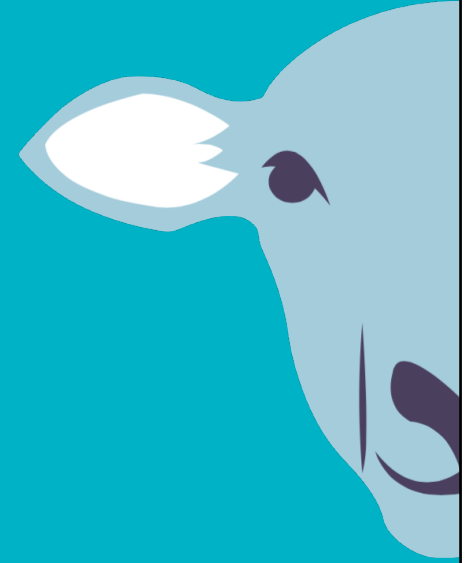




B+LNZ GENETICS
SHEEP BREEDER FORUM

2016



Perendale NZ and Next Generation Progeny Test

Mike McElrea

Maternal Hill Next Generation Progeny Test

Partners

- BLNZ Genetics
- Smedley Station
- Perendale NZ

Perendale Background

- Perendale NZ PT trial with AgResearch
- 2010 one SI site
- 2011-2016 NI and SI
- Run on hill country
- Aim to improve meat traits
- Get some facts about meat quality

Perendale background

- Facial eczema
 - Needed attention in breed
 - More stock measured for FE tolerance (Ramguard)
 - AgResearch advised need 1500 animals to make headway

Perendale background

- Facial eczema
 - Needed attention in breed
 - More stock measured for FE tolerance (Ramguard)
 - AgResearch advised need 1500 animals to make headway
 - 5 progeny per sire
 - Society paid for PT animals, breeders paid for own
 - Breeders could add animals to be tested
 - All FE tests at PT site(s)

Perendale NZ - PT design

- Natural mating, synchronised ewes (teasers)
- Mated in April
 - NI rams used before, SI rams used after PT
 - Link rams NI and SI and years
- Crypt male progeny measured at slaughter
- One kill, 4-6 weeks after weaning
- Recorded
 - NLB
 - WWT
 - EMA (males only)
 - PRESLWT
 - Viascan data – Alliance (Meat Yield, pH, Yellow Fat, Meat Colour etc)
 - FE (ewe lambs)







Perendale ram selection for PT

- To date 95 rams tested
- Rams were chosen on
 - Top 20% of Across Flock
 - Meat focus
 - Representative of the breed structurally
- Chosen by Perendale NZ with input from across flock manager Julia Aspinal Genetic Gains

What have we learned?

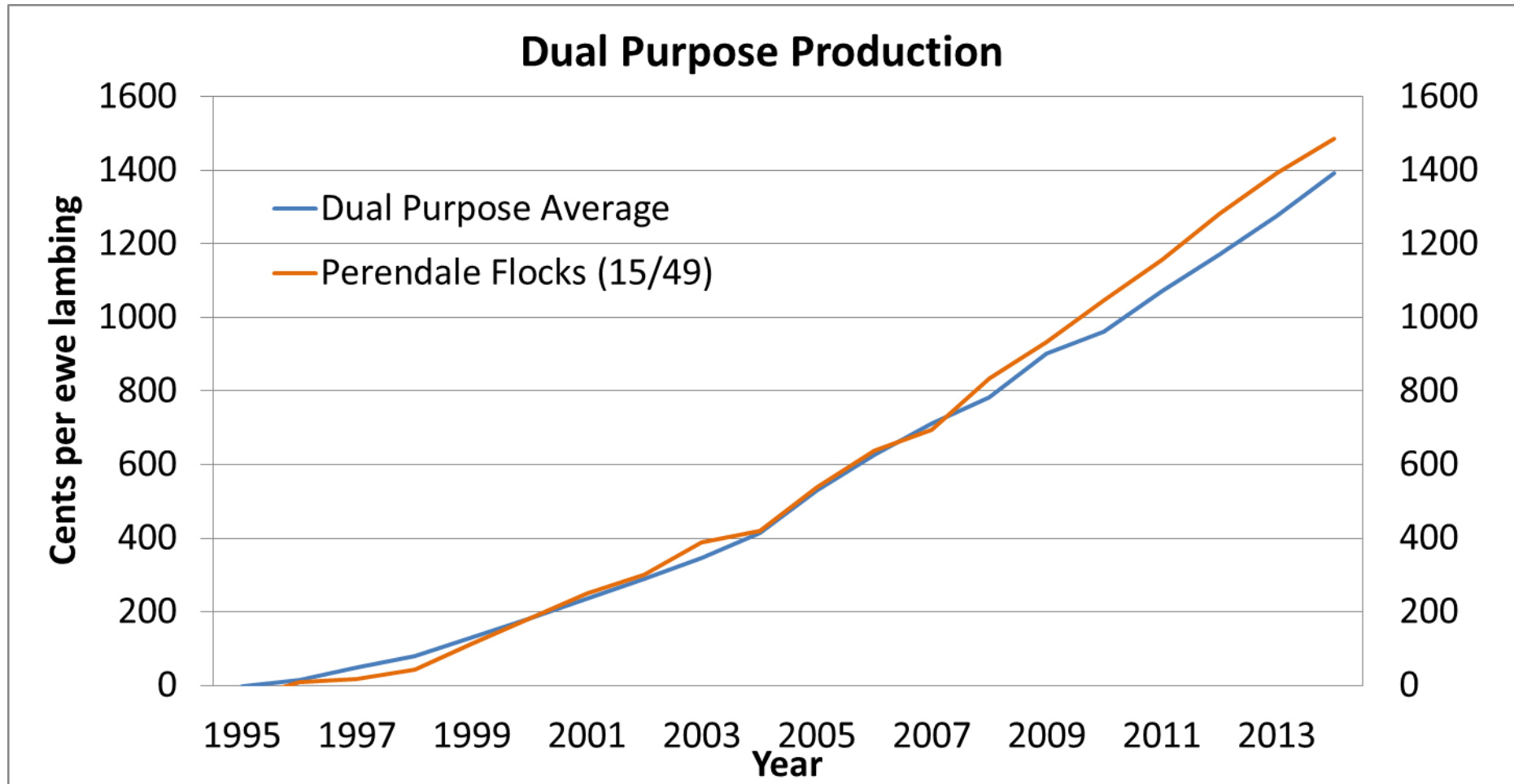
- High growth lambs not necessarily high meat yield lambs
- Meat Yield up to 62%
- No super rams, many individual trait leaders
- Goal to have 1500 FE measurement on track
- Result of trial has massively improved our across flock linkages

Linkages

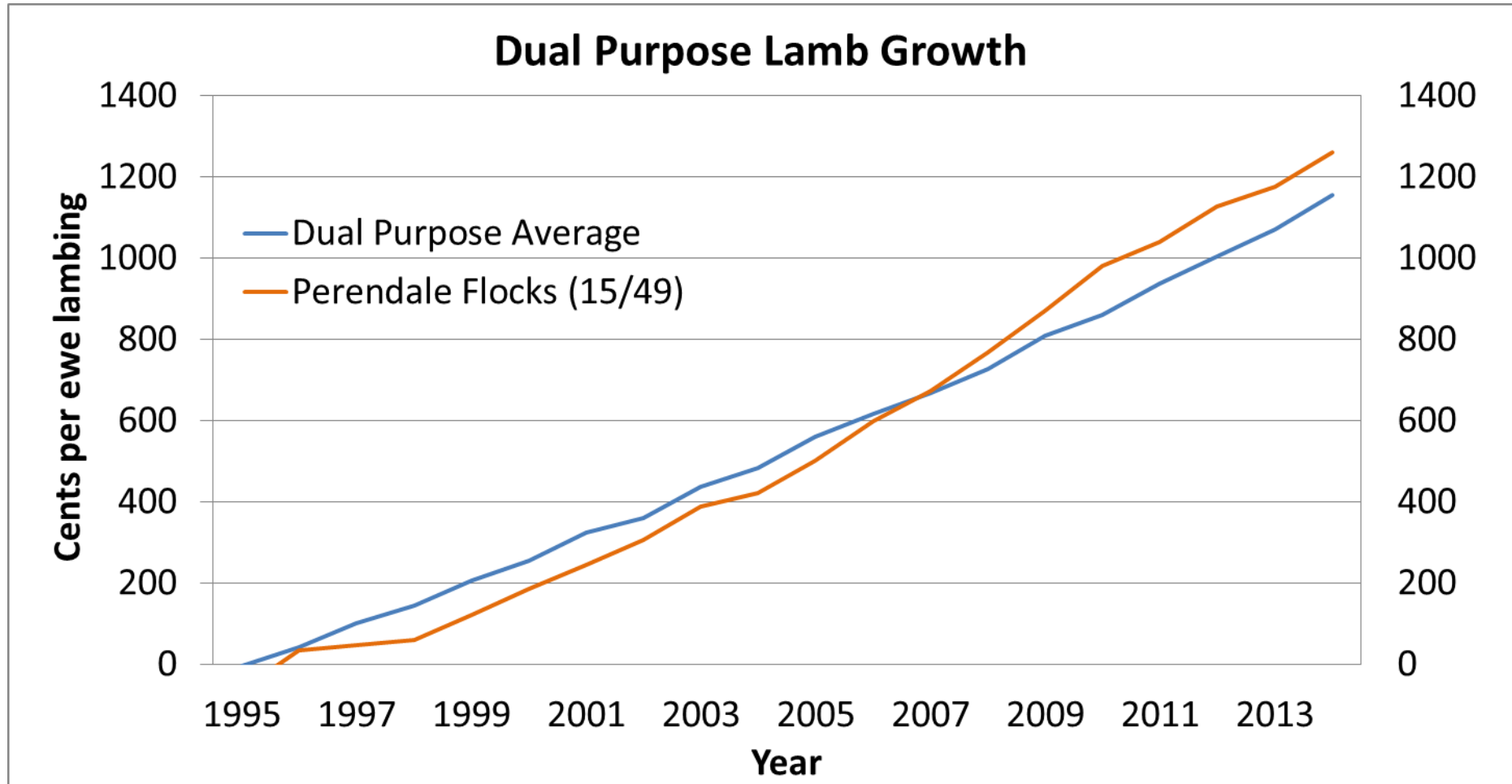
- Well linked across flock group
- Data collected in the same way for PT traits
- Rams submitted to CPT were used in our PT the year before
- Improved connection to SIL-ACE

***25000 genetically linked ewes farmed
by 50 passionate Perendale breeders***

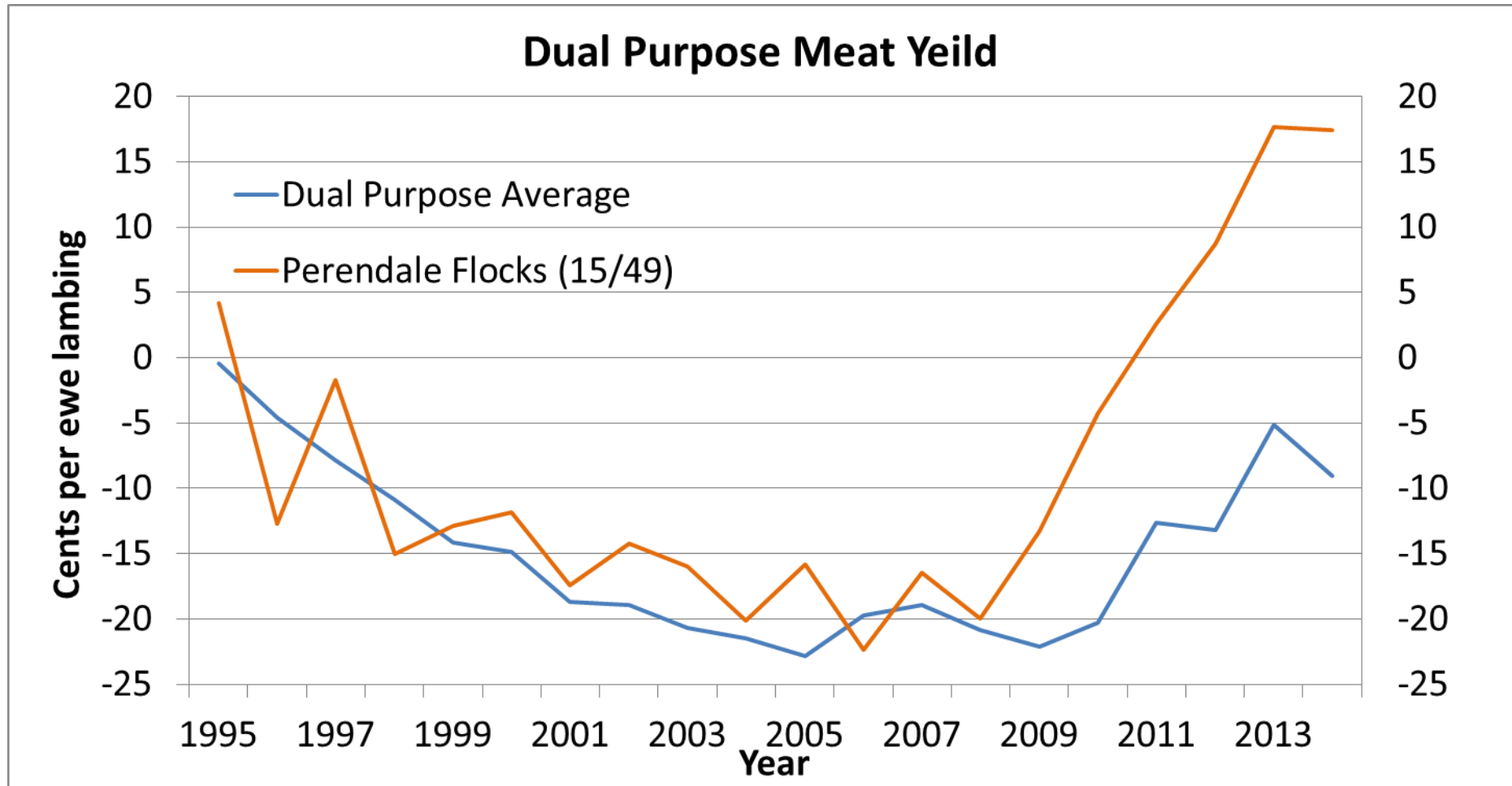
SIL-ACE GT graphs



SIL-ACE GT graphs



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Opportunities for the future

- Continually raise profile of breed and genetic improvement
- Partner with B+LNZ Genetics science expertise
- Smedley provide stock and labour
- Trainees gain experience with Perendales, genetics and performance recording technology
- Trial run similar to ours
- Simple, low cost, one kill, natural mating, accurate data collection

Using young rams

- We chose to use ram hoggets for NG site
 - Less impact on own use as stud rams
 - Unproven rams means any breeder can qualify
 - To continue linkages one of each farm's submitted ram hoggets will be used as a 2-tooth on the home farm in the following year
 - Easier to commit ram lambs than adult rams

Next Generation and our PT

- Semen from 2 rams used in CPT trial this year
- Used in SI and NI site as well as Smedley NG site
- Last year of Perendale NZ trial
- Maternal focus + Meat Traits



THANK YOU