EWE BODY CONDITION SCORING (BCS) HANDBOOK

MAY 2013

0800 BEEFLAMB (0800 233 352) | WWW.BEEFLAMBNZ.COM
BY FARMERS. FOR FARMERS

Acknowledgements:

A big thanks to Paul Kenyon – Massey University who's presentation was adapted and reproduced with permission: 'Management of your ewe flock from weaning to breeding'. And a big thanks to Trevor Cook of Totally Vets for helping with the video and providing resources for this booklet as well.

Beef + Lamb New Zealand would also like to acknowledge the writers of the "FlockMaster Manual" and "A guide to improved lambing percentage. 200 by 2000" which were also utilised as the basis of this booklet.

Top 20% versus the rest

In the 2009-10 B+LNZ Farm Survey[1], the bottom line difference between the top 20% farmers and the average was **$185 per hectare**. High sheep performance is a key driver of these top 20% businesses. A common trait among top performers is that they continuously monitor the tail end ewes in their flock and regularly BCS their ewes. They also use a split flock approach and targeted feeding, based on ewe BCS.

The key drivers of profit in a sheep flock are:

- Kg of lamb weaned per hectare
- Weaning weight per lamb
- Number of lambs weaned per hectare.

How can you influence these drivers today in your ewe flock?

The single most important factor influencing these is the percentage of ewes that are below BCS 3 at mating and at lambing. It's all about minimising the number of tail end ewes, as these are the ones that are bringing down the overall flock performance.

Some quotes to ponder

"Your biggest percentage jump in scanning percentage will come from reducing the number of very poor condition ewes at mating"
– Paul Kenyon, Professor of sheep husbandry

"Why do so many farmers get so hung up about the average price of the last load of lambs in the autumn, yet continue to be disappointed with their scanning results in winter."
– Richard Hilson, Veterinarian

"Running ewes as one mob means you are wasting feed by putting condition on ewes who have already reached optimum and will not return anything extra. I Target those light girls below BCS 3."
- Farmer

A common trait among these top performers is that they continuously monitor the tail end ewes in their flock and regularly BCS their ewes.

[1] Class 4 Hill Country, Quintile Analysis
Ranked by EBITR per hectare

Why Body Condition Score ewes

Condition scoring is a quick and easy low cost management tool to increase ewe productivity and flock profitability. It is a way of comparing sheep: Independent of live weight, frame size, breed, stage of gestation, gut fill. BCS is valuable as it relates to the production ability of sheep regardless of body weight

Why do body weights vary?

- Lifetime frame size of a ewe largely set by the four tooth weaning. Age class effect, drought impacts on age classes etc
- Into the third trimester, the pregnancies will have a variable impact on ewe body weight
- Many flocks today have a variety of ewe breeds and crosses present
- Gut fill
- Wool

Drafting by eye – does it work?

At the drafting gate most farmers can tell if newly-shorn sheep are skinny or fat, however it is very hard to accurately judge the condition of woolly sheep coming up the drafting race. If ewes are more than 6 weeks off the shears the eye is inaccurate and only picks up extremes, you need to put a hand on ewes and BCS them.

If ewes are more than 6 weeks off the shears the eye is inaccurate and only picks up extremes

Could you draft these ewes on condition at the gate without putting a hand on them?

Impact of ewe BCS

Studies have shown ewe BCS directly affects:

- Scanning %
- Lamb birth weights
- Mothering ability
- Lamb survival
- Colostrum production
- Lamb growth rate and weaning weights
- Ewe death rates
- Ewe weaning weights and potential flow on effects.

BCS and the impact on your bottom line

One of the key drivers of profit in a sheep flock is the kgs of lamb weaned per hectare. Ewe BCS has a big influence on this outcome and therefore on your bottom line.

Key management periods to target feeding and increase ewe BCS:

Weaning to pre-mating (summer):

- Lifting one ewe 1 condition score for mating lifts ewe gross margin by $13 (if 2.0 to 3.0)
- To lift 1 condition score needs 30 kgDM
- That is 43 cents/kgDM.

Scanning to lambing (winter):

- Lifting one ewe 1 condition score by lambing lifts ewe gross margin by $10.50 (if 2.0 to 3.0)
- That is 35 cents/kgDM.

Note: 2010-11 product prices used for analysis.

Table 1: The benefit of reducing the number of tail end ewes at mating and pre lamb

63 kg ewes, 10/ha, lambs sold @ weaning	Status quo 15% ewes < BCS 2.5	Increased CR 5% ewes < BCS 2.5	Increased lamb survival 5% ewes <BCS 2.5	Increased weaning wgt 5% ewes < BCS 2.5
Scanning %	160%	**175%**	175%	175%
Lamb survival	78.4%	78.4%	**81%**	81%
Weaning weight	26.5 kg	26.5 kg	26.5 kg	**27.4 kg**
Gross margin/Ha	$806	$854	$875	**$920**

Analysis and table prepared by Trevor Cook, Totally Vets. CR = Conception Rate. Based on 2010-11 prices.

Taking time to condition score ewes stacks up financially

Most farmers don't body condition score ewes. Why?

Most farmers routinely vaccinate ewes to protect them from campylobactor. Condition scoring ewes is just as quick and just as valuable, as the following hypothetical example illustrates.

Justification and value

If mate 500 two tooths and vaccinate for campylobactor:

- 500 x $0.61 x 2 shots = **$610**
- Average two tooth scan % - 141%, therefore two tooths have 705 lambs
- 80% survival = 564 lambs.

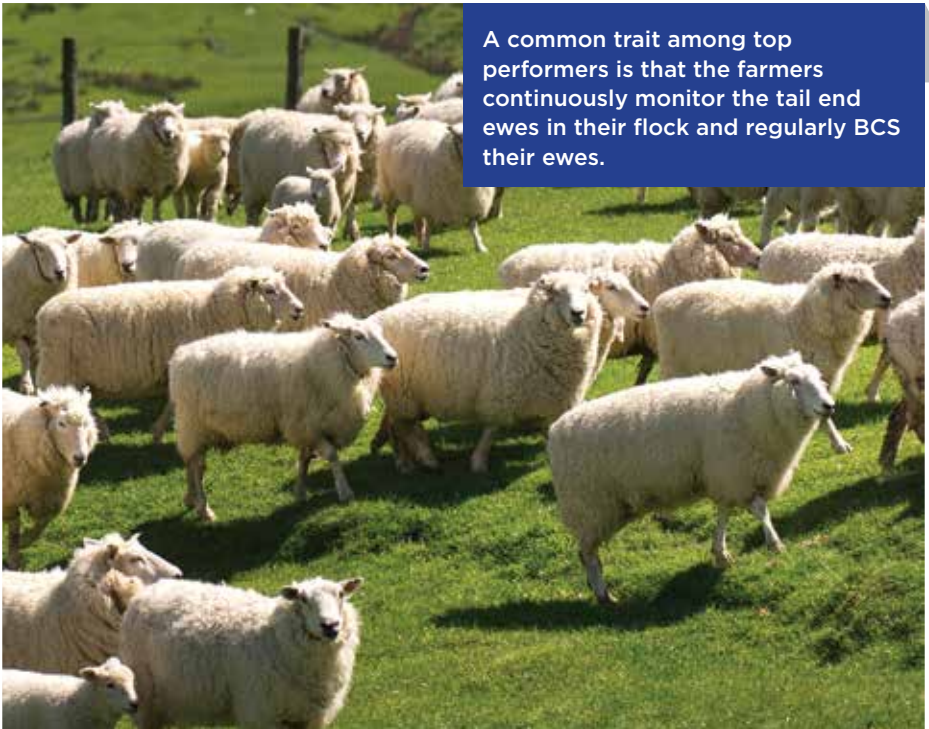
With no campylobactor vaccine: (research and analysis by Vet Services Hawke's Bay)

- Lose 8% i.e. 133% scanning or 665 lambs
- 80% survival = 532 lambs
- Therefore with vaccine net gain of 32 lambs @ $90 = **$2880**
- Or **$4.54** per ewe mated (net of vaccine cost).

Lifting one ewe 1 condition score for mating lifts ewe gross margin by **$13** (if 2.0 to 3.0)

- Additional labour/time needs to be accounted for.

$13 Vs $4.54 - Taking time to condition score ewes stacks up .



A common trait among top performers is that the farmers continuously monitor the tail end ewes in their flock and regularly BCS their ewes.

How to ewe BCS

BCS assesses the amount of body fat or condition by feeling the vertical (spine) and horizontal (short ribs) processes. **BCS is based on a scale of 1-5**, 1 being very skinny and emaciated and 5 being over fat (see diagram 1 and 2).

See also: Ewe Body Condition Scoring video on B+LNZ website.

Diagram 1

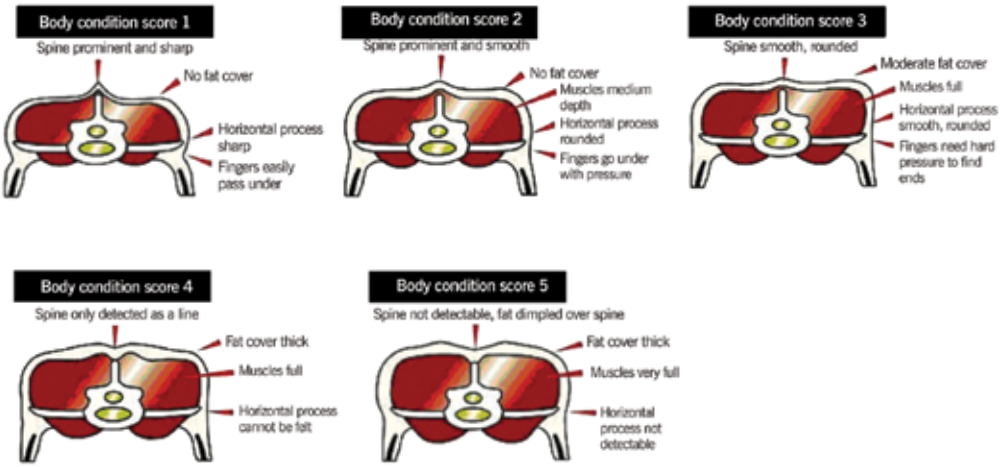
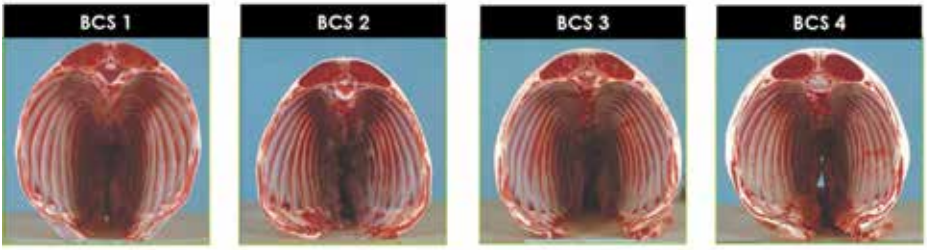


Diagram 2



How to do a Body Condition Score

See also "BCS Made Easy" in the back of this booklet.

Push ewes up a drenching or drafting race reasonably tight. Get in the race and walk up the race, condition scoring each ewe.

The animal should be standing in a relaxed position. It should not be tense, crushed by other animals or held in a crush. If the animal is tense, it is not possible to feel the short ribs and get an accurate condition score. Place your hand behind the 13th rib (see diagrams 3 and 4) , pushing fingers under the short ribs with pressure and finger on spine.

Using the balls of the fingers and thumb, try to feel the backbone with the thumb and the end of the short ribs with the finger tips immediately behind the last rib (see diagram 5). Feel the muscle and fat cover around the ends of the short ribs and over the backbone.

Diagram 3

Diagram 4

Diagram 5

Don't take too much time, it's not about getting exact numbers. Put a hand on them, make a decision, and move on. For example, have one number in your mind, say BCS 3 then all ewes going up the drafting race below BCS 3 need to be marked with chalk and drafted off.

Condition scoring sheep by hand is quicker than weighing and can be done when doing other management practices, such as:

- Uddering/culling ewes at weaning
- Drenching ewes
- Vaccinating ewes
- Pushing ewes up to the scanning crate.

Don't take too much time, it's not about getting exact numbers.

Condition scoring sheep is quicker than weighing and can be done when doing other management practices.

Two key times to condition score ewes:

At weaning

- All ewes are in the yards
- Management weaning to pre-mating

At scanning

- All ewes are in the yards
- Management scanning to lambing

Ewe BCS at Weaning: Management of ewes from weaning to mating

The traditional approach for many farmers at weaning is to shear their ewes and run them as one mob over the summer/autumn. The ewes are then screwed down and used to "clean up" pasture in preparation for other classes of stock.

This approach does have a flaw. It assumes that all ewes within the flock are the same and therefore have the same nutritional requirements. When in reality, there will be a range of ewes in terms of body condition.

The poor condition ewes are less likely to get pregnant in the first 17 days of breeding. They will have lower scanning percentages and will have less "buffering" late in pregnancy and lactation, resulting in lighter lambs weaned the following season.

So what do we want from our ewe flock?

Ideally:

- To conceive early in the breeding period
- To be multiple-bearing
- To rear all lambs to weaning
- To wean heavy lambs.

What effects do ewe liveweight and condition score at breeding have on the preceding parameters?

Over the late spring to early autumn period, we are also trying to:

- Finish lambs
- Grow hoggets for breeding
- Feed lactating cows and growing calves
- Finish cattle.

In this period, pasture quality can be poor, pasture growth can be declining and summer dry can further exacerbate the situation. It is important to ensure that the pasture available is used **optimally**.

Pasture is not free - **Optimal** use means maximising animal performance now and in the future for each kg of pasture consumed. Approximately 60% of feed in a ewe breeding flock is maintenance. However, we can improve efficiency by getting more output for a given maintenance requirement.

Traditional management of ewes over summer post weaning

- Managed in big mobs (often two tooth mob & MA mob)
- Mobs used to clear up rough feed
- Low priority class of stock
- Tail develops = Fat ewes and skinny ewes.

The ewes are then expected to be in good condition and perform well at breeding. This approach is not **optimal /efficient.**

It is known that heavier/better condition ewes:

- Start cycling earlier in the breeding period
- Have higher ovulation rates
- Have higher conception rates
- Give birth to heavier lambs
- Produce more milk
- Wean heavier lambs with higher survival rates.

However, what impact do these heavy ewes have on ewe efficiency on a per ha basis?

- Does a heavy ewe mean she is of good body condition?
- Are the body condition - ewe performance relationships linear?
- What impact do heavy ewes have on efficiency on a per ha basis?

Based on the same lambing percentage, the financial return for a 70kg ewe flock would be only 70% of a 60kg flock, as there would be less, heavier ewes eating the same amount of total herbage but weaning less lambs in total.

For the same return per hectare, compared to a 60kg flock weaning 134%, a 70kg flock would **need to wean** 151%, due to the lighter flock having more ewes.

Therefore, just aiming for heavier weights may decrease efficiency. Approximately 60% of what a ewe eats in the year is for maintenance only.

Approximate maintenance requirements for ewes:

- 50kg - 0.9kgDM/d
- 60kg - 1.05KgDM/d
- 70kg - 1.2KgDM/d

Thus, for the same amount of feed, you can run approximately 14% more 60kg ewes compared to 70kg ewes

Does a heavy ewe mean she is of good body condition?

Condition score and live weight are related. Generally to increase condition score by one unit (i.e. 2.0 to 3.0) ewes need to gain 7 - 9kg. But remember:

- Heavier ewes can be of poor condition if they are of large frame size
- Conversely, relatively lighter smaller frame ewes can be of very good body condition
- Thus we cannot just assume heavier ewes are of good body condition.

To determine if a ewe has a good level of body reserves, each ewe needs to be individually condition scored and this cannot be based on weight.

Are the ewe BCS/performance relationships linear?

Studies in the 1970s to 1990s compared BCS 1.0-1.5 ewes with BCS 3.0-4.0 ewes. The poor condition ewes:

- Started cycling later
- Had lower ovulation rates
- Had lower conception rates
- Had lower scanning and lambing percentages
- Weaned lighter lambs.

But these studies do not indicate if the relationships are linear (i.e. is there a constant production gain for a given increase of body condition?).

Nicol et al (Lincoln University) compared 'heavy' large frame (71kg) Coopworth ewes with 'lighter' smaller frame (61kg) ewes. They reported no further increase in ewe ovulation rates once ewes achieved a liveweight of 67kg. It is apparent, when you look ovulations rate data, that there is the law of diminishing returns occurring that is:

- 45kg 52% multiples
- 50kg 70% multiples
- 55kg 77% multiples
- 60kg 80% multiples
- 65kg 82% multiples

Therefore, from a reproductive performance point of view, there is a plateau:

- For every gain in condition, the response is smaller
- There is a point at which a further gain in condition will not increase production levels
- Relationships between ewe live weight and condition score against ewe reproductive performance are not linear

What do these plateaus mean for management of the ewe flock post weaning?

From a purely scanning performance point of view, there is no advantage in having high condition score ewes (>BCS 3) at mating. The aim should be to reduce the % of ewes below the 'optimum' condition score (i.e. CS 2.5 - 3)

"Your biggest percentage jump in scanning percentage will come from reducing the number of the very poor condition ewes."

But the traditional rule for ewes at mating has been to get the average flock live weight and condition score as heavy/high as possible. This rule is correct..... BUT it fails to take into account that the relationships between ewe live weight and condition score with ewe reproductive performance are not linear, **thus it is an inefficient use of feed.**

Problems with the 'one mob' traditional approach

If you do increase the average condition score by running them as one mob, you are wasting feed by putting condition on ewes who have already reached the optimum and will not return anything extra. That extra feed would have been better used by lifting the tail even further by 'targeted feeding'.

It takes a lot more herbage to gain weight in a good condition (fatter/ heavier) ewe than that of a thinner/ lighter ewe.

What it costs to gain weight?

- To gain 50g/d in a 70kg ewe requires 1.4kgDM/d
- To gain 50g/d in a 55kg ewe requires 1.25kgDM/d
- Thus if we had 2000 70kg ewes and 1000 55kg ewes in one mob, we would consume 4050 kgDM/d
- To maintain a 70kg ewe requires 1.12 kgDM/d
- To gain 100g/d in a 55kg ewe requires 1.54 kgDM/d
- Total consumed for same ewe numbers is 3780 kgDM/d.

Split flock management post weaning

Split flock post weaning and 'hold' the good condition ewes (BCS >3) and feed the poorer ewes (BCS <3) better. I.e targeted use of available feed.

- Target as many as possible at BCS 3 and none below 2.5 at mating
- Percentage of the flock below BCS 3 at mating sets the performance level of the flock
- Aim to reduce the % of ewes below the 'optimum' BCS 3 at mating
- Hold good condition ewes (BCS >3) at maintenance over summer and use these girls to clean up pasture.
- Set up regular times to BCS ewes from weaning to mating (monthly):
  - Aim to bring poor condition ewes up
  - Ewes BCS 1.5 and 2 most gain from lifting
  - Consider drench (be "WormWise")
  - Reduce mob pressure - more feed, frequent shifts
  - In front of rotation or on crop,
  - Or with lambs (good refugia for lamb grazing areas).

Losing weight between weaning and mating reduces feed conversion efficiency

This split mob approach (based on ewe BCS) will utilise the herbage available most efficiently and will require less herbage than trying to lift condition of all ewes by a single mob approach.

It is much more efficient to maintain ewe live weight and BCS between weaning and mating. It takes a lot of extra feed to regain weight, as opposed to maintaining weight.

- Each kg of ewe live weight lost is equivalent to 17MJ ME (1.5kgDM)
- It takes 65MJ ME (6kg DM) to gain one kg of live weight
- Loosing weight between weaning and mating reduces feed conversion efficiency.

Set up regular times to BCS ewes from weaning to mating.

It is more efficient to maintain ewe LW and BCS between weaning and mating.

It takes time to increase ewe condition

It takes time to increase ewe condition, especially if ewe growth rates are low (see table 2):

- Split ewes soon after weaning their lambs
- Ewes eating 'rank' herbage will not gain condition
- Putting one condition score on light ewes is equal to 7-9kg live weight. At 100g/day = 70-90 days.

Table 2: Time taken for a 54kg ewe (BCS 2) post weaning to lift 1 BCS and reach 63Kg (BCS 3) at different growth rates:

1 January 2013	Weaning - Ewe BCS 2, 54KG LW Start		
Growth Rates	50g/Day	70g/Day	100g/Day
1 February 2013	55.5	56.1	57
1 March 2013	57	58.2	60
1 April 2013	58.5	60.3	63

Flushing ewes

Ewe live weight gain (100 – 150g/d) during the 3 to 6 weeks pre-breeding will result in an increase in ovulation rate. Gaining live weight is better than being static. Loss of liveweight during flushing period reduces ovulation rate. Light ewes are more responsive to flushing:

- 51 – 57kg = 17 % more multiples
- 63 – 69kg = 8 % more multiples.

Light ewes are more responsive to flushing.

However, flushing correctly requires a lot of feed and, in autumn, we cannot often bank on a lot of (if any) good quality herbage. A safer goal is to ensure we minimise the number of poor condition ewes before the flushing period. Then, if feed is available, flush them in autumn.

If there is not enough feed to flush them all correctly (which is often the case), the best bet is to flush the poorer condition ones and hold the better condition ewes (i.e. a split flock approach with targeted feeding).

Finally, ask yourself these questions:

With regards to your management post weaning:

- How much value are you adding to your trade lambs post weaning?
- Is my property set up for finishing these lambs?
- What impact am I having on my capital stock?
- What impact will the decisions I make now have on next year's production?

"Why do so many farmers get so hung up about the average price of the last load of lambs in the autumn yet continue to be disappointed with their scanning results in winter" – Richard Hilson, Veterinarian

Ewe BSC at scanning: Management of ewes from scanning to lambing

Advantages of scanning

Scanning is the ideal time to adjust feeding levels based on ewe BCS.

Advantages of scanning:

- Drys out – sold early to free up feed
- Know which ewes must not lose condition
- Know which ewes need to be lifted
- Know which ewes can be tightened up
- Know which ewes need to be paddocked out at lower rate
- Know which ewes need safer paddocks
- Update the feed budget!

Studies have shown heavier/better condition ewes at lambing:

- Give birth to heavier lambs
- Have increased mothering ability
- Produce more milk
- Wean heavier lambs with higher survival rates.

Ewe BCS and its impact on lamb survival

Several studies have shown the body condition of ewes at lambing has a big impact on lamb survival.

- Lamb survival decreases 5% for every ½ BCS lost in the 4 weeks before lambing
- Lamb survival decreases 5% for every ½ BCS below 3 at lambing
- Ewes at BCS 3.5 at lambing produce 2 x colostrum as if they had been 2.5
- Consequence of "stuffing it up" and having poor condition ewes at lambing:
  - **The time it takes for a lamb to stand.** A lamb that stands and suckles within 20 minutes of birth has 95% chance of still being alive in 90 days.

Ewe body condition at lambing has a big impact on lamb survival.

Ewe BCS and its impact on lamb weaning weight

Several studies have shown the body condition of ewes at lambing has a big impact on lamb weaning weight.

A ewe produces 40-50% of total milk yield in the first 4 weeks after lambing. A ewe will have longer/stronger milk supply if:

- Lambed at BCS above 2.5
- She loses less than 1 BCS over lambing
- Lamb weaning weight decreases 6% if more than ½ BCS lost over the winter
- Lamb weaning weight decreases 4% for every ½ BCS lost in 4 weeks before lambing
- Lamb weaning weight decreases 6% for every ½ BCS below BCS 3 at lambing

- Or, put more simply, a trial showed:
  - Lambs from 'fat' ewes: **27.2kg** at weaning
  - Lambs from 'thin' ewes: **26.2kg** at weaning.

Ewe body condition at lambing has a big impact on lamb weaning weight.

Condition scoring at scanning

Target a BCS of 3 at lambing to maximise lamb survival and lamb weaning weights.

Multiple-bearing ewes struggle to consume their theoretical nutritional requirements in late pregnancy and they often rely on their body reserves as a buffer. The period between scanning and approx 5 weeks before lambing is the only time ewes below BCS 3 have the ability to put on condition. It is critical that ewes below BCS 3 at scanning are identified and preferentially treated post scanning.

The person pushing the ewes into the scanning race/crate should be experienced in condition scoring. With practice this is a quick and easy process.

Ewes going into the scanning crate that are below BCS 3 need to be marked and drafted off, especially multiples and low mouthed older ewes.

Preferentially feed these ewes:

- Aim to bring poor condition ewes up
- Ewes BCS 1.5 and 2 gain most from lifting
- Consider a long acting drench (be "WormWise")
- Reduce mob pressure - more feed, frequent shifts
- In front of ewe rotation.

Ewes in satisfactory condition (BCS 3 – 3+) can be fed below-maintenance for short periods from 60 days after mating to 35 days pre-lamb.

Take off single ewes after scanning and tighten up to build feed for multiples. If crayons used, 3rd cycle ewes could go with singles as their energy demands are one month later.

Target a BCS of 3 at lambing to maximise lamb survival and lamb weaning weights.

Ewes below BCS 3 at scanning need to be drafted off and preferentially feed, especially multiples.

Pre lamb feeding of ewes

Excessive under nutrition pre lamb can lead to:

- Sub-optimum levels of colostrum production
- Delayed milk let down
- Lower peak and total milk production
- Low lamb birth weights
- Poorly developed maternal instinct
- Impaired lamb bonding behaviour
- Impaired thermoregulatory capability of lambs
- Metabolic diseases in ewes.
- All these above lead to **reduced lamb survival.**

Multiple-bearing ewes need increasing feed allocation, as lambing approaches to prevent them loosing condition (remember the consequences of under nutrition). Try to feed multiples above maintenance in the last 5 weeks of pregnancy.

It's recommended that rotations are kept going as long as possible, but reducing mob size and speeding up those rotations closer to lambing.

Massey University research suggests there is no real advantage from offering multiple- bearing ewes grazing conditions greater than:

Day 90 to 133: (30 June – 12 August, if mating date 1 April)

- Pre mass 1200kg DM/ha, pre sward height 4cm
- Post mass 800kg DM/ha, post sward height 2cm
- It is important not to go below 800 kg DM/ha

Day 133 onwards (12 August until Lambing)

Covers should not go below 1200kg DM/ha, sward height 4cm.

Try to feed multiples above maintenance in the last 5 weeks of pregnancy.

Time off grass pre lamb

Multiple-bearing ewes are very sensitive to time off grass pre lamb. Lamb survival is the cost (sleepy sickness and release of beta-hydroxy butyrate (BOH) toxin affects lamb vigour at birth). Farmers need to be organised around pre lamb shearing and vaccinating, taking cuts off grass, multiples first, small mobs, in and out of yards quickly and avoid leaving ewes in yards over lunching etc.

Multiple ewes are very sensitive to time off grass pre lamb. Lamb survival is the cost.

Condition scoring and what farmers are already doing

A number of farmers are starting to use ewe BCS as a culling criteria in their ewe flocks.

- E.g. Light ewes at weaning-below BCS 2.5 – tag on trial. Take a split mob approach post weaning, based on ewe BCS. If that ewe reoffends at scanning, black tag into terminal mob.
- Using EID to track BCS. Repeat offenders into terminal mob.

By only breeding from the ewes that have higher BCS, feeding does not have to be diverted into building up ewes with lower BCS in the maternal mob. The progeny are more likely to carry the genetics for a robust BCS. The ewes that reliably produce twins are more likely to pass this trait on to their offspring, and lambing percentage will increase.

Condition scoring in the future

- What about a machine that can BCS ewes then auto draft? (like a CT scanner)?
- Pay scanner extra 10 cents per sheep to have trained labour unit pushing sheep up and condition scoring? ROI pretty good.

SIL currently estimates genetic merit for adult ewe size = EWT eBV.

- What about BCS eBVs - weaning, mating, pre lamb?
- eBV on KgDM to lift one BCS?
- One study showed the mean increase in live weight per unit increase in BCS between two different breeds was 7.88 kg Vs 4.78 kg.

Table 3: Difference in the cost of feed between two breeds to lift 1000 tail end ewes 1 BSC

BCS over summer

Some basic calculations				
	kg live weight to increase 1BCS	Total kgDM per ewe	Cost per ewe @ 12c/kg DM	Cost for 1000 tail end ewes
Breed 1	7.88	47	$5.7	$5,674
Breed 2	4.78	29	$3.4	$3,442
				$2,232 *Difference between Breed 1 & 2*
1kg live weight over summer = 6kgDM				

In the future farmers might like to investigate the link between BCS and feed efficiency – remember that 60% of feed in a breeding flock is maintenance. Below are some interesting points:

- The chicken and pig industries have improved feed utilisation efficiency by genetic selection. In 25 years FCE in chickens has improved from 2.4:1 to 1.8:1
- Beef cattle – differences of 20% in feed required to produce same liveweight gain have been measured in feedlots
- Sheep – no data on between animal differences or whether there are any genetic effects

Ewe Body Condition Scoring (BCS)

TIMING AND BCS TARGETS

At Weaning: Management weaning to pre-mating

- Target as many as possible at BCS 3 and none below 2.5 at mating
- Split flock post weaning and 'hold' the good condition ewes (BCS >3) and feed the poorer ewes (BCS <3) better
- Set up regular times to BCS ewes from weaning to mating
- **Ewes below BCS 3 -** reduce mob pressure, front of rotation preferentially feed, consider drenching these ewes

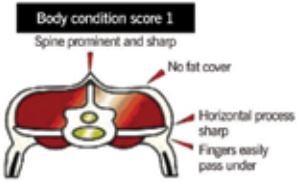
At Scanning: Management scanning to lambing

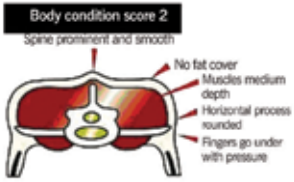
- Target a BCS of 3 at lambing to maximize lamb survival and lamb weaning weights
- Ewes going into the scanning crate that are below BCS 3 need to be marked and drafted off, especially multiples
- **Ewes below BCS 3 -** reduce mob pressure, front of rotation preferentially feed, consider drenching these ewes

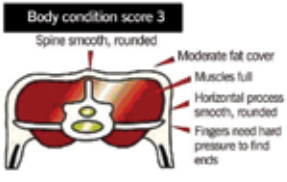
Generally, to increase condition score by one unit (i.e. 2.0 to 3.0), ewes need to gain 7-9 kg Live weight.

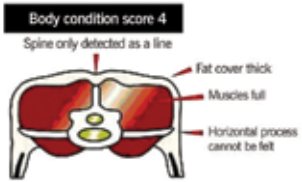
HOW TO BCS SHEEP

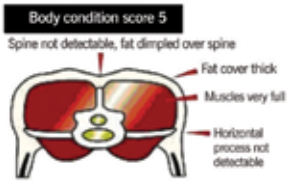
Locate the last rib (the 13th) using the balls of the fingers and thumb, try to feel the backbone with the thumb and the end of the short ribs with the finger tips immediately behind the last rib.











Note: It is common to use increments of 0.5 of a BCS; when a ewe is not quite good enough for one category but better than the one below. Don't break it down any more than this though!

BODY CONDITION SCORE – FEELING ACROSS AND UNDER SHORT RIBS	DESCRIPTION – HOW IT FEELS – COMPARED TO AN 'AVERAGE' HAND
1.0 	The ends of the short ribs feel like the ends of your fingertips. When you push your fingers under the short ribs, there is no muscle underneath, just skin. Spine is prominent. There is virtually no muscle on the back and it feels concave.
2.0	Muscle depth under short ribs equivalent to distance from first knuckle to finger tip. Can feel spine. Back muscle is slightly concave and not rounded.
2.5 	Muscle depth under short ribs about equivalent to distance from second knuckle, to first knuckle when fingers are flexed. Need some pressure to feel short ribs. Some cover on spine, back muscle flat.
3.0 	Muscle depth under short ribs about equivalent to distance from 3rd knuckle to 2nd knuckle, when fingers are flexed. Need moderate to strong pressure to feel short ribs. Back muscle rounded.
4.0 	'Prime'. Can only feel short ribs with really strong pressure. Back is rounded with plenty of fat cover. Muscle under short ribs deep - nearly the distance from first knuckles to the beginning of your wrist joint.
5.0	Obese. Fat rolls either side of spine. Spine is in a dimple. Impossible to feel short ribs - fat either side of tail head. Almost never see in a commercial flock.

Ewe Body Condition Scoring Made Easy - Courtesy of Totally Vets, Fielding

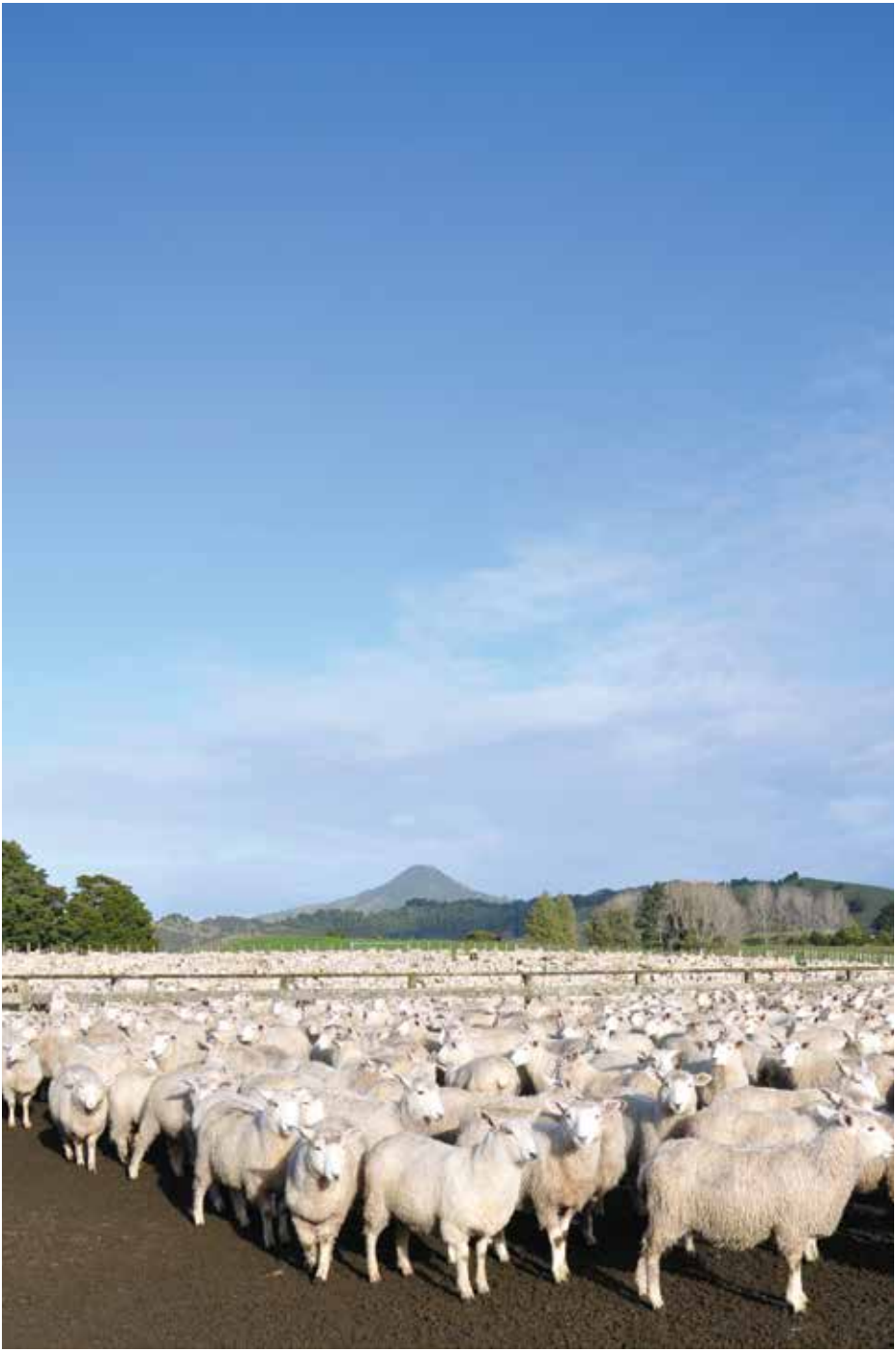
Acknowledgements

- Trevor Cook of Totally Vets for helping with the video and providing resources for this presentation.
- "The effect of multiple-bearing ewe nutrition and condition". Presentation -Paul Kenyon, Massey University.
- "Management of your ewe flock from weaning to breeding". Presentation by Paul Kenyon, Massey University.
- Lamb survival presentation by Dr Julie Everett-Hincks, AgResearch.
- B+LNZ R&D Briefs and other farmer-funded papers.
- Graphics from www.agric.wa.gov.au/PC_91909.html.
- Graphics from Country Wide Heartland Sheep.

More publications & resources

- B+LNZ YouTube video "Ewe Body Condition Scoring".
- B+LNZ DVD "Ewe Body Condition Scoring".
- B+LNZ Flock Master Manual.
- B+LNZ A guide to improved lambing percentage: 200 by 2000.
- B+LNZ 400 Plus - A Guide to Improved Lamb Growth.
- FITT Final Report 09FT214 "The life and times of tail end ewes".

For these publications phone 0800 BEEFLAMB (0800 233 352) or visit beeflambnz.com




beef+lamb
new zealand