

meatup

FORUM

For the latest in red meat R&D

Using processor carcass feedback for better on-farm decisions

Elke Hocking, Elke Hocking Consulting

ALMTech



DATA – INFORMATION - DECISIONS

DATA (Feedback)

- What data is available from where?

INFORMATION (Feedback analysis)

- What information can we extract from it?

DECISIONS (On-farm)

- What decisions can be made on-farm to improve compliance, efficiency and profit?



Australian Government
Department of Agriculture

ALMTEch

Advanced Livestock Measurement Technologies project



FRONTMATEC





1/2 hour researching recipes + 1
hour cooking + 5 seconds
for kids to

She should have cooked
Lamb!



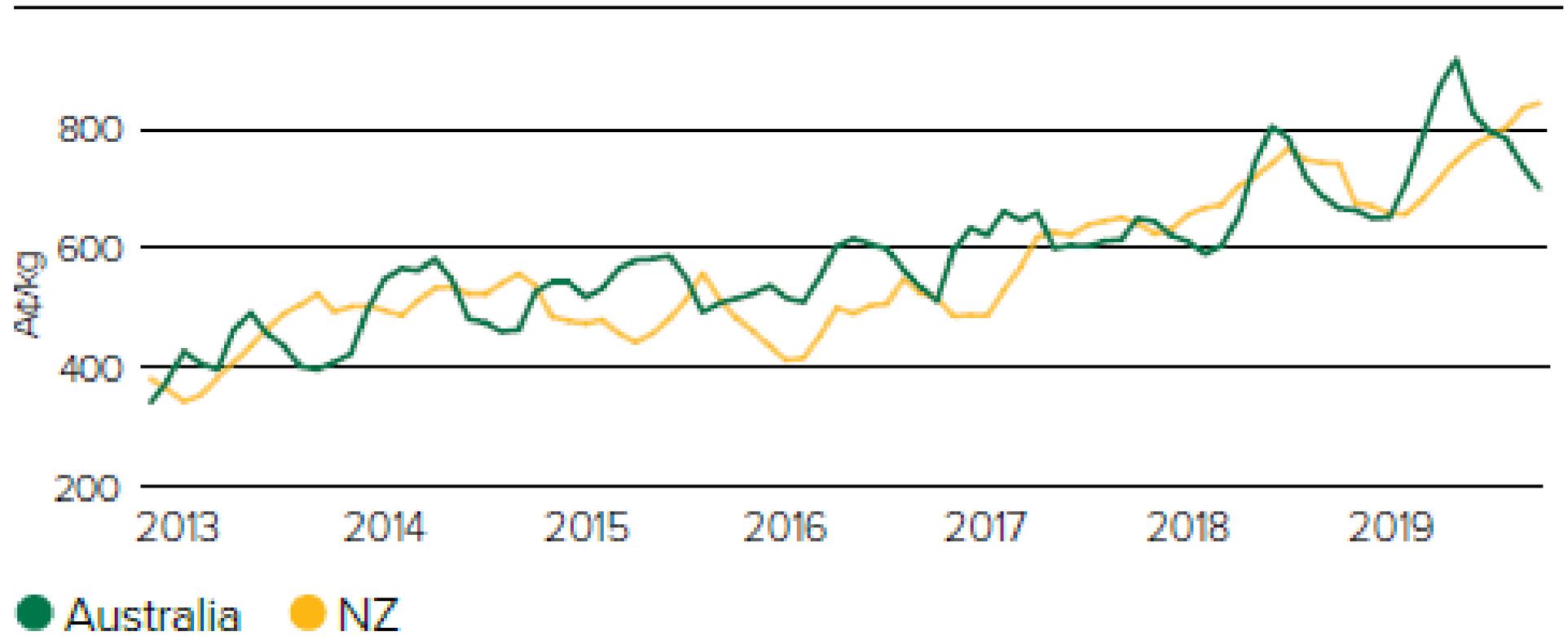
som^{ee}cards
user card



SA Lamb 2002 (\$3.00/kg cwt)



Australian and NZ lamb prices



Source: MLA, Agri HQ

Grid not an accurate reflection of the customer

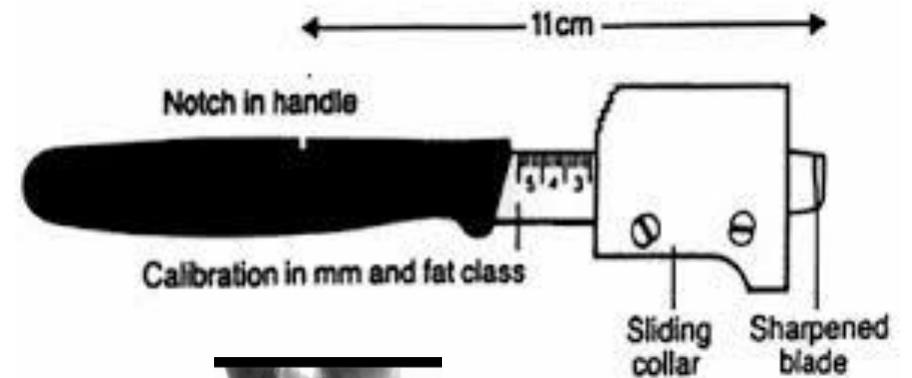
Only 10% will hit 'sweet spot'

Grade	Fat Scr	Teeth	Price										
New Season Lambs			8.0-	8.0+	12.0+	16.0+	18.0+	20.0+	22.0+	24.0+	26.0+	30.0+	32.0+
N1	1	Milk	0.30	1.50	1.90	4.30	4.70	4.70	4.70	4.70	4.70	4.70	4.20
N2	2	Milk	0.30	1.80	2.20	4.60	5.00	5.00	5.00	5.00	5.00	5.00	4.50
N3/N4	3-4	Milk	0.30	1.80	2.20	4.60	5.00	5.00	5.00	5.00	5.00	5.00	4.50
N5	5	Milk	0.30	1.80	2.20	4.60	5.00	5.00	5.00	5.00	5.00	5.00	4.50

Lack of accurate measurements of carcass fat

Fat scoring in plant

- Mostly by 'palpation', similar to live fat scoring
- Can be with a GR knife (more accurate)
- New technologies – DEXA



Future Carcass Value

Carcass value (\$) =  Carcass Wt \times  Lean Meat Yield \times  Eating Quality

Need to be able measure these!

THE VIEWS

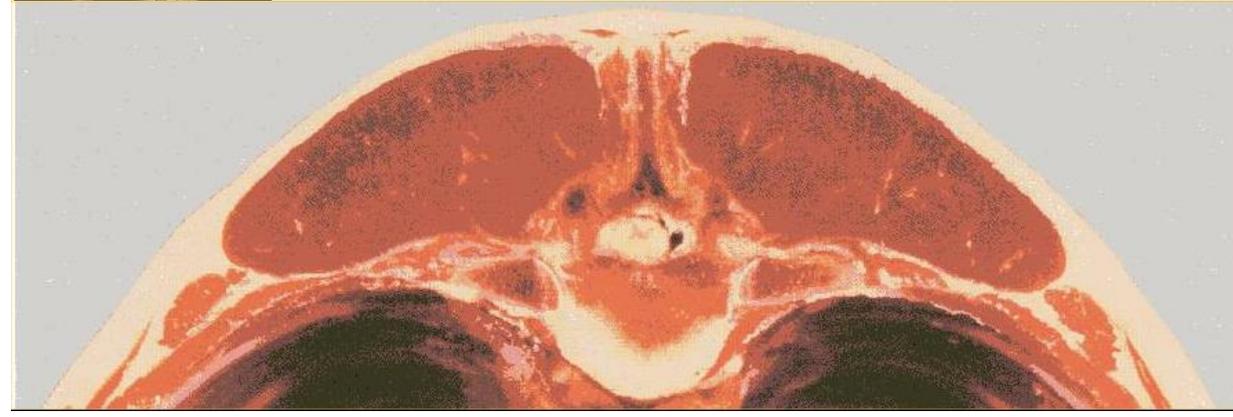
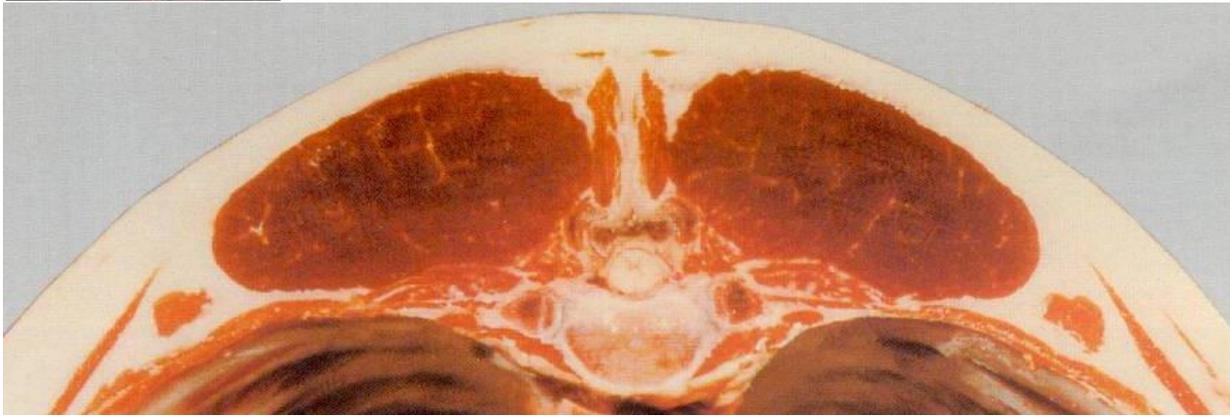
Why is lean meat yield important?

Score 4

Carcase Wt. 23.0 kg
GR 20.0 mm

Score 2

Carcase Wt. 23.6 kg
GR 10.0 mm



Score 4

Fat: 6.87kg (30% fat)

Saleable Meat: 10.34kg
(46% LMY)

Retail Value: \$207

Score 2

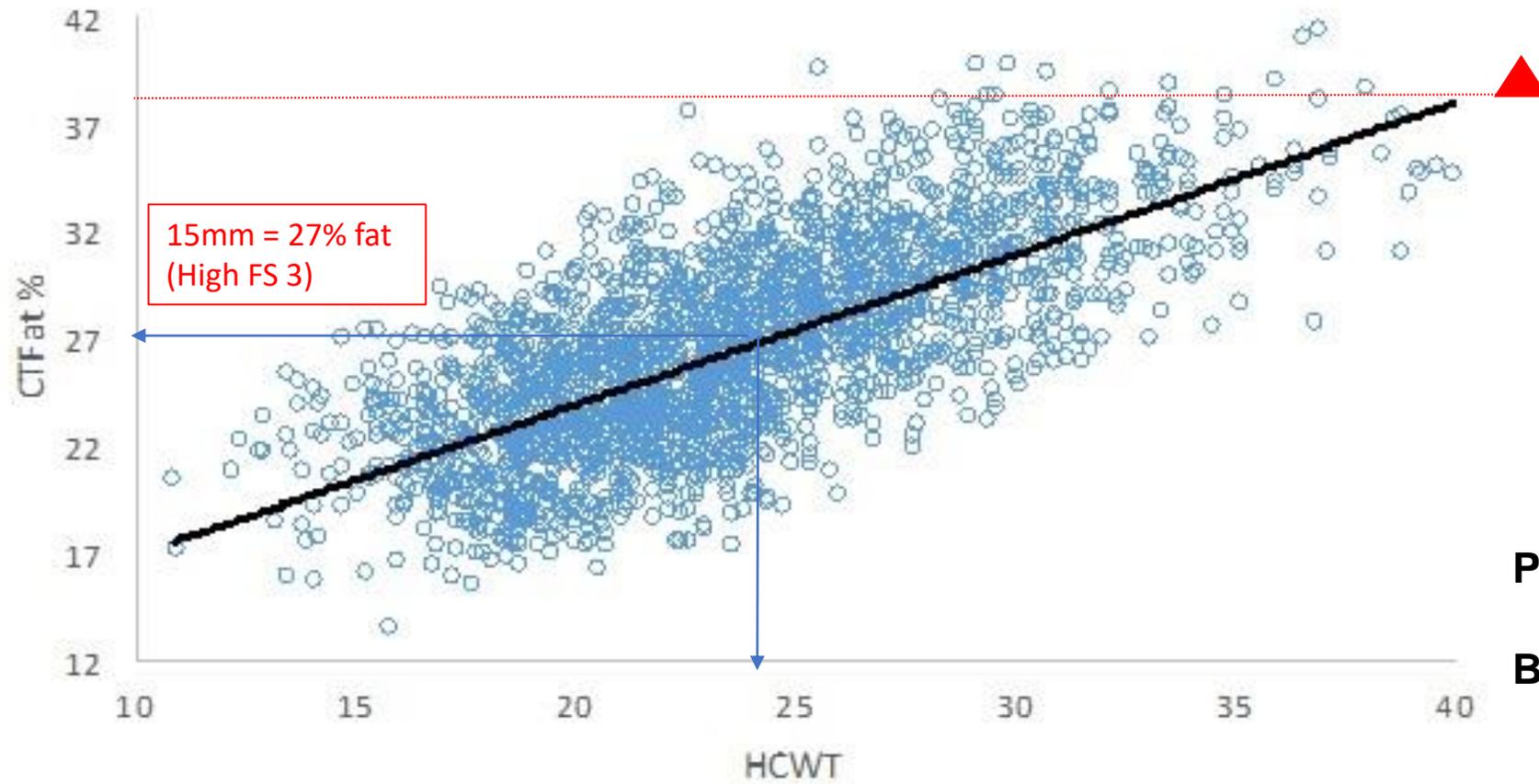
Fat: 4.68kg (20% fat)

Saleable Meat: 13.08kg
(56% LMY)

Retail Value: \$262



There's a lot of fat in a heavy 'fat lamb' = Inefficient



Processors prefer 20-27% (FS 3)

Bone-out time compared to 23kg FS3

- FS5 = +20%

- 30 Kg FS5 = +40%

Feed Conversion Efficiency (FCE)

- Fatter animals = lower FCE
- Takes more feed to put on fat than muscle

Fatter animals

= low

=

rec

4x more feed to put on 1kg fat compared to 1kg muscle

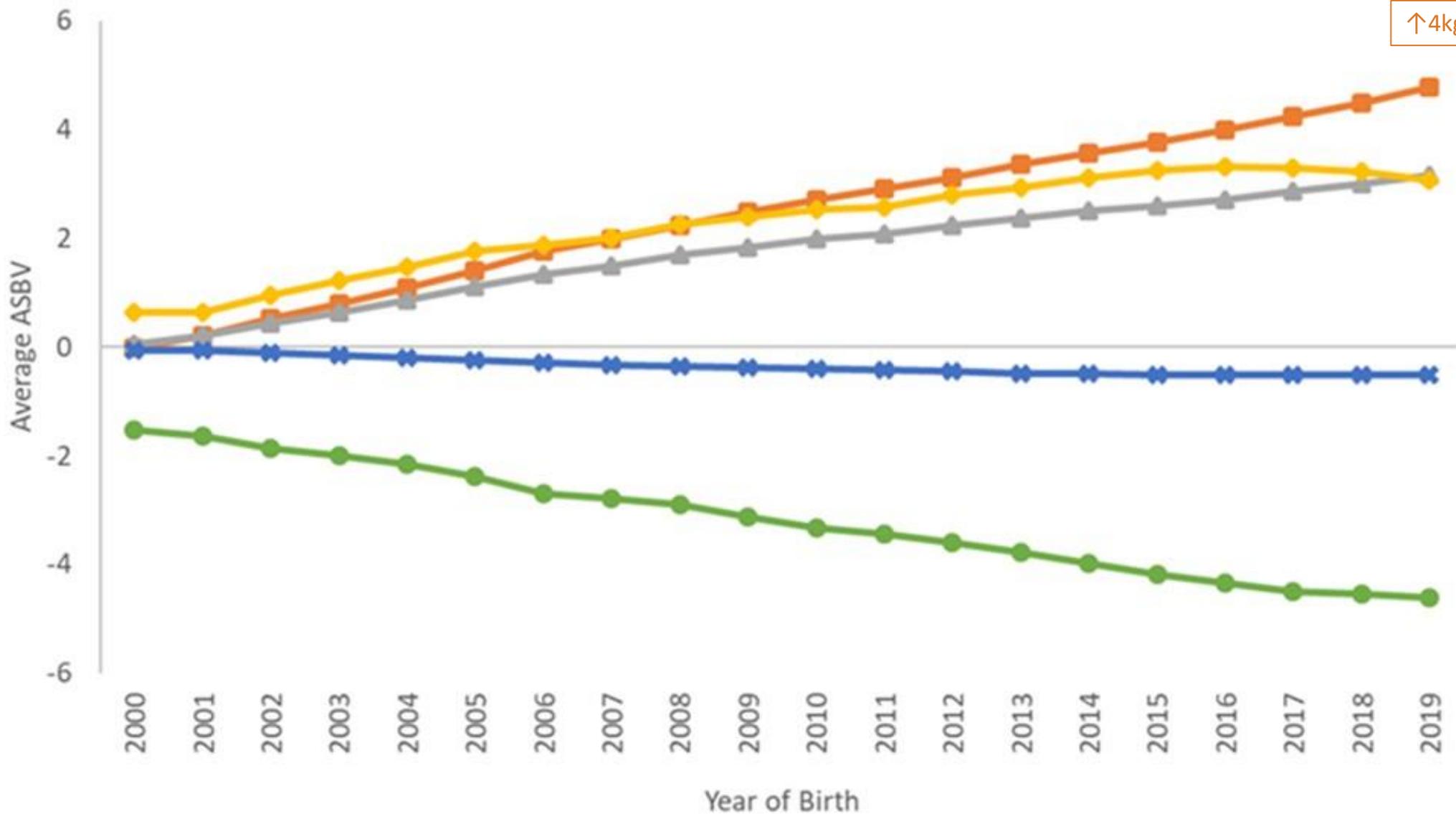


Objective carcass measurement of LMY



LAMBPLAN Genetic Trends (July 2020)

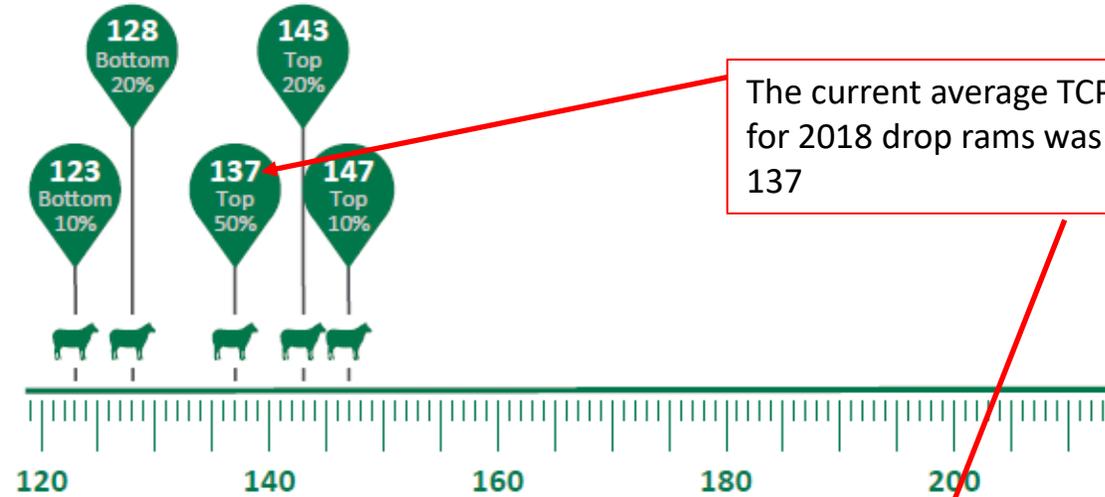
CWT LMY% ShearForce5 IMF% Overall Liking



TCP vs Carcase Plus Index

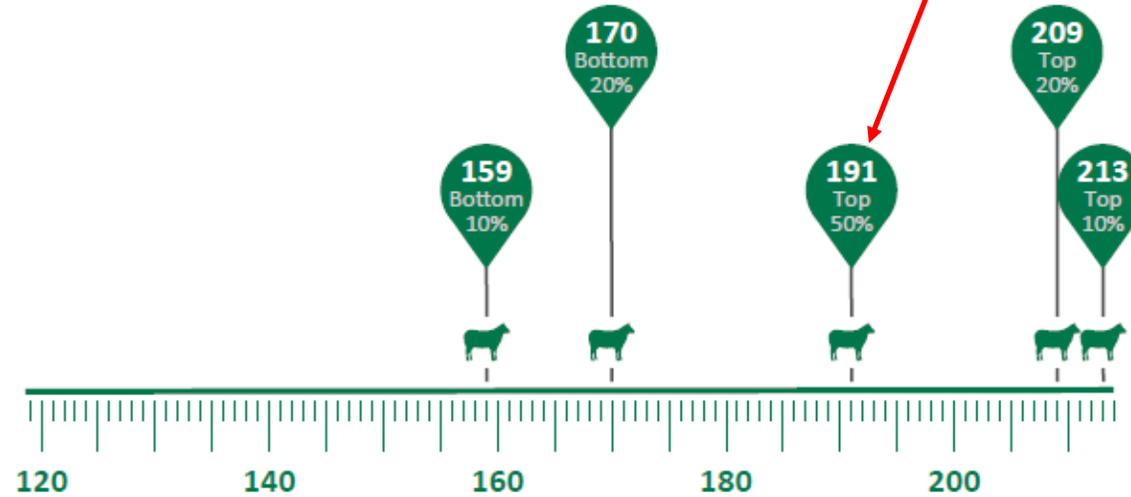
Terminal Carcase Production

Replacement for Carcase Plus



Carcase Plus

Discontinued March 2020



Objective carcass measurement of Eating Quality (EQ)

EQ = tenderness + juiciness + flavour

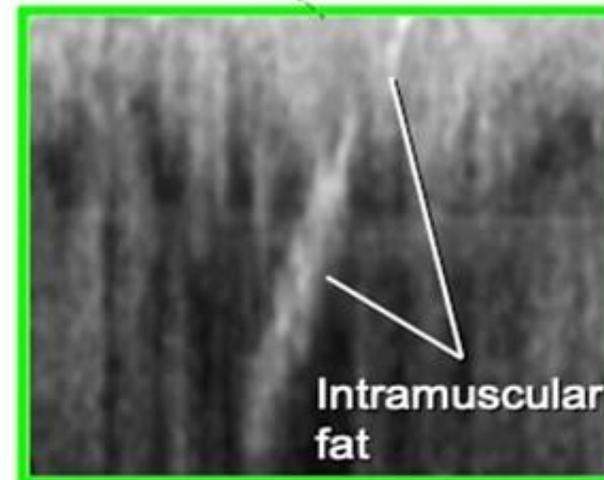
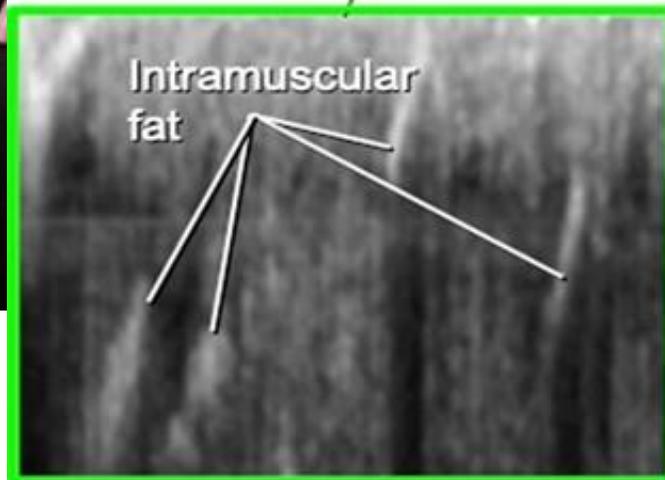
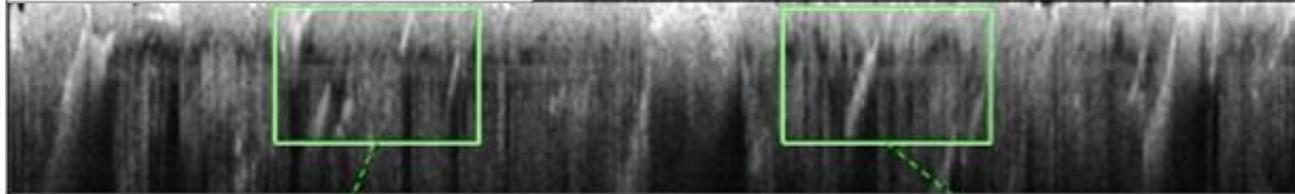
EQ = higher IMF%



LAMB

4.2% = current IMF%

> 5% = premium EQ



What might future grids look like?

Will include weight.

Will include LMY

Will include EQ index

Possibly compliance bonus

		Weight (kgs)											
LMY	FS	0-10	12-16	16-18	18-19	20-22	22-24	24-26	26-28	28-30	30-32	32+	
54-56	5												
56-57	4												
57-58	3												
58-60	2												
60+	1												
		MSA Join Index = 72											

The market sweet spot

(18 – 26kg FS 2,3)

4* or above loin (0% failure rate !)



Meat The Market

Lamb compliance workshop



Developed in association with Sheep CRC, MLA, JBS and GMP

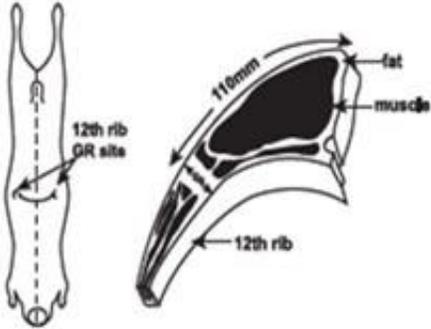
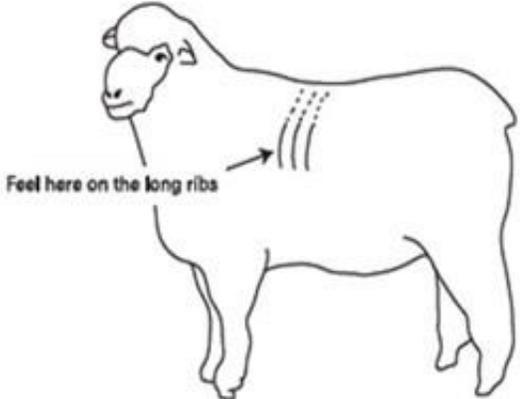
Key Learning Outcomes: assist producers improve compliance for carcass weight and LMY, whilst maintaining or improving meat eating quality.

- Mix of theory, on-line & hands-on learning (processing plant and on-farm)
- Delivered through supply/value chains with OCM systems
 - Piloted to 2 **JBS** groups in Bordertown SA (Feb 2019 – July 2019)
 - 1 group **Gundagai Meat Processors** (July 2019 – 2020)

Processor relationships



Skill development: live animal assessment



Methods to analyse feedback – Livestock Data Link



Solutions to non-compliance: Genetics, nutrition, management, animal health



Tools to assess carcasse feedback - Livestock Data Link

LIVESTOCK DATA LINK



Workshop

Farm Assurance

31/12/2010

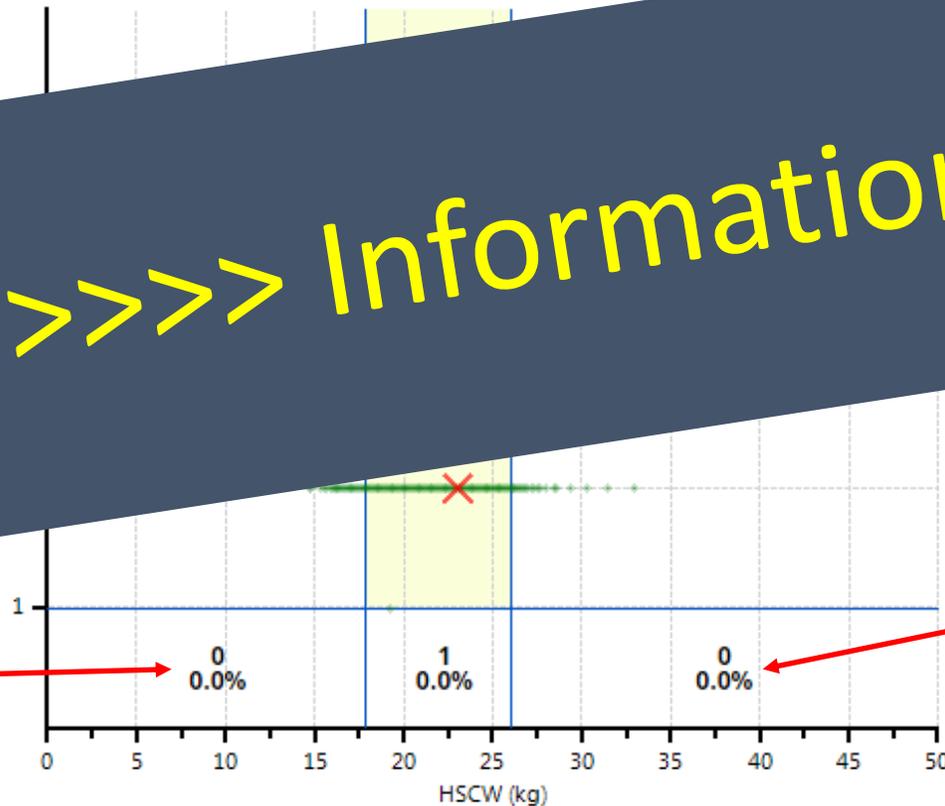
17/04/2019

HSCW (kg)

Discount

Carcasse Analysis Report

Grid compliance to HSCW (kg) and Fat



Data >>>> Information >>>> Decisions

Too Light and too lean

Too Heavy

Too Heavy and too lean

How can I improve – Solutions to Feedback Library?

Home > Cattle > **Meat Standards Australia Grading**

AGE/DENTITION
BRUISING
CHILLER ASSESSMENT
DISEASE & DEFECT CONDITIONS
LEAN MEAT YIELD
MEAT STANDARDS AUSTRALIA GRADING
■ MARBLING
■ MSA INDEX
■ MUSCLE PH
■ OSSIFICATION
FAT - RIB FAT THICKNESS AND DISTRIBUTION
RESOURCES
WEIGHT AND FAT

Meat Standards Australia Grading

Click on the following links to access information on how to improve carcass compliance with Meat Standards Australia (MSA) grading:

- [Muscle pH](#)
- [Ossification](#)
- [Marbling](#)
- [Fat - rib fat thickness and distribution](#)
- [MSA Index](#)

[WEIGHT AND FAT](#)

[AGE/DENTITION](#)

[LEAN MEAT YIELD](#)

[DISEASE & DEFECT CONDITIONS](#)

[RESOURCES](#)



myMSA

Resources

BeefSpecs - A tool to assist meeting market specs

BeefSpecs calculator

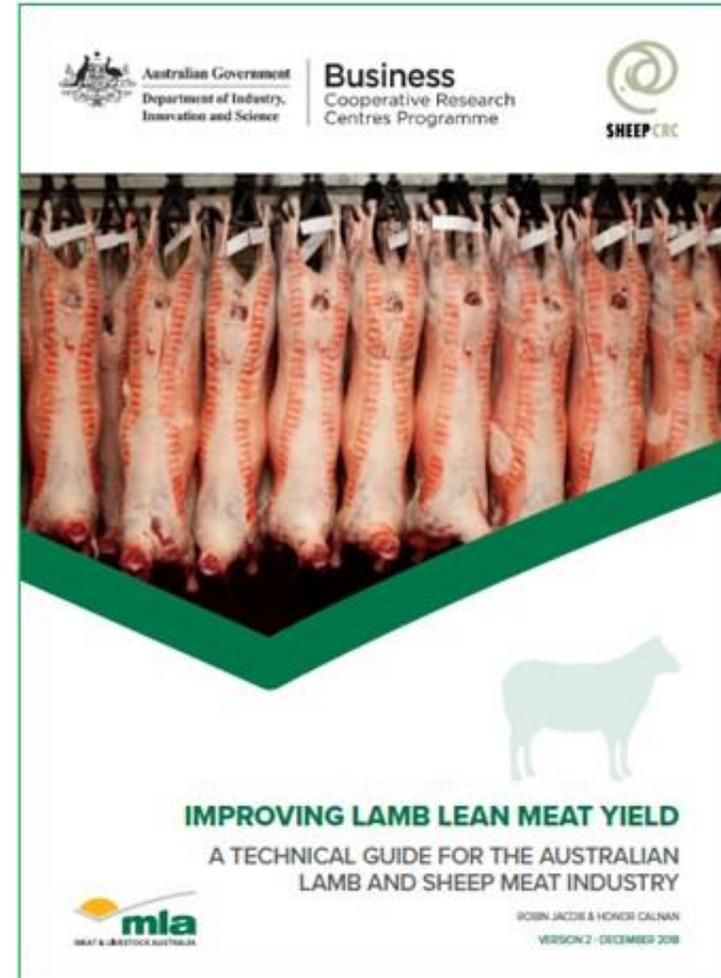
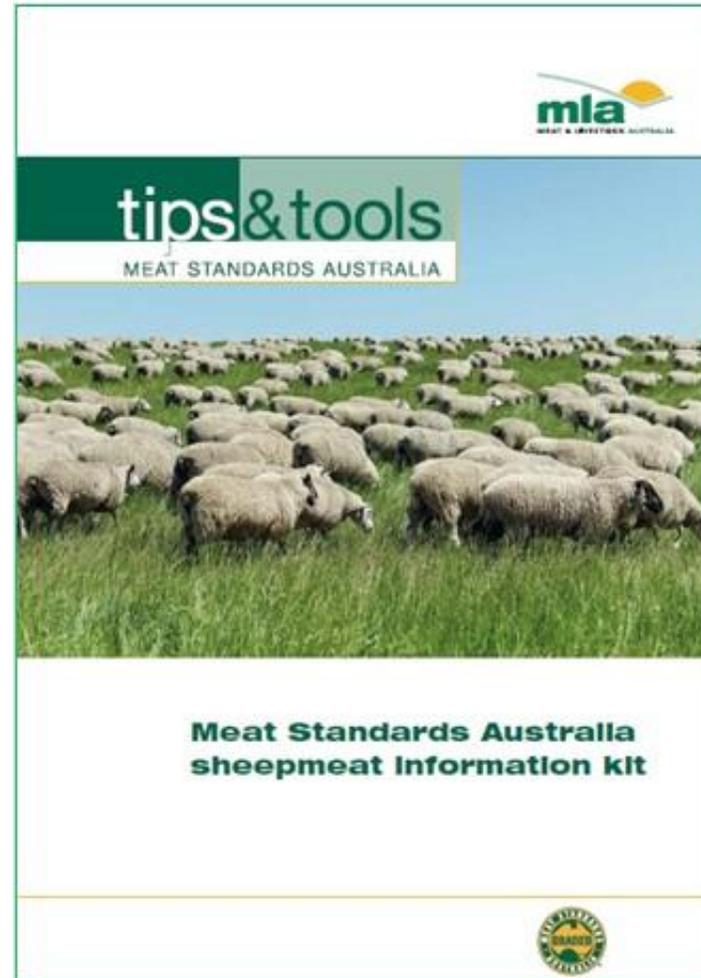
MSA Feedback support

Solutions to feedback (beef)

MSA grading glossary

myMSA support

myMSA help guide for Producers



Take home message *Holy-grail = VBM



Need to be able measure these!

Key Messages

1. RELATIONSHIPS / TRUST
2. DATA – INFORMATION – DECISIONS
3. DO SOMETHING to increase compliance and profit
 - ✓ Genetics, nutrition, management, animal health, time of turnoff, change target market
 - ✓ Skill development, tools & resources, use of trusted advisers

1% better
every day =
37% better
in 1 year!"

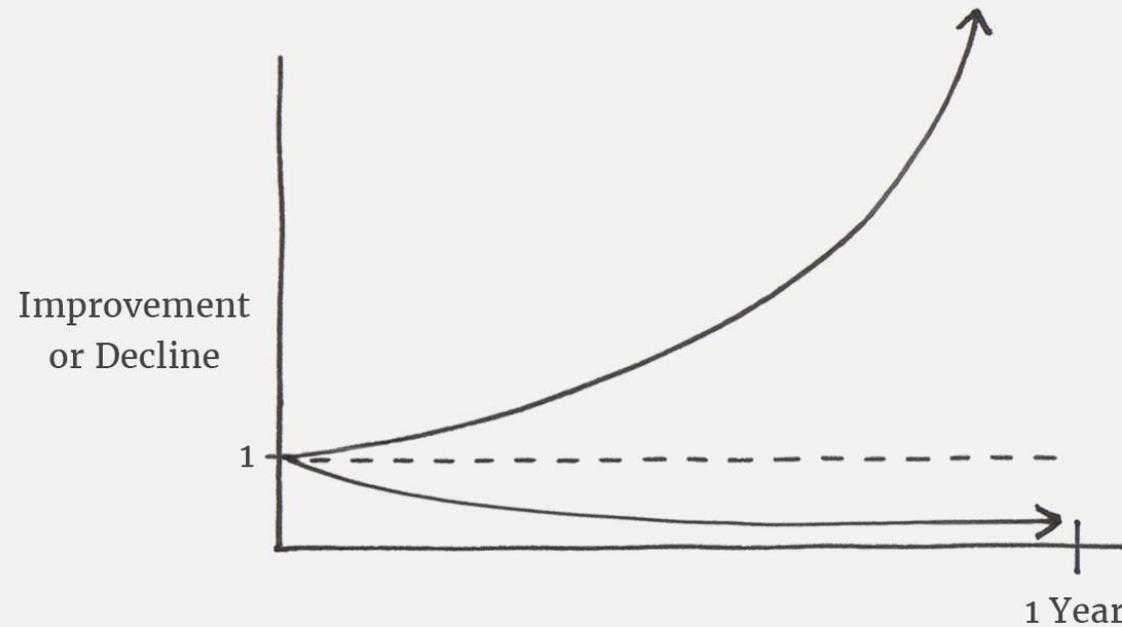
- James Clear

"Atomic Habits"

<https://jamesclear.com/>

The Power of Tiny Gains

$$\begin{aligned} \text{1\% better every day} & \quad 1.01^{365} = 37.78 \\ \text{1\% worse every day} & \quad 0.99^{365} = 0.03 \end{aligned}$$



Tools and resources

- Meating the Market – Lamb Compliance PGS SLP

<https://www.mla.com.au/extension-training-and-tools/profitable-grazing-systems/>

- Lean meat yield technical manual (Sheep CRC)

<https://www.mla.com.au/globalassets/mla-corporate/marketing-beef-and-lamb/documents/meat-standards-australia/improving-lamb-lean-meat-yield-interactive-july-2019.pdf>

- Livestock Data Link

<https://www.integritysystems.com.au/data--feedback/livestock-data-link/>

<https://solutionstofeedback.mla.com.au/>

- Dexa

<https://www.mla.com.au/globalassets/mla-corporate/news-and-events/documents/dexa-factsheet-lr.pdf>

Tools and resources

- Making more from sheep – market focused lamb and sheepmeat
<http://www.makingmorefromsheep.com.au/market-focussed-lamb-and-sheepmeat-production/index.html>
- More beef from pastures – meeting market specifications
<https://mbfp.mla.com.au/meeting-market-specifications/>
- BeefSpecs Calculator: <http://beefspecs.agriculture.nsw.gov.au/>
- Meat Standards Australia: <https://www.mla.com.au/marketing-beef-and-lamb/meat-standards-australia/>
- ALMTech: <https://www.almtechau.com/#>
- Genetics: <https://genetics.mla.com.au/>