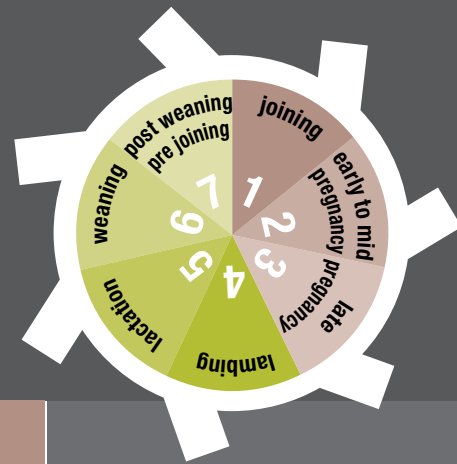




Scoring for profit

This infographic describes seven important phases in the reproductive cycle of Merino ewes. Managing ewe condition during each step of the cycle affects: conception success, reproductive rate, placental development, udder development and colostrum production of the ewe, foetal growth of the lamb, including wool follicle development which influences wool production in the progeny and ewe milk production which influences lamb growth after birth.



1 Joining (day 0)



3.0

condition score target at joining

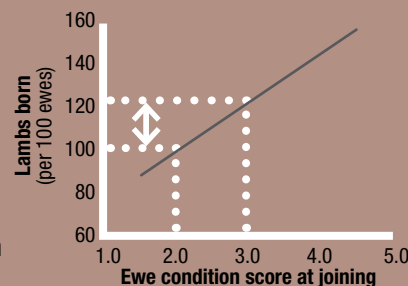
Ewe condition score on the day of conception is the major predictor of reproductive rate.

Ewes in condition score 3.0 have full eye muscle and no excess fat but the short ribs and spine are well covered.



20 extra lambs per 100 ewes

for each increase in condition score.

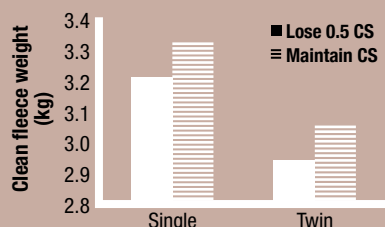


2 Early to mid pregnancy (day 1–90)

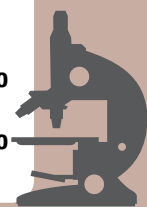
0.3

recommended maximum loss of condition score

Ewe condition score during early to mid pregnancy affects placental development, which drives primary follicle development and can have a lifetime impact on fibre diameter and fleece weight.



Lambs from ewes fed to maintain condition score during pregnancy produce 0.2kg/hd more wool at up to 0.2 micron finer wool than lambs from ewes allowed to lose a condition score.



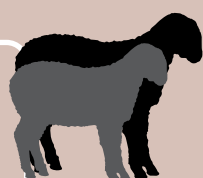
3 Late pregnancy (day 90–150)

3.0+

condition score target for twin-bearing ewes by lambing*

* target condition score for ewes bearing single lambs is 3.0

Ewe nutrition during late pregnancy has a greater impact on lamb birth weight (up to 0.45kg), than early pregnancy nutrition.

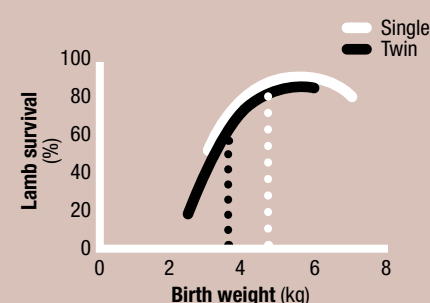


70%

of lamb survival is driven by birth weight.

4.5–5.5kg

the optimum birthweight for lamb survival.



4 Lambing (day 150)

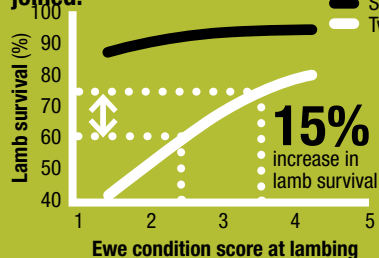
3.0+

condition score target for twin-bearing ewes at lambing*

* target condition score for ewes bearing single lambs is 3.0

The condition score of the ewe at lambing influences birth weight and lamb survival.

Lifting the condition score of twin-bearing ewes from 2.5 to 3.5 at lambing can increase lamb survival by about 15–20%, delivering an extra 30 lambs born for every 100 ewes joined.



average birth weight

4.9kg

single lamb

3.7kg

twin lambs



Ewes in condition score 4.0 or higher (particularly single ewes) may be at increased risk of having lambing difficulties (dystocia).



70%

of lamb mortalities from birth to weaning occur during the first 48 hours of life.

5 Lactation (day 150–240)

2.7–3.0

condition score target during lactation

Improved ewe nutrition through lactation means bigger weaners and better weaner survival.

F00

Feed on offer (F00) and pasture quality during lactation (particularly legume content) is the major driver of lamb growth rates.

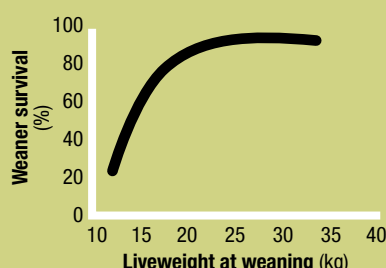


6 Weaning (day 240)

2.5–2.7

ewe condition score target at weaning

Lamb liveweight at weaning is important for weaner survival.



45%

adult bodyweight weaning liveweight target

* draft off and preferentially feed lightweight weaners until critical liveweights are achieved



14 weeks

Maximum age for weaning lambs

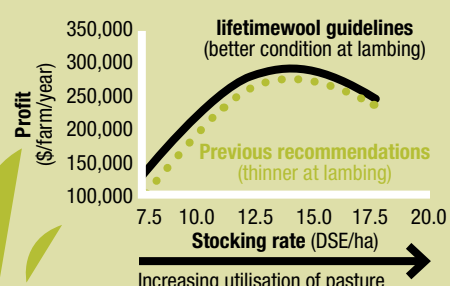
7 Post weaning – pre joining (day 240–365)

3.0+

ewe condition score target post weaning to pre joining

The more time on high-quality green feed post weaning, the lower the cost of achieving condition targets prior to joining. Give priority to lighter condition score ewes.

Stocking rate vs profitability



Feed on offer (F00) targets^

800kg DM/ha

minimum green F00 to maintain ewe condition*

* Supplementary feed as required

500kg DM/ha

green F00 minimum pasture target at break of season



900kg DM/ha

green F00 minimum pasture target by day 90 of pregnancy

1000kg DM/ha

green F00 minimum pasture target for single-bearing ewes

1200kg DM/ha

green F00 minimum pasture target for twin-bearing ewes

1200kg DM/ha

green F00 minimum pasture target for single-bearing ewes

1800kg DM/ha

green F00 minimum pasture target for twin-bearing ewes

1400kg DM/ha

green F00 minimum pasture target for single-bearing ewes

2000kg DM/ha

green F00 minimum pasture target for twin-bearing ewes

1100kg DM/ha

minimum green F00 to maintain ewe condition*

* Supplementary feed as required

1000+kg DM/ha

green F00 minimum pasture target

800kg DM/ha

target to preserve groundcover*

* Supplementary feed as required

* F00 targets are for high-quality (75% digestibility) green feed

Condition score (CS) is an assessment of the amount of soft tissue (fat and muscle) over the short ribs and backbone on a scale of 1.0 to 5.0. This assessment is independent of body weight. For more information go to www.lifetimewool.com.au/conditionscore.html

Feed on offer (F00), is the amount of pasture available for sheep consumption expressed in kilograms of dry matter per hectare (e.g. 1100 kg DM/ha). For more information go to www.feedonofferlibrary.com

lifetimewool
more lambs, better wool, healthy ewes



Australian Wool Innovation Limited

This poster has been produced by AWI Extension TAS from information contained in the LifetimeWool Ewe Management Handbook. For more information about managing ewes for optimal reproductive performance, or to find out about participating in a Lifetime Ewe Management (LTEM) course, go to www.wool.com/LTEM

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