Mediterranean farming climates in Australia are affected by seasonal variation in the quality and quantity of available pasture.

Ewes that have less liveweight change may lose less weight when pasture quality is low: opportunity to reduce supplementary feeding or increase stocking rates.

Previous work has shown that liveweight change is proportionally the same in genetic lines of sheep that are different for mature liveweight.

High growth genetics:
- Increased liveweight gain.
- But only in ewes with enough nutritional support to attain heavier mature weights.

Regardless of breeding values:
- heavy ewes gained and lost a smaller proportion of their liveweight than lighter ewes.
- High growth genetics: did not impact liveweight loss.

Hypothesis: that ewes with higher breeding values for post weaning weight will also have higher liveweight gain and loss.

Liveweight gain in adult ewes is affected by sire breeding values for post weaning growth.

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Australian Sheep CRC Information Nucleus Flock
- 8 sites across Australia
- 2772 ewes over 3 years (5000+ records)
- Aged 2, 3 and 4 years
- Merino dams & Merino and Border Leicester sires
- Average of 5.8 weight points/year/ewe
- Weights adjusted for GFW and conceptus

Used to generate spline weight profiles
- Annual average weight
- Liveweight gain (min to subsequent max)
- Liveweight loss (max to subsequent min)

Phenotypically larger ewes with high growth genetics will gain more weight, possibly due to extended time to reach maturity.