



“Efficiency gains from better genetic selection”

Rozzie O'Reilly



# Who is LAMBPRO?

- Prime lamb seedstock business, based at Holbrook, southern NSW.
- 362 clients spread from northern NSW, Vic, S.A. & Tas
  - produce approx. 1.2million lambs in industry throughout 2022
- Our philosophy:

“Maximum kilograms per hectare,  
maximum dollars per kilogram”







# How do we achieve our philosophy?

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## **Data is core to the business**

- Performance recording for over three decades
  - All data is submitted to LAMBPLAN to generate ASBVs
- In 2022:
  - Joined 10,600 performance recorded ewes
  - Will tag approx. 14,000 lambs at birth
  - Market approx. 4,000 ram lambs, all with ASBVs





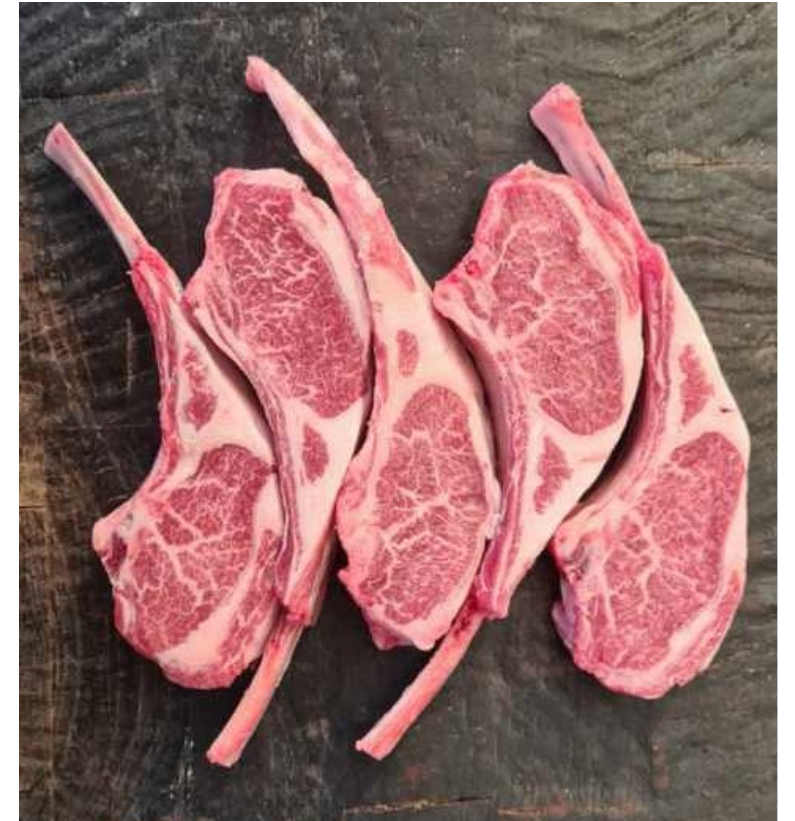
## Breeding Objective:

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“High performing trade lambs with muscle & consistency, that will marble off grain at export weights”







# How do we achieve genetic gain?

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# On-Farm Joinings

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- Conduct Matesel joinings
  - Computer generated breeding program
  - Optimise genetic gain, whilst controlling inbreeding level





# Genomic Testing

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- What is it?
  - Tissue sample taken to profile an animals DNA sequence
    - Different sequences correspond to certain traits
  - Identifies sequences for desired, hard to measure traits
    - Fertility, meat quality etc
- Ram lambs of good type, that are in the top 20% for breed index, are genotyped at lamb marking
  - 100% of Hampshire Down ram lambs are genotyped



# Progeny Testing

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- Test all breeds across the seedstock business
- Collect all the normal on-farm data:
  - Preg Scanning
  - BW, BT & RT
  - WWT
  - PWWT, as well as PEMD & PFAT through ultra-sound scanning
- Abattoir:
  - CWT, pH etc
  - Track individual carcasses along the chain to collect loins out of each carcase





# Progeny Testing Continued...

- Loins are taken to the labs at UNE
- Determine:
  - Chemical IMF%
  - Shear force (tenderness)
- All of this data is submitted into LAMBPLAN, increasing the accuracy of ASBV's for these hard to measure traits.



What are the  
efficiency  
gains from  
better genetic  
selection?

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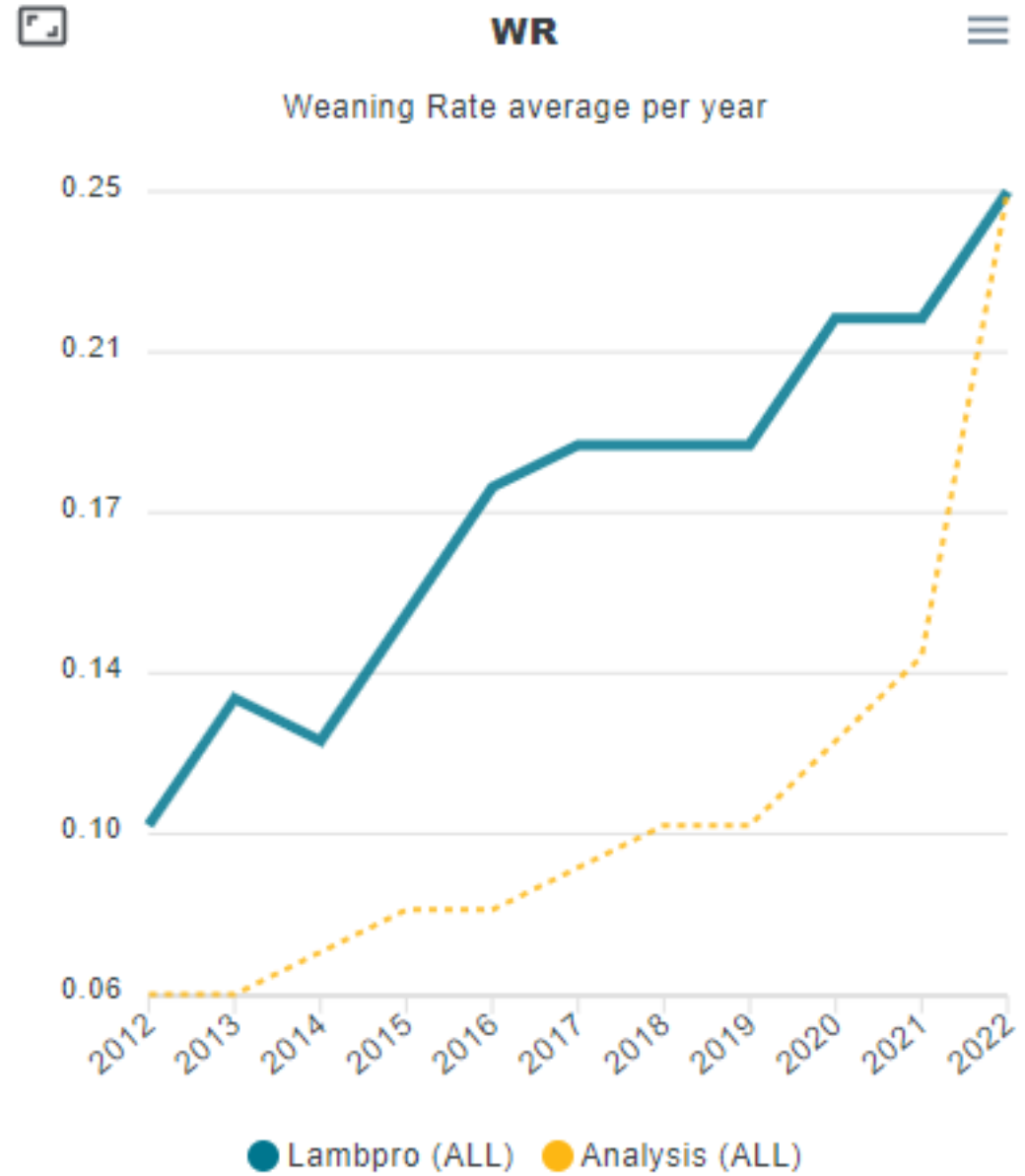




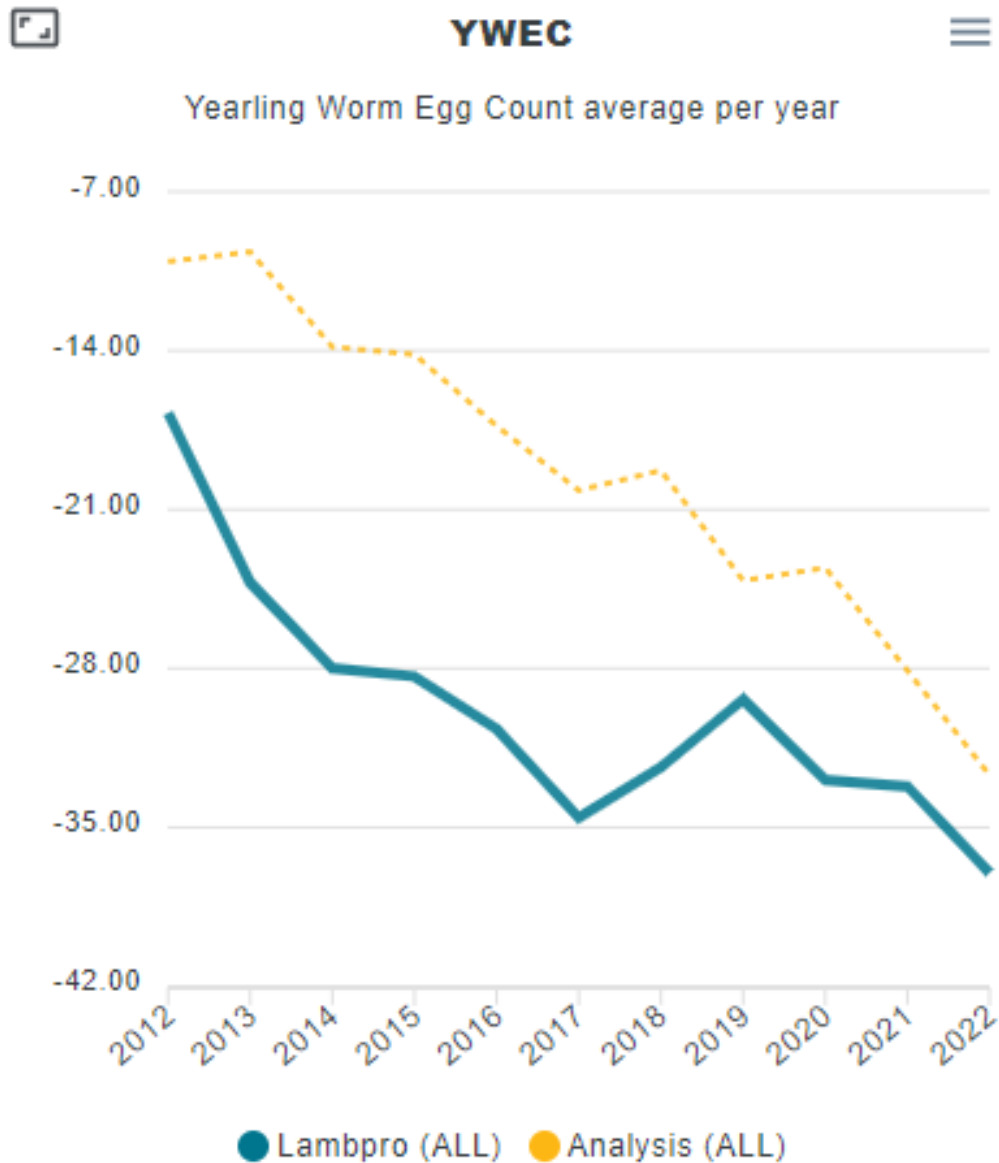
sheep GENETICS



# More Lambs



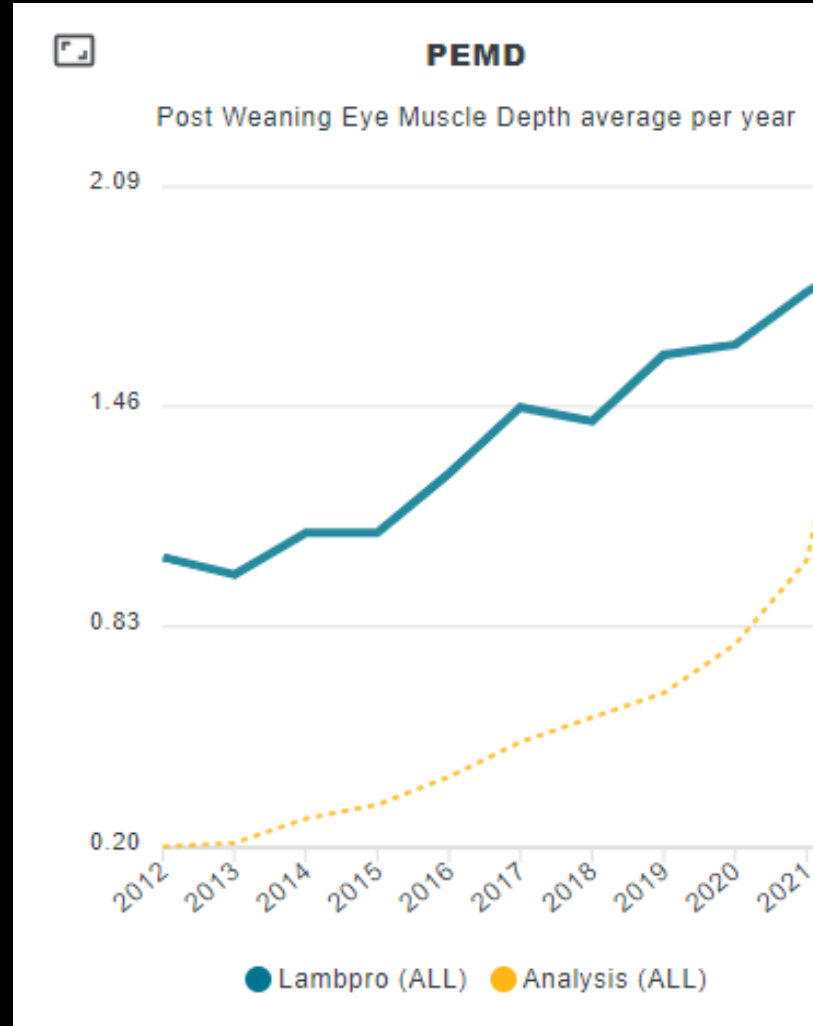
RED MEAT UPDATES  
TASMANIA



# Less Drenching



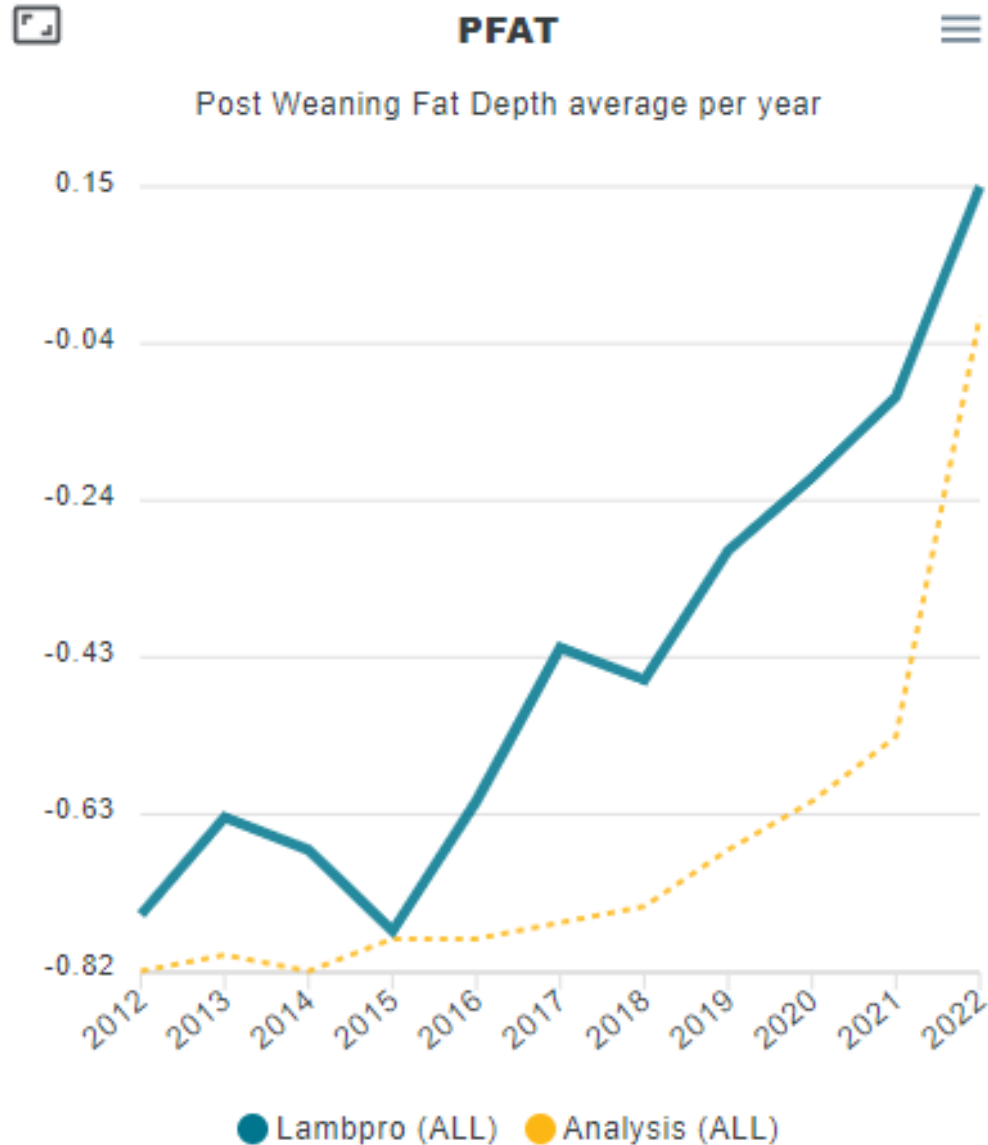
# Quicker Turn Off's



 **sheep GENETICS**

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 **RED MEAT UPDATES**  
TASMANIA



More fat reserves  
for dry times; feed  
less & run more  
ewes/ha



 Sheep GENETICS

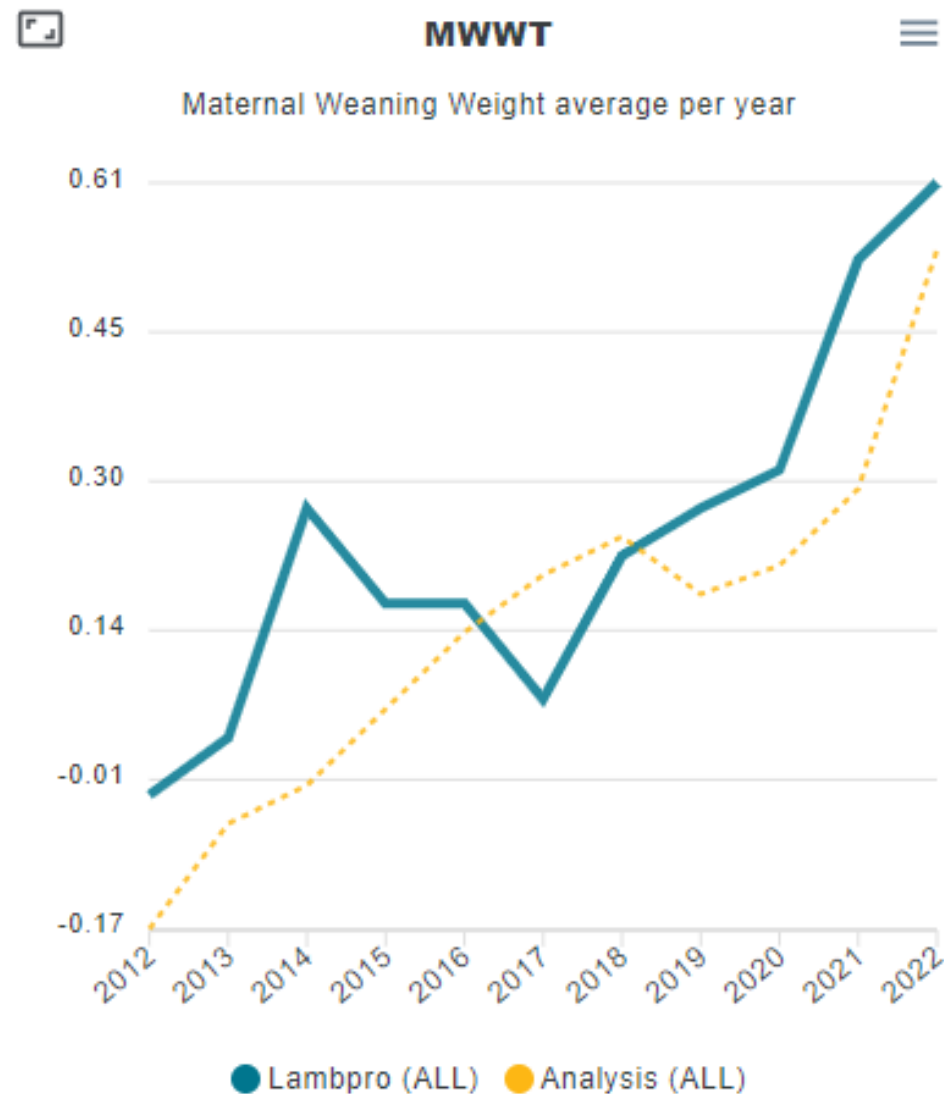
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More Milk



# These genetic gains increase labour efficiency

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- Growth & milk reducing turn off time, massively reducing labour
- Reducing turn off time, reduces drenching, feeding and other husbandry tasks
- Higher benchmarking clients are running 1 labour unit per 5000-6000 ewes





# Marketing gains from better genetic selection

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LAMBPRO is in the transition of becoming an end-to-end supply chain business & clients are maximising \$/kg through the marketing of brands





# Marketing of Primeline Maternal Ewes

- 2021/2022 LAMBPRO Clients marketed 45,000 ewes
- Premium of \$77/hd across all AuctionsPlus ewe lamb sales on the mainland





# High value branded export lamb markets, based around marbling and primal weights

- Beef's journey
  - Not value based marketing
  - Based on genetics and fine-tuning feeding regimes
- Partnership between LAMBPRO & meat trading company
  - Two lamb marketing brands for LAMBPRO clients:
    - Kinross Station Lamb
    - Willow Bend Lamb
- Currently 8% of LAMBPRO sired lambs are being marketed through these channels
- First 12 months of processing
  - Avg premium over the indicator price was \$43 for the first financial quarter
  - This quarter is looking like \$60/lamb



# Kinross Station Hampshire Down Lamb

- Hampshire Down Genetics
- Long-fed lambs with unrivalled marbling
- Food Service
- Domestic <10%
- Exporting >90% to China, Malaysia, Singapore, Dubai & Maldives





# Willow Bend Lamb

- Primeline, Tradie & Dorset genetics
- Sold 100% to the US
- Grain assist finishing, imitating American lamb



# Top three take home messages

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1. Know your data, and utilise it to capture genetic gain
  - 50% of future productivity gains come from genetics
2. Labour efficiency is key to profitability
3. Utilise brands to extrapolate \$ value, avoid producing commodity products





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