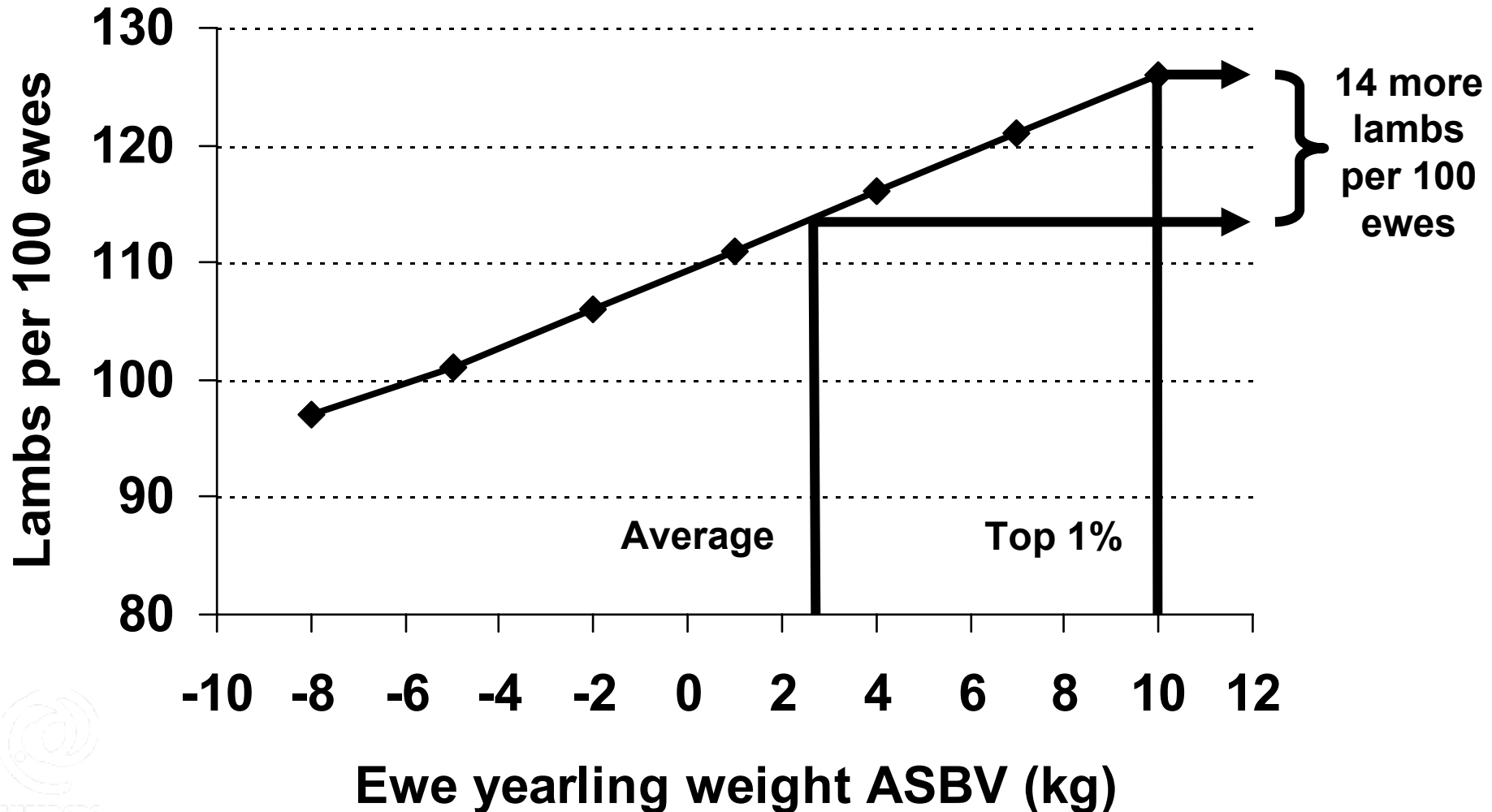


ACHIEVING THE BLUEPRINT

- **Growth ASBV (WWT,PWT,YWT)**
- **Muscling ASBV (PEMD,YEMD)**
- **Fat ASBV (PFAT,YFAT)**

ASBV – Growth (YWT)

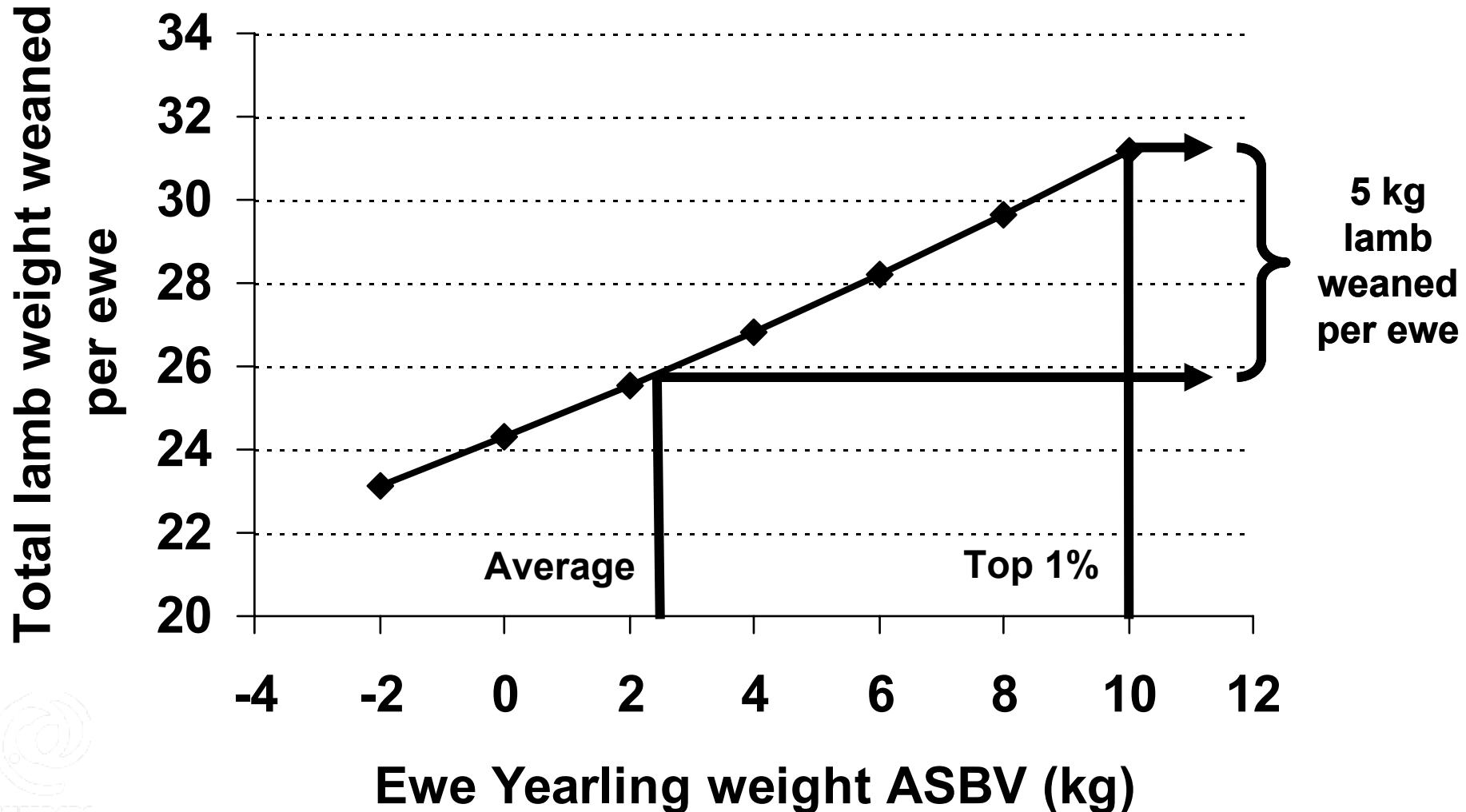
Number of Lambs Born





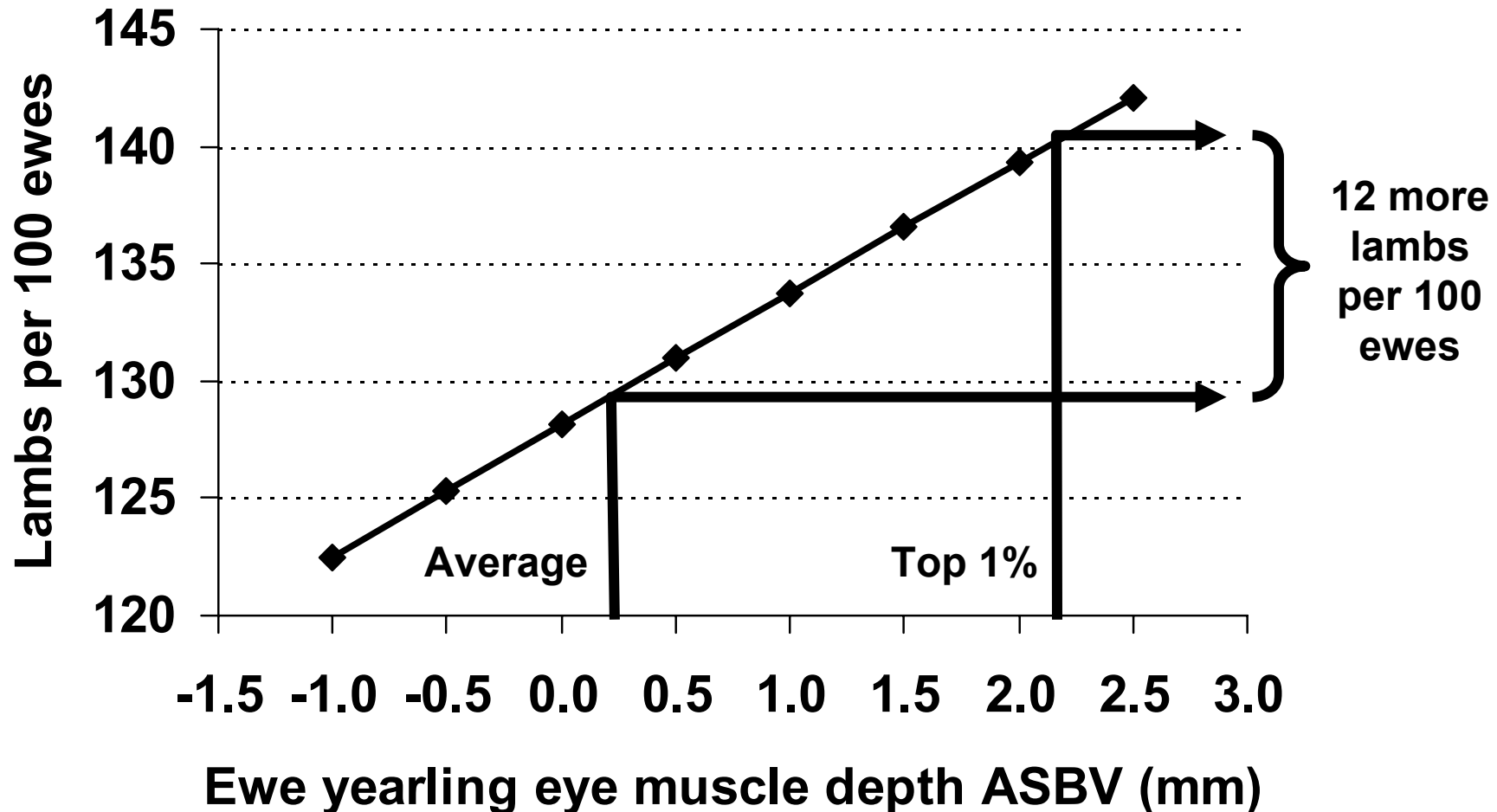
ASBV – Growth (YWT)

Total weight of lamb weaned



ASBV – Muscling (YEMD)

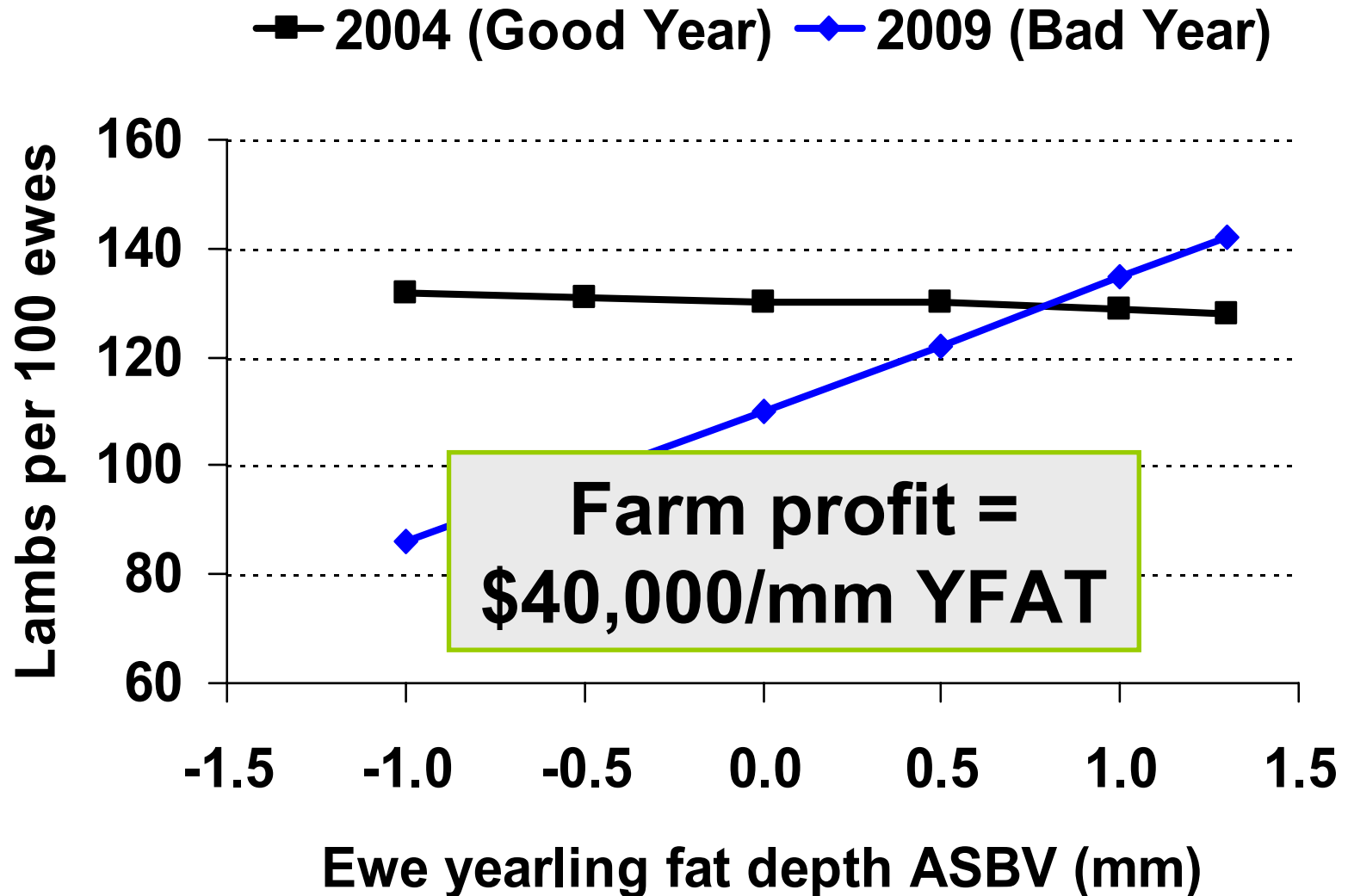
Number of Lambs Born





ASBV – Fat (YFAT) – Easy Care

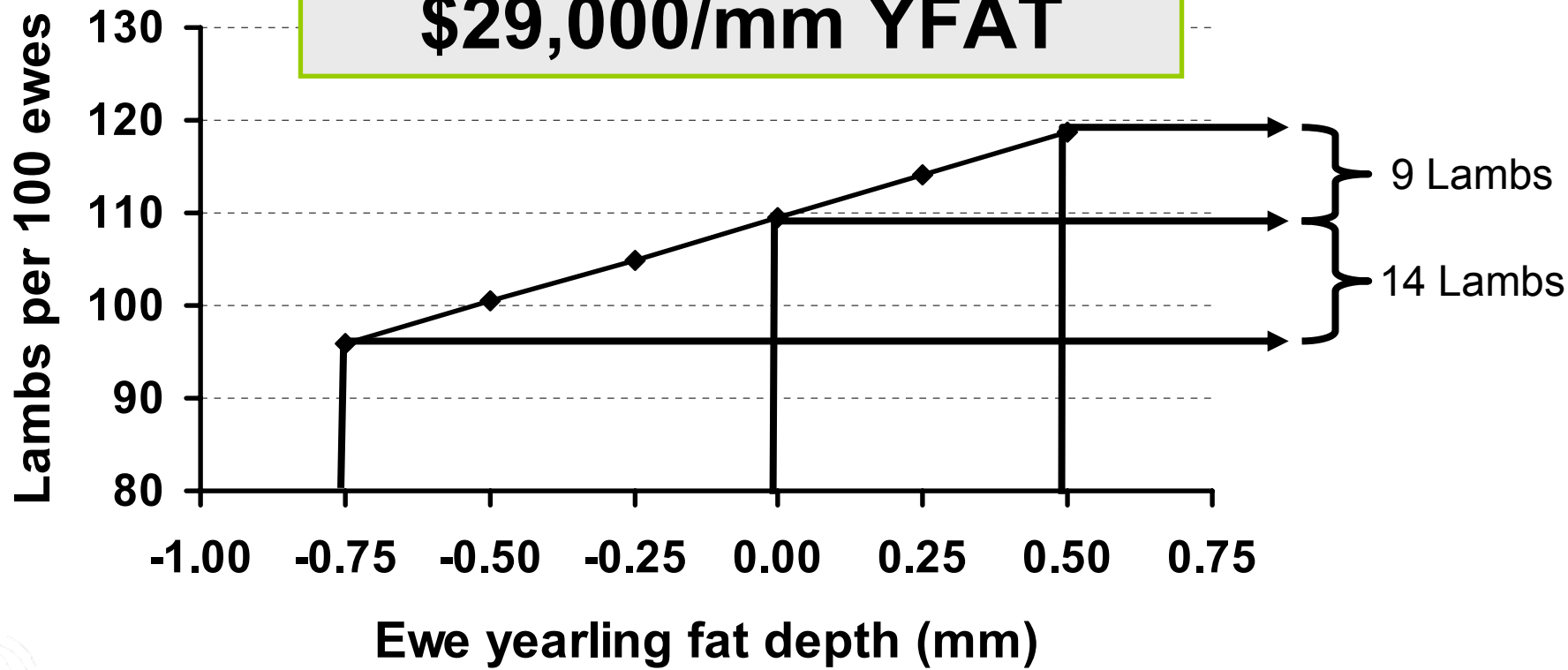
Impact only realised under poor conditions



ASBV – Fat (YFAT)

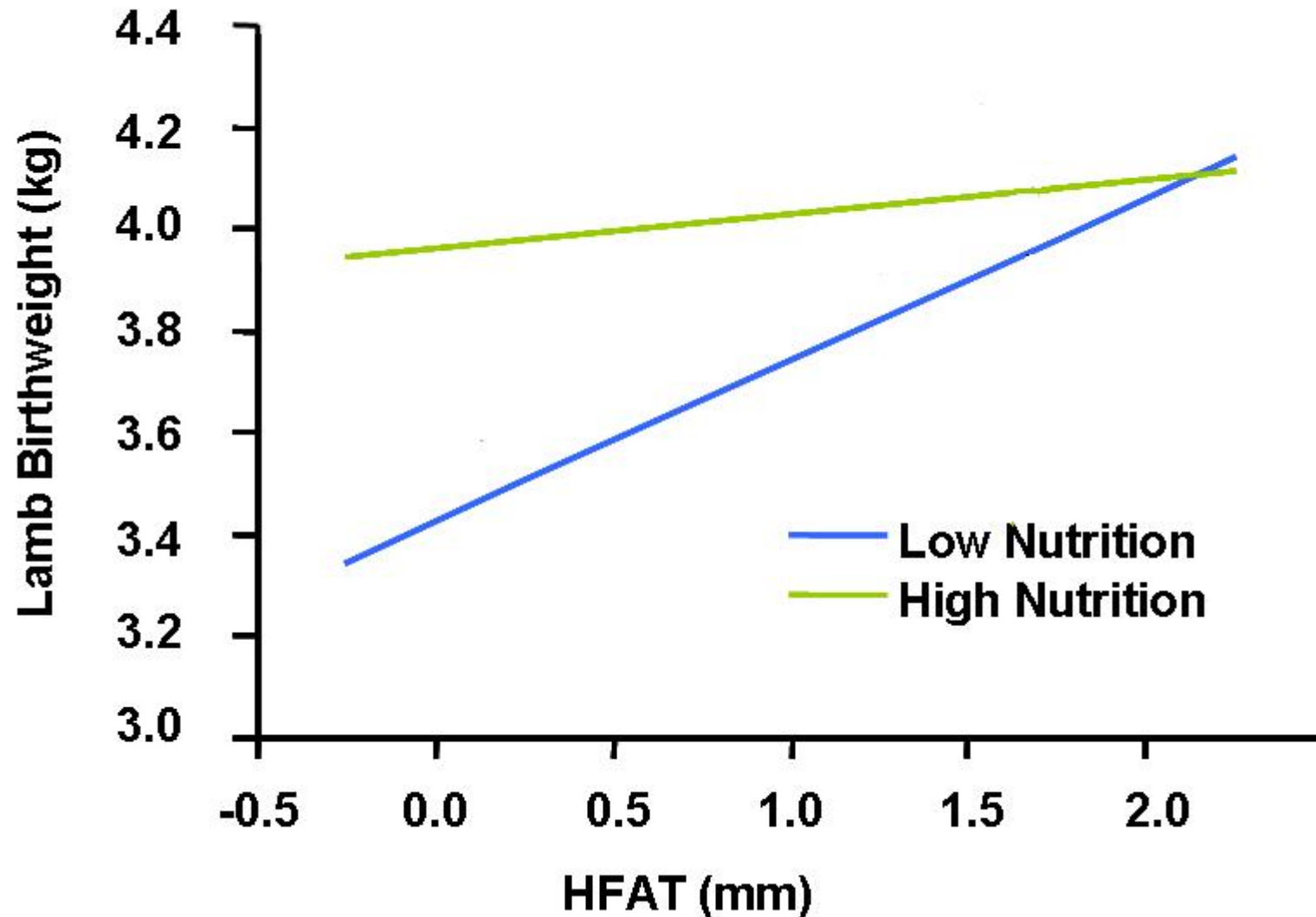
Number of Lambs Born

**Farm profit =
\$29,000/mm YFAT**



ASBV – Fat (YFAT)

Easy care





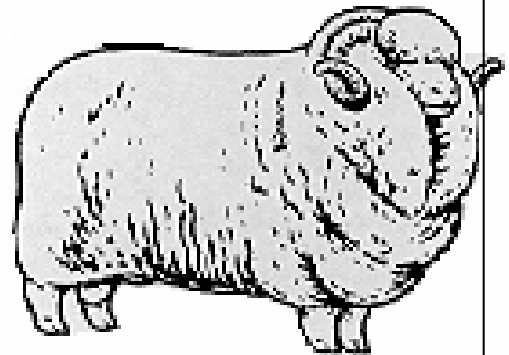
YWT= +5kg
YEMD= +1.5mm
YFAT= +0.5mm



YWT= +10kg
YEMD= +2.5mm
YFAT= -0.5mm



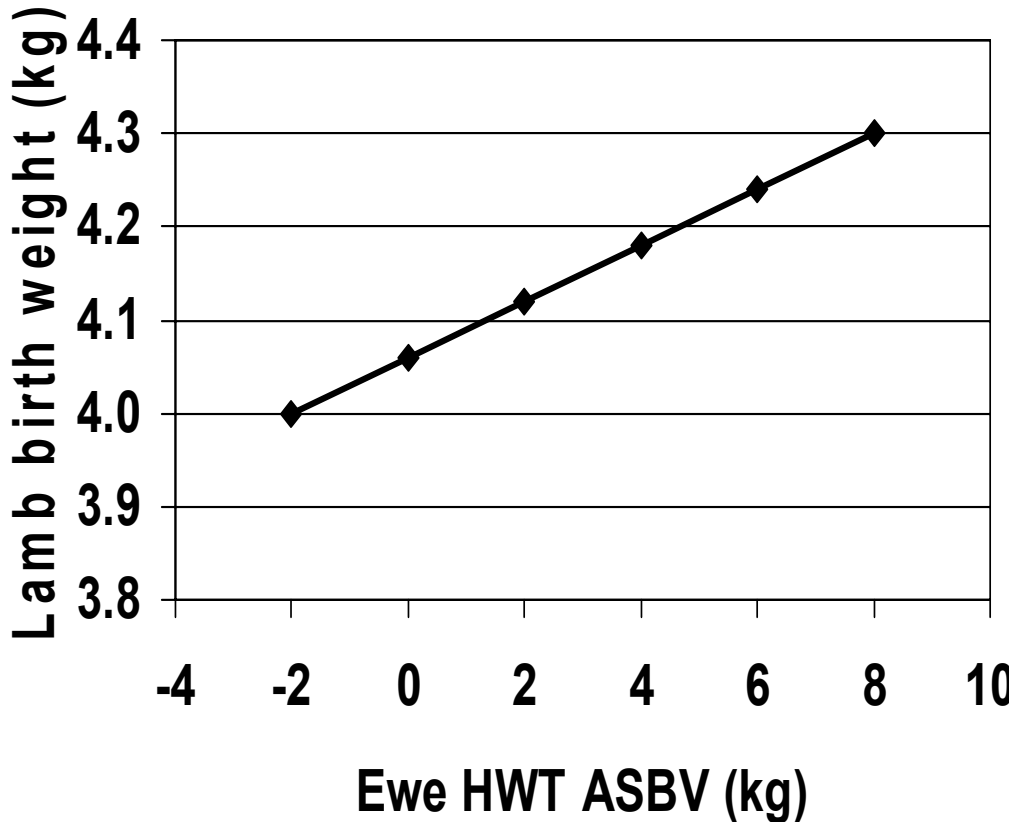
YWT= +5kg
YEMD= +2.5mm
YFAT= +0.5mm



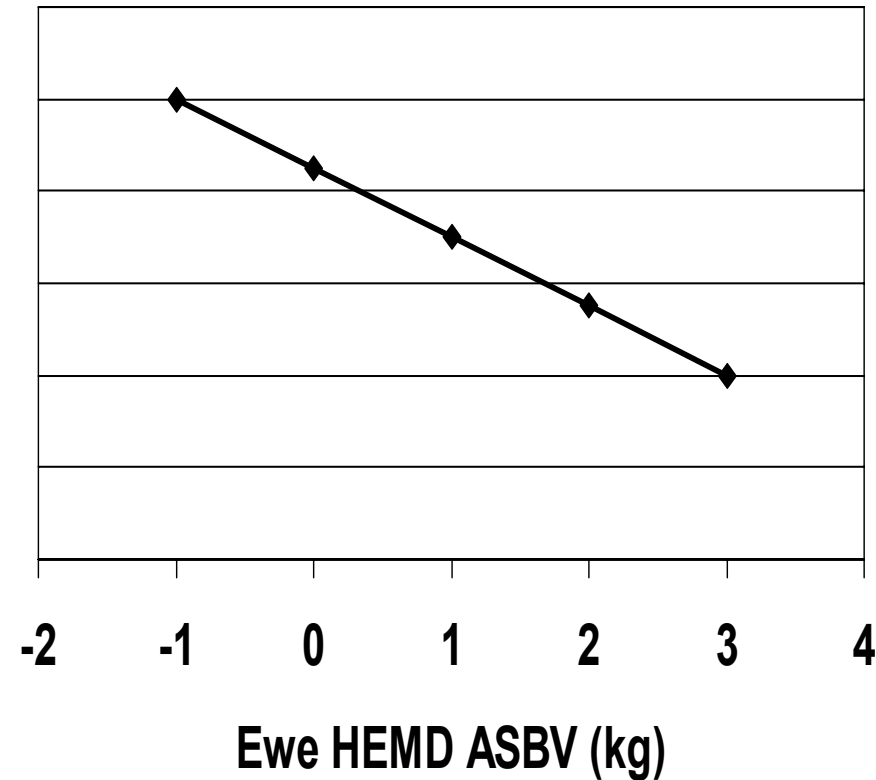
The balancing act

Traits are related to each other

Growth



Muscling



The balancing act

Be aware of the implications of producing the 'future ewe' and trade-off's on other traits

- Growth/muscle and birth weight
- Fat and lean meat yield
 - select terminal sires accordingly
 - slaughter weight and ages
- Reproduction and fleece weight
- Bareness and fleece weight



**Carcass
quality**



**Quality
wool**

No Excuses – you must understand ASBV's

FUTURE EWE BLUEPRINT



More lambs
&
better survival

- **Increase Growth ASBV's**
- **Increase Muscle ASBV's**
- **Don't select negatively for fat ASBV's**

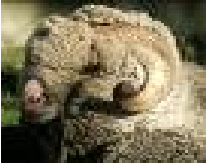
FUTURE EWE BLUEPRINT



Rapid lamb
growth

- **Increase Growth ASBV's**
IN COMBINATION WITH
- **Increase Muscle ASBV's**

FUTURE EWE BLUEPRINT



‘Easy-care’

- Less flies
- Worms
- Horns, cover
- Chemicals
- Labour

- **Don't select negatively for fat ASBV's**
- **Range of other ASBV's for parasites, breech wrinkle**

What's to come for the future ewe?

Robustness

- Maintain live weight during high demand and low feed available periods
- Repeatable reproductive performance

What's to come for the future ewe?

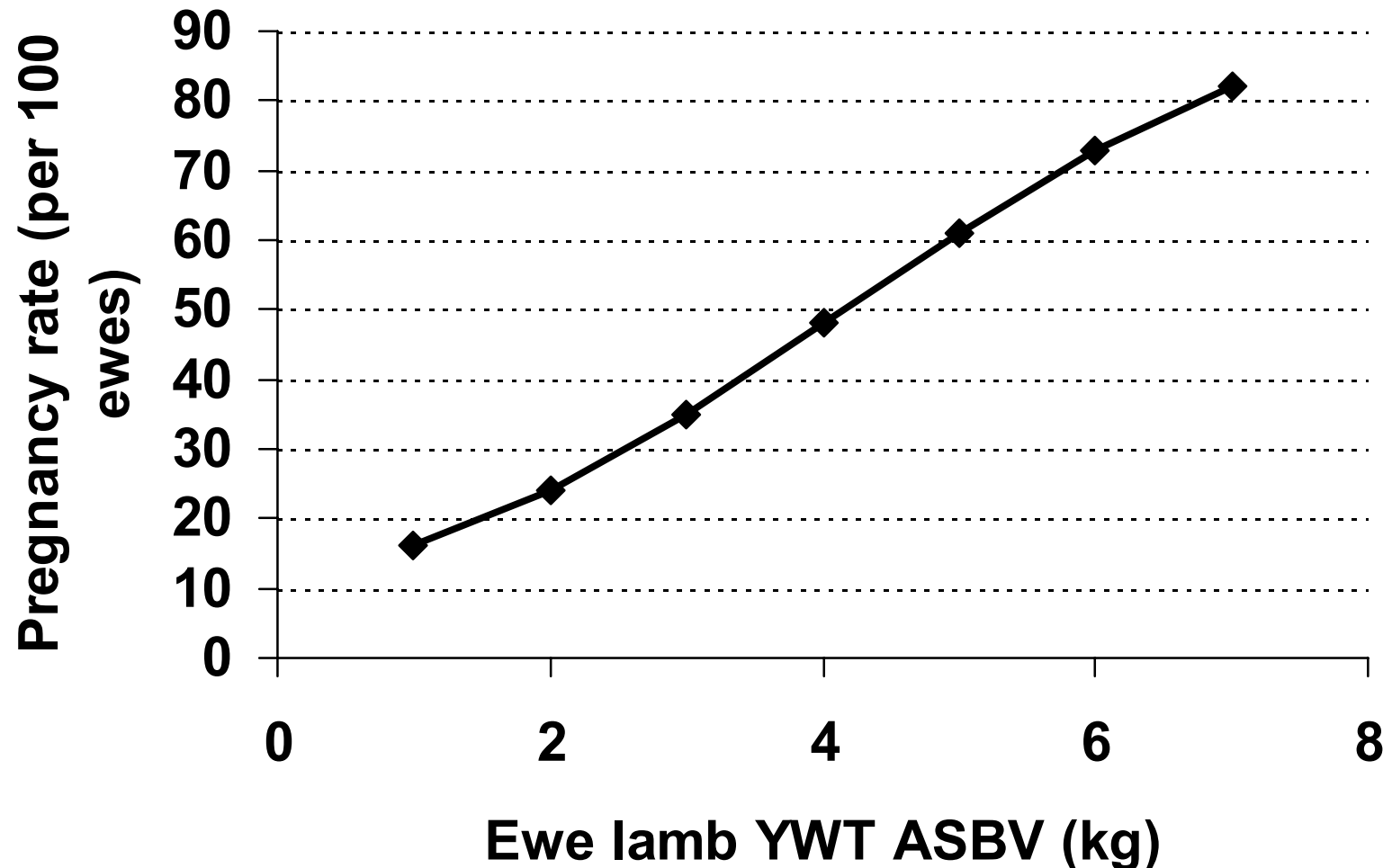
Robustness – whole farm profit

	Poor Pasture	Good pasture
Standard Genotype	38000	92000
Higher intake of low quality feed	+8800	+700
7.5% less ME required for maintenance	+10500	+11000
100g/hd extra fleece weight	+7400	+10400
0.2µm lower fibre diameter	+5900	+8300

What's to come for the future ewe?

Joining ewe lambs

- Joined at 7-8 months to lamb at 12-13 months of age



The future, “Future ewe lamb”



Weaning weight:
30kg

Joined at 8 months:
Twins



WWT: +5.5kg
PWT: +7.1kg
PEMD: +1.6mm
PFAT: +0.5mm

Summary

- **Reproduction, lamb growth, easy care**
 - ASBV's – Growth, Muscling, Fat
- **Tradeoffs between traits**
 - Fat and LMY, Repro and fleece weight
- **Using and understanding ASBV's is a business essential**
- **Exciting work to come**
 - Joining ewe lambs
 - Robustness

Acknowledgements



Ian Robertson and family

David Thompson and family



Bill and Geoff Sandilands and family



Merinotech WA



Australia's competitive advantage



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA



Department of
Agriculture and Food



Summary

- **Reproduction, lamb growth, easy care**
 - ASBV – Growth, Muscling, Fat
- **Tradeoffs between traits**
 - Fat and LMY, Repro and fleece weight
- **Using and understanding ASBV's and business essential**
- **Exciting work to come**
 - Joining ewe lambs
 - Robustness