

# Andrew Bouffler

## 2006 Nuffield Scholar

How to Fully Utilise and Rapidly Improve the Australian Maternal Ewe Flock (including merinos) to Ensure the Continuity of Supply of Product into our Valuable Meat and Wool Markets.

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A huge thanks to my family



- Farm in partnership with brother (Philip) and wife (Mandi) at Lockhart in the Southern Riverina in NSW.
- Total Hectares – 2850
- Cropping 1250 Ha including wheat, barley, canola, faba beans and oats.
- Principle of Trigger Vale Bond and White Suffolk Studs. It's in this area of sheep breeding where my main interests and passions lie.

So you probably already think that I'm in the business of breeding and selling these.



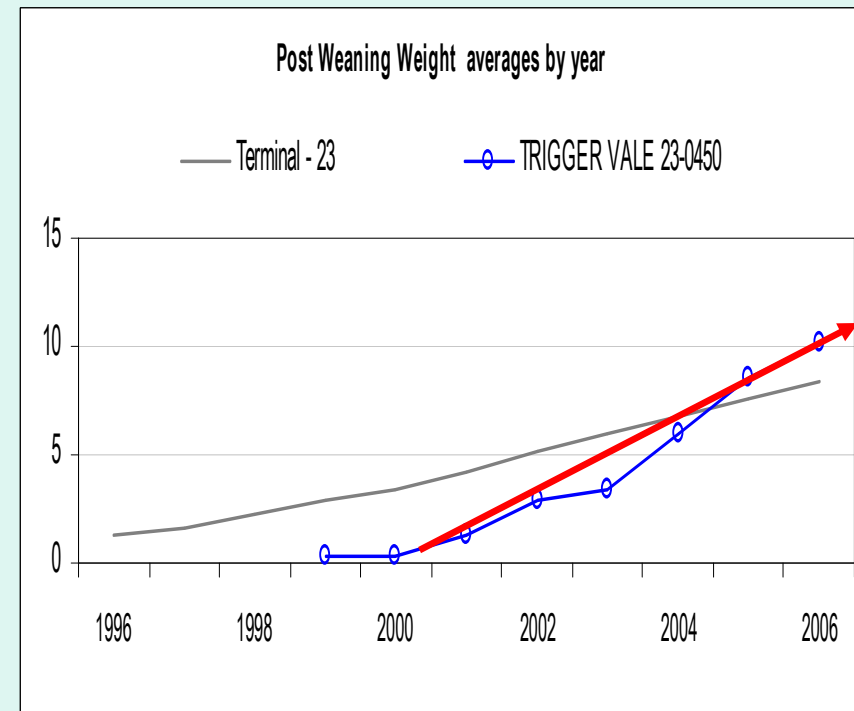
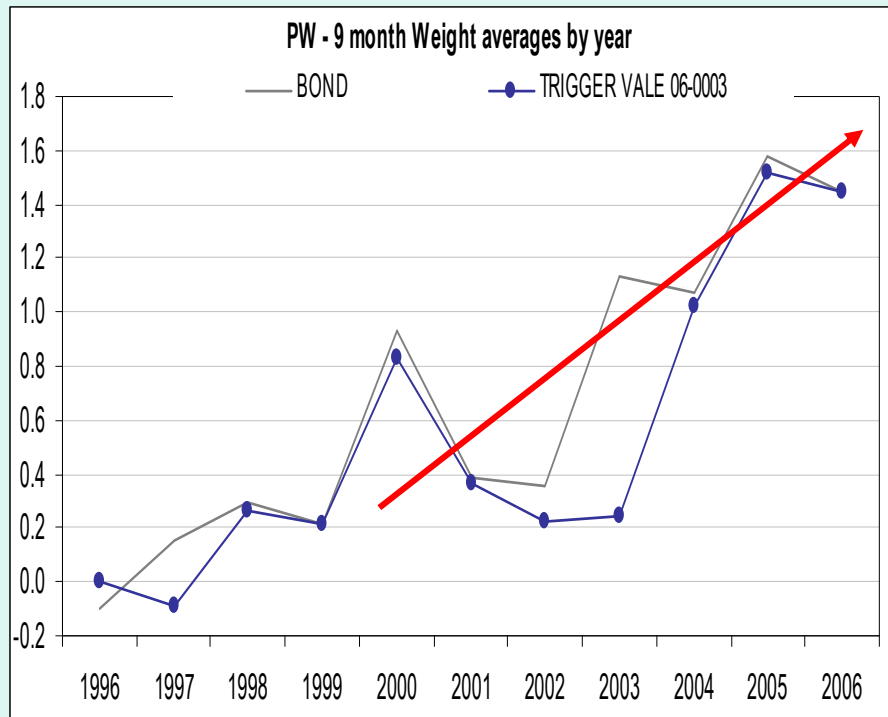
Hogget Bond Rams



Hogget White Suffolk Rams

**WELL NOT EXACTLY!!**

# I am actually in the business of selling performance tested genetics.



**Summary: Lambs 6.5 kgs heavier at 200 days**

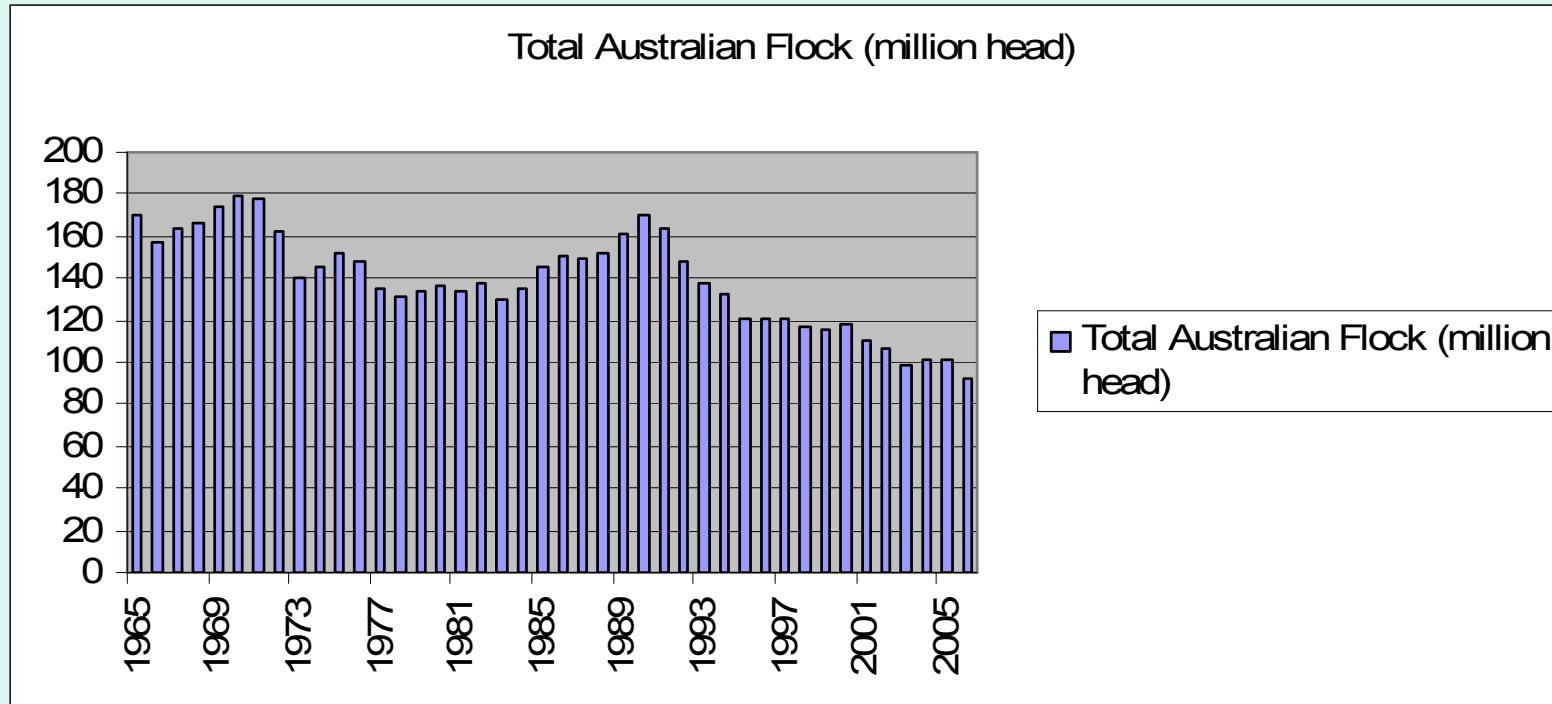
**Think of your favourite bottle of wine.**

# Why I Applied for a Nuffield Scholarship

- Concerned about a major CRISIS confronting the Australian wool and lamb industries.

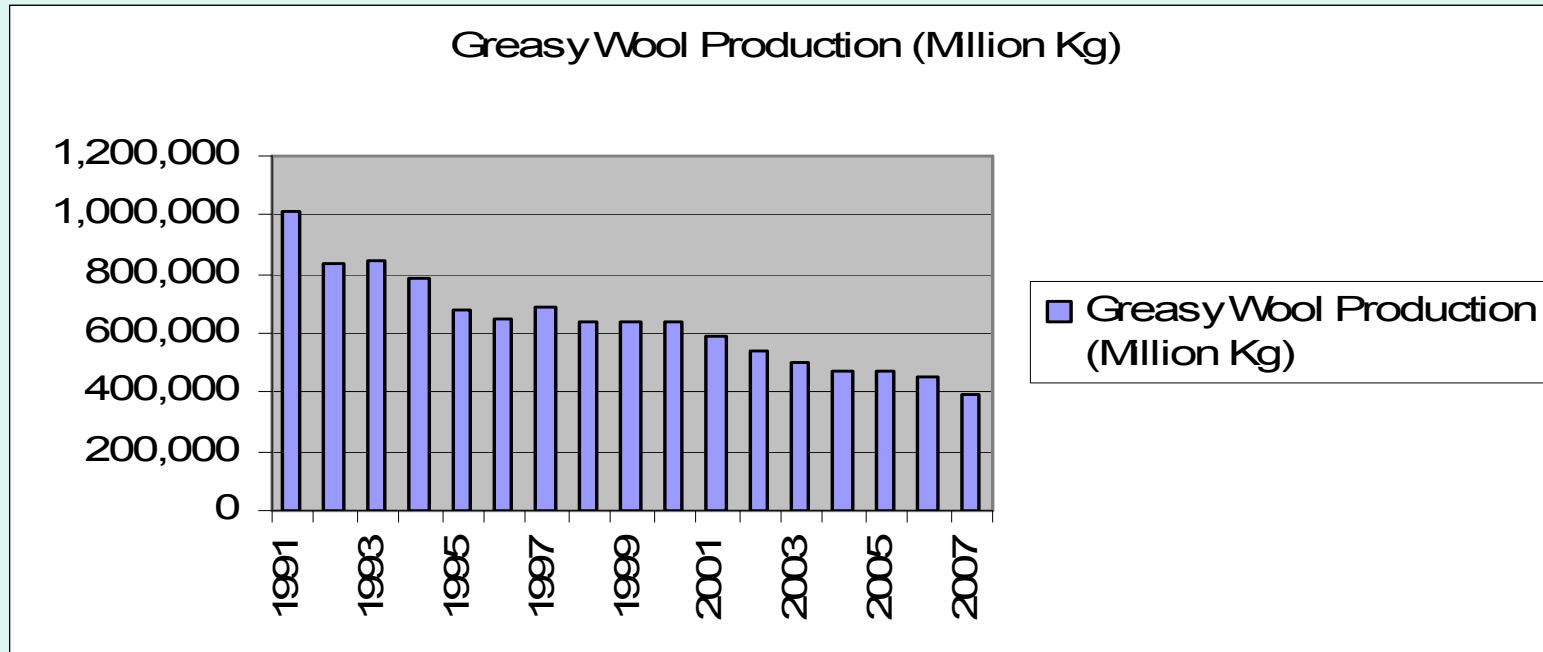
**Continuity of Supply**

# Australia's National Sheep Flock



NOTE: 2007 Merino ewe to Merino ram joining predicted to be less than 30 million.

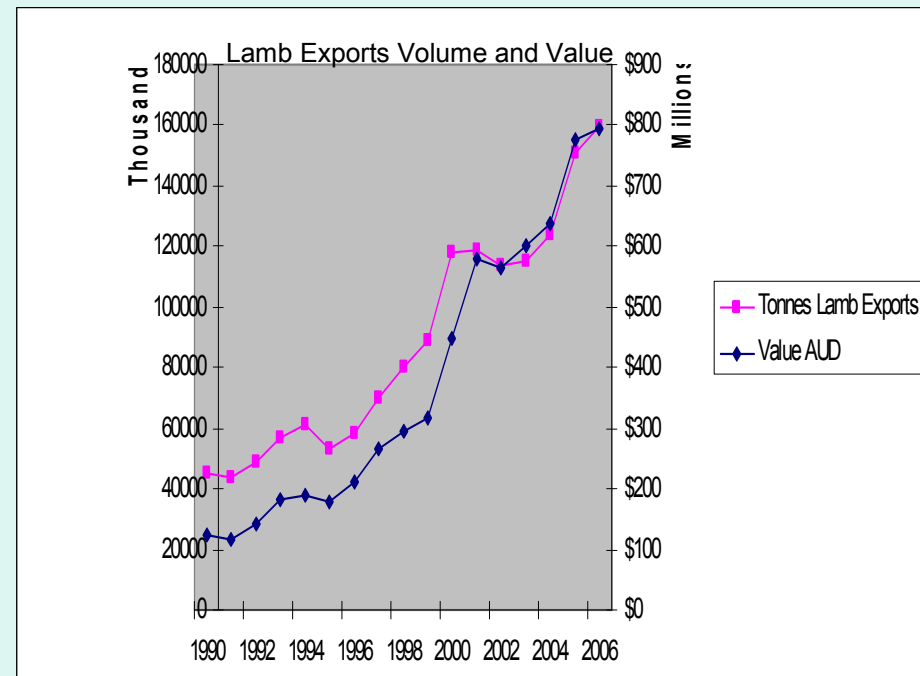
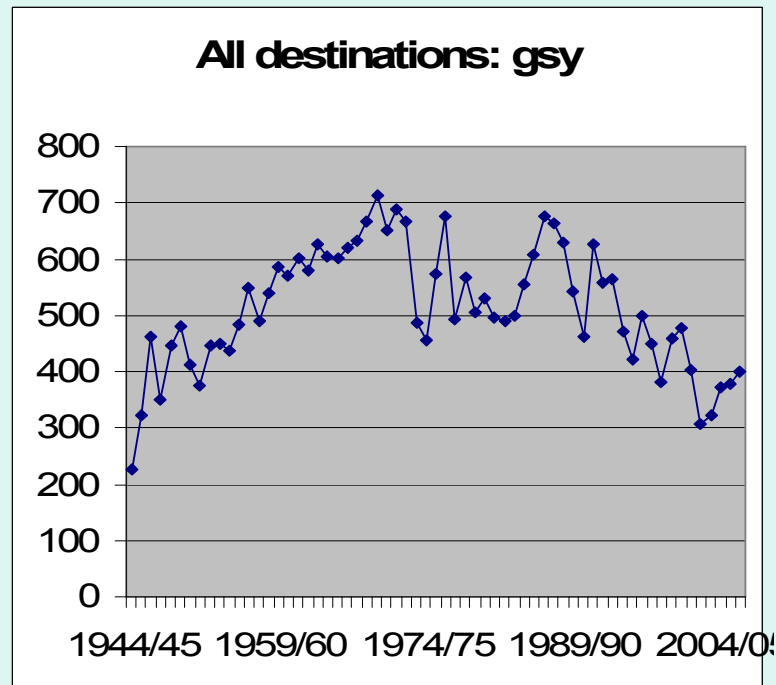
# Australian Greasy Wool Production



What is this telling us?

- Growth of lamb has been at the expense of wool
- Primarily terminal rams joined to Merino ewes
- This is not sustainable

# Export Demand for Wool vs Lamb



- Lets put the above into perspective
- Both industries are very valuable to Aus. Economy

# Future Demand

- Lamb
  - Average US consumption is 94Kg of meat per year of which only 0.3Kg is lamb
  - They consume on average more garlic than lamb
  - Asian potential is unlimited ( D Hollands AJC)
- Wool
  - Clean green renewable fibre which isn't heavily reliant on fossil fuel

- If both valuable industries are to remain viable we **MUST** make the low ewe numbers more productive as the flock re-builds



# South Africa - A Defining Moment

Day four of my Nuffield experience my study focus was set due to a conversation with the following two men.

Wynand  
du Toit



Cameron  
McMaster

# Wynand Du Toit

- 12000 Ha Dryland Mixed farm
- Lamb feedlot
- Dairy X 2
- Land Reappropriation
- Meat : Wool Ratio
- My repeated question



# Meat to Wool Income Ratio



Merino's Flocks 60:40



SAMM Flocks 80:20

- Every farmer I met new exactly where their income was derived
- Meat always greater than wool – implications
- The Australian experience?
- My commercial flock ratio 05/06 - 60:40    04/05 – 63:37

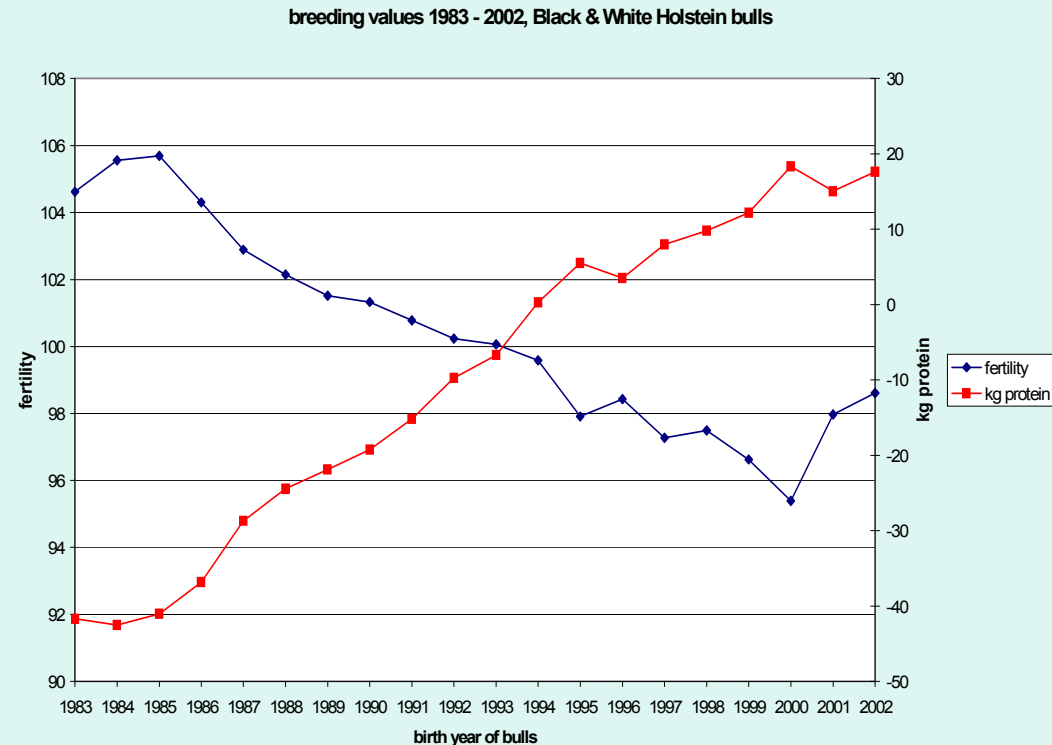
# Production Vs Fitness

- Fitness – the ability to survive, grow and reproduce in a particular environment (Oxford English Dictionary)
- Extremes of production always impacts negatively with fitness (hardiness, fertility, growth rates, longevity)
- For dual purpose sheep the villain is wool
- Wool cut per head has negative correlation with Number lambs weaned (A very good indicator of Fitness)

# Implications

- Selecting for increased wool cut/ head indirectly results in decreased fertility
- This goes a long way in explaining the Merino's generally low fertility levels
- The reverse is true for Growth rates
- Selecting for faster growing animals indirectly results in increased fertility
- This is a great outcome for breeding a dual purpose sheep.
- The concept of diminishing returns

# The Holland Genetics Dairy Experience



- Push for production lead to major fitness problems ( Correlation -0.35)
- In 1999 they placed more emphasis on Fertility
- Great outcome as improved fertility without losing production gains

# Where to from here

- Option 1. – Follow the Holland Genetics experience and maintain current wool weights but select for fitness traits
- Option 2. Do I dare to say it. Select for lower wool cut per head!!
- Further Research required
- Is wool the villain or the sign

# Implications for my breeding program

- Sire Selection
- More emphasise on meat
- Better understand the constraints of our environment



# Industry Outcomes

- Need to have the meat : wool ratio as Australian sheep industry best practice
- Hope to get portion of breeders at least to question the wisdom of current breeding programs. The times right
- Super - duals
- Good news story and incredibly exciting

# Some other Highlights



Sheep classing in Chile



Networking in Argentina



Great new friends



- New Perspective on farming

Things don't always go to plan and the best intentions in the world often go astray.





*When you are in deep trouble, say nothing,  
and try to look like you know what you're  
doing.*

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Thank you once again to AWI  
and Nuffield Australia for this  
wonderful opportunity

