

Better returns from Body Condition Scoring (BCS) beef cows and heifers

Body condition scoring (BCS) is a technique used for assessing the energy reserves of livestock at regular intervals. It uses a scale from 1, very thin to 5, very fat. Condition scoring provides a guide to the nutritional status of the animal and should be used to adapt feeding strategies to ensure that cows are in the correct condition for each stage of their production cycle.





Why Body Condition Score (BCS)?

Body condition scoring is a key tool for suckler producers to help them optimise health, welfare and fertility, whilst minimising calving difficulties and production costs.

Optimise health & fertility

Body condition score at calving is closely related to how quickly cows start cycling after calving. Cows in the correct body condition score at calving (2.5-3.0) tend to have a shorter interval to first heat and get in calf sooner.

→ Take note of any cows that have lost body condition unexpectedly or are failing to gain body condition when expected as this could be an indicator of an underlying health problem. Consult your vet about investigating such cases.

Minimise calving difficulties

In general, both overfat or thin BCS increases the risk of calving difficulties. Cows which are too fat in late pregnancy will have increased risk of calving difficulties due to deposition of fat narrowing the birth canal. Conversely cows that are too thin can suffer problems at calving time, they also produce less colostrum and weak calves.

→ At winter housing, condition score cows to ensure they are grouped and fed to achieve target body condition 6 weeks before calving starts.

Managing BCS throughout the year

BCS tends to vary throughout the year with feed supply, however it is recommended to avoid extreme and rapid changes in BCS.

➔ Avoid excessive loss of body condition and cows falling below BCS 2.5. If suckling cows are too thin then wean earlier than usual to enable condition to be regained.

Achieving one calf per cow per year

Achieving a 365-day calving interval and compact calving period relies on cows being in good body condition and fit and healthy at calving and subsequently during the breeding season.

The average gestation length for commonly used terminal sires is 280-290 days, leaving only 80 days for the uterus to recover after calving, and the cow to start cycling again and become pregnant.





Problems associated with too thin or too fat cows

Thin condition BCS 1-2	Fat condition BCS 4-5
Failure to cycle and conceive	Failure to cycle and conceive
Increased calving difficulty	Increased calving difficulty
Poor calf vigour	Costly to maintain

When to BCS?



- A. Avoid changes to BCS within six weeks of calving.
- **B.** Very thin or fat cows need careful observation around calving as they have an increased risk of calving difficulties. They may also be more prone to other health problems such as milk fever.

After calving, group thin cows and first calvers together to give them access to the best grazing or feed. Aim to have females on a rising plane of nutrition up to service time and maintain good levels of nutrition until at least 6 weeks after service. To maintain a 365 day calving interval, cows need to be back in calf 12 weeks (80 days) after calving.

C. Thin cows will have poorer conception rates than those in better condition. The breeding season coincides with early lactation and the associated increased nutrient demand. The level of feeding during the breeding season should aim to avoid loss of body condition and ideally maintain/ increase BCS from calving to six weeks after conception. This will encourage bulling activity, implantation of the embryo and reduce early embryo losses.

D. Increase body condition gradually during mid-pregnancy for spring calvers. Weaning is a good tool for managing body condition. Wean early if cows/heifers are in poor body condition or if feed supplies are short. Conversely, weaning could be delayed for cows carrying excessive condition.

If possible, group cows according to body condition score during the housing period so feeding can be adapted, allowing cows to either maintain or change condition as required.

Target body condition scores for cows and heifers

	Spring calving herds	Autumn calving herds
Calving	2.5-3.0	3.0
Service	2.5-3.0	2.5-3.0
Housing	3.0-3.5	3.0

How to BCS?

When assessing BCS, handle animals on their left side, as seen from behind, using the same hand from cow to cow. Large amounts of kidney fat on the right hand side can be misleading when assessing fat cover. It is also important not to confuse assessment of animal conformation with body condition, use your hands to assess if you are feeling fat or muscle.

Loin area (Spinous Processes)

- The loin is scored by feeling the horizontal projections of the vertebrae and the amount of fat between them.
- Grip the outer edges of the loin with the thumb curled under the ledge formed by the horizontal processes of the spine.
- The ball of the thumb is used to feel the thickness of fat over the bone.

Ribs

• The ribs are scored using the flat of the hand and finger-tips to feel the amount of fat over them.

Tail head and pelvic (hip and pin) bones

• Assess the fat deposits around the tail head and over the pelvic bones.

An overall view

• An overall visual assessment is also important. Be aware that gut fill and pregnancy can change the appearance of moderately fleshy cows, especially over the ribs or in front of the hips.



What do you feel?

Score	Description		
1	Tail head Loin Ribs	– deep cavity with no fatty tissue under skin. Skin fairly supple, coat condition often rough – spine prominent and horizontal processes sharp – sharp with no fat cover	
2	Tail head Loin Ribs	 shallow cavity but pin bones prominent; some fat under skin. Skin supple horizontal processes can be identified individually with ends rounded can be identified individually but feel rounded rather than sharp 	
3	Tail head Loin Ribs	 fat cover over whole area and skin smooth but pelvis can be felt, but only with firm pressure end of horizontal process can only be felt with pressure; only slight depression in loin individual ribs can only be felt with firm pressure 	
4	Tail head Loin Ribs	 completely filled and folds and patches of fat evident cannot feel processes and will have completely rounded appearance folds of fat developing over ribs 	
5	Tail head Loin Ribs	 almost buried in fatty tissue pelvis impalpable even with firm pressure covered with thick layer of fat 	

Source: Defra 2001 – PB6491

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