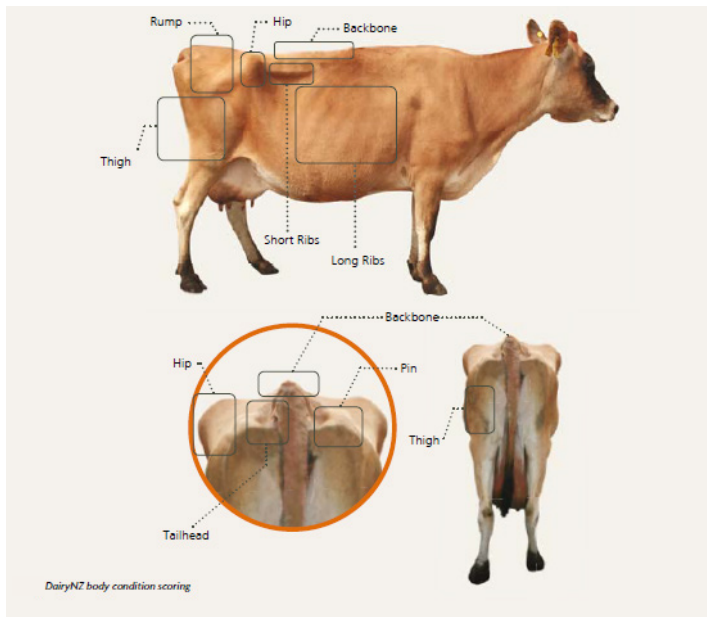


Body Condition Score

A cow's body condition score (BCS) gives an indication of her body fat reserves. The cow's BCS or change in BCS over a period of time is a reliable indicator of the cow's nutritional status. Achieving target BCS at key critical times of the year is important to optimise milk production, reproduction, cow health and welfare. BCS targets have been established from both New Zealand and international research and a 1 to 10 scoring system is used in New Zealand. BCS takes into account the fat reserves of the cow over 8 body points as shown in the figure below.



TARGETS

To optimise the herd's performance, mature cows should calve at BCS 5.0 (first and second calving animals at BCS 5.5) with not more than 15% of cows below BCS 5.0 or above BCS 5.5. Other key targets include:

- A BCS loss post-calving of not more than 1.0 score.
- An average BCS of at least 4.0, but more ideal 4.5, at planned start of mating with not more than 15% below 4.0.
- BCS of at least 4.0 when 100 days from expected calf due date.
- BCS of 4.5 when dried off at end of lactation. This will allow a 0.5 BCS gain over the dry period (assuming an average dry period length of 60 days and sufficient feed available).

The effects of BCS on subsequent reproductive performance

BCS can have a significant effect on herd reproductive performance as shown in the table below, which summarises individual cow BCS collected by XLVets before planned start of mating and their subsequent 6-week in-calf rate.

As we can see, cows calving in BCS 3.0 had on average 13% lower 6-week in-calf rate than cows in BCS 4.0, and cows with a BCS of 3.5 had on average 6% lower 6-week in-calf rate than cows in BCS 4.0.

BCS	Average	Herd 1		Herd 2		Herd 3		Herd 4	
		6wk ICR	# cows	6wk ICR	# cows	6wk ICR	# cows	6wk ICR	# cows
BCS 2.5				50%	2				
BCS 3	61%	67%	12	66%	32	70%	10	42%	12
BCS 3.5	68%	66%	301	67%	239	65%	103	72%	173
BCS 4.0	74%	75%	831	72%	422	73%	323	77%	606
BCS 4.5	76%	81%	307	72%	183	70%	287	80%	222
BCS 5.0	80%	95%	22	78%	9	75%	97	72%	18
BCS 5.5	81%	50%	2	100%	3	75%	28	100%	1
BCS 6.0	44%					44%	9		
BCS 6.5	50%					50%	2		

The relationship between pre-mating BCS and 6-week in-calf-rate for 4 herds with recorded individual body condition scores done September 2014 (PSM October 2014)

When should we get cows assessed?

The most important time to BCS cows is during summer and autumn. This allows individual groups of cows in need of more BCS gain to be managed preferentially to ensure BCS targets at calving are met.

A pre-Christmas assessment determines if cows have gained BCS since planned start of mating and a management plan for the autumn can be set up.

Assessing cows in mid-February to mid-March determines if the management plan is working or whether some cows should be dried off early, milked once-a-day (OAD) or preferentially fed.

Assessing BCS pre-calving (in springer mob) determines if the autumn management plan achieved the calving BCS targets and whether there is a need to re-assess management practices for next autumn.

An assessment of BCS at planned start of mating helps determine how much BCS cows lost between calving and mating.

This will identify if getting cows back in calf is at risk as well as whether anything should have been done differently to prevent the BCS loss.

Who should assess BCS?

Farmers have a duty of care for livestock under their management and as such should be aware of BCS and be able to identify cows in need of extra attention.

However outside expert assessment provides clarity and unbiased objectivity particularly if the assessor is observing many other herds other than just the farmer's cows.

XLVets clinics can provide assessors certified in the New Zealand system and can also help to plan reaching BCS targets with tailored advice on which cows need preferential treatment such as once a day milking, preferential feeding, strategic drying off and feeding of dry cows.



For more information contact your local XLVets practice

