

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

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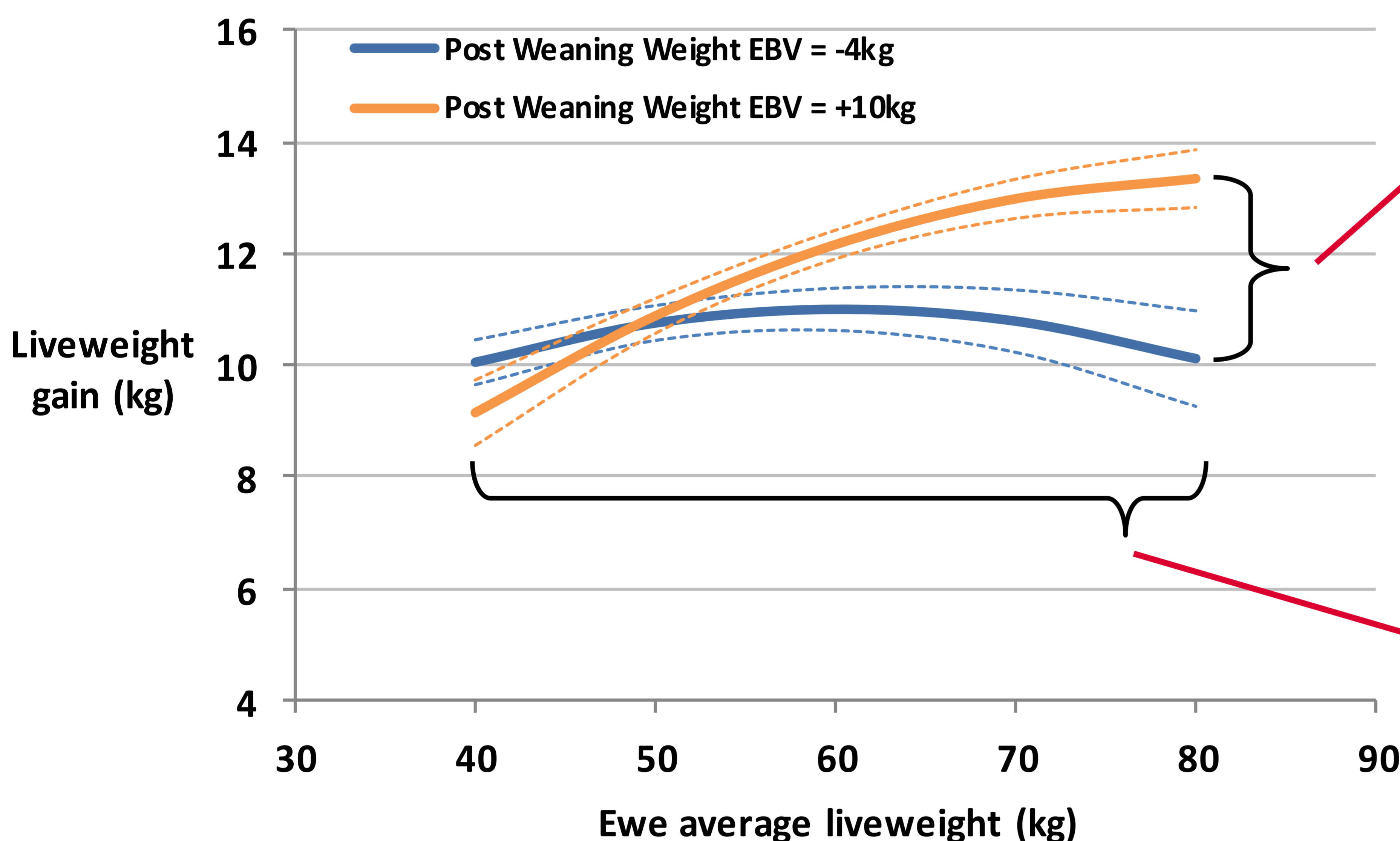
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- Mediterranean farming climates in Australia are affected by seasonal variation in the quality and quantity of available pasture.
- Ewes that have less liveweight change may lose less weight when pasture quality is low: **opportunity** to reduce supplementary 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.

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



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.

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.

