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# **BODY CONDITION SCORE**

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# Why Body Condition Score for genetics?

- Live weight is incomplete for describing key traits
- Describing the ewe of the future
- Cheap & easy but useful breeder collected data

**What are we actually trying to  
use BCS for?  
Efficiency? Feed saved?  
Constitution?**

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more production relative to size of ewe



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# **What are we actually trying to use BCS for?**

## **Efficiency? Feed saved?**

## **Constitution?**

Currently SIL estimates ewe feed costs on basis of adult liveweight (EWT BV)

Adding BCS improves estimation of ewe feed requirements

**What are we actually trying to  
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# **What are we actually trying to use BCS for? Efficiency? Feed saved? Constitution?**

Ability of ewe to remain productive while  
withstanding environmental challenges

# Why Body Condition Score for genetics?

- Directly affects...
  - scanning percentage
  - lamb birthweight and survival
  - colostrum production and milking ability
  - lamb growth

# When to BCS?

Record at:

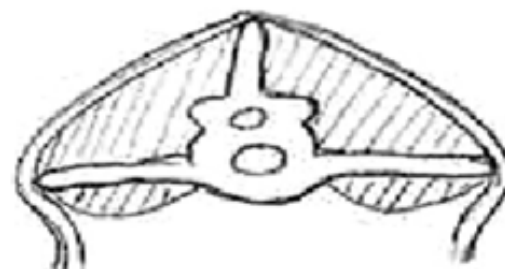
- (Pre) Mating
- Winter
- Scanning
- Lambing
- Weaning



# When to BCS?

Record at:

- (Pre) Mating
- Winter
- Scanning
- Lambing
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All are highly correlated (ewes will rank the same)

So only one is necessary...



# When to BCS?

SIL recommends recording :

**BCSMATE**  
alongside  
**LWMATE**

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Data for discovery - to answer these questions

# In SIL...

- Moderately heritable at 20%
- Take more than 1 score and SIL will use largest data set
- 2th scores and older
- Is highly repeatable

# So who's doing it?

- Recording to date:
  - Ovita ewe efficiency trial
  - BCS data via SIL flocks
  - Lamb Ultrasound scans (40% correlation)

# State of the Nation

Number of DP & DP+TS flocks recording LWMATE & BCSMATE

Year	LWMATE	BCSMATE
2014	120	22
2015	135	40
2016	110	45

# State of the Nation

% of DP & DP+TS flocks recording LWMATE & BCSMATE

Year	LWMATE	BCSMATE
2014	50%	10%
2015	55%	16%
2016	45%	18%



# Is fat a maternal trait or a carcass trait?

- Maternal optimum vs terminal optimum

Class of country dependent?





# Is fat a maternal trait or a carcass trait?

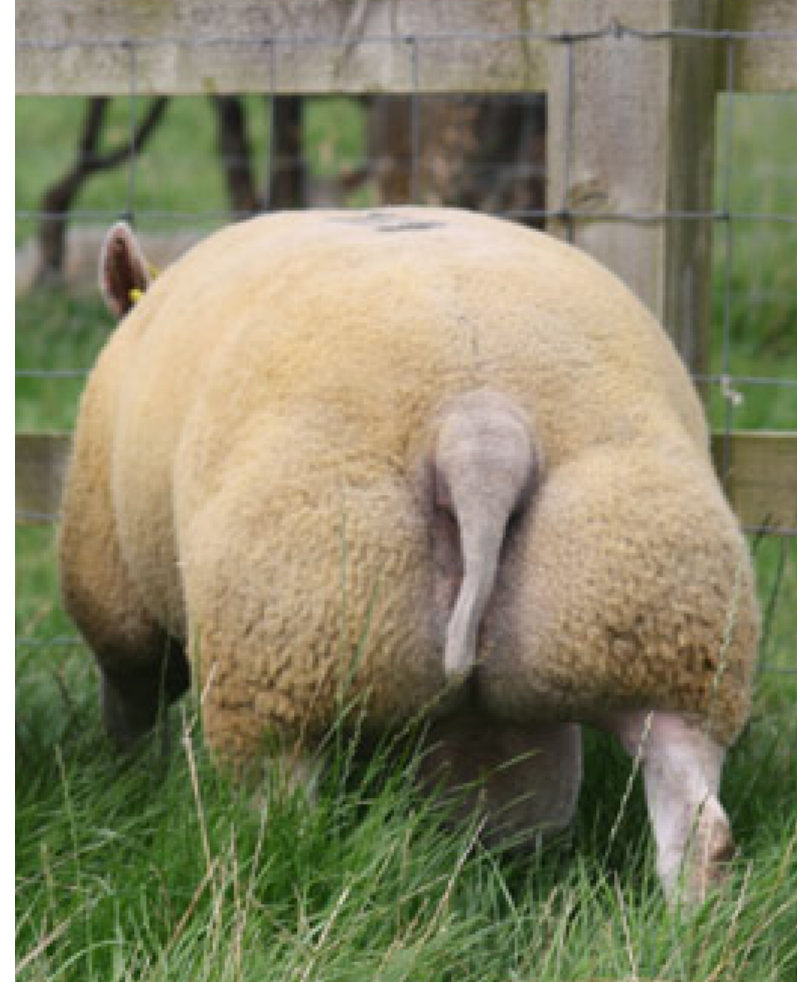
- Maternal optimum vs terminal optimum

Class of country dependent?



**NZ has very effectively selected for lean sheep**

# Optimums





# Remember...

- Correlated to many other production traits
- Better descriptors are needed
- You talk the talk, now walk the walk
- And do so at mating *with* LWMATE



**Thank you.**