

Body Condition Scoring (BCS) using the Penn State University method

What is Body Condition Scoring (BCS)?

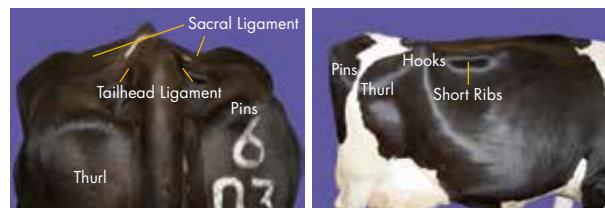
BCS was developed around 20 years ago and is widely accepted as a practical means of assessing the impact of negative energy balance in early lactation.

This system concentrates on the accurate determination of scores between 2.0 and 4.0 as these are the most critical for management decisions. Scores outside these values are extreme, those below 2.0 are seriously under-conditioned and require immediate attention as do those at 4.0 and above which require controlled weight loss.

Scores range from 1 to 5 in increments of 0.25.

This system concentrates on accurately assigning scores from 2.0 to 4.0.

Scorers using this system will be able to assign BCS consistently and accurately.



When to Condition Score

The change in Body Condition Score is more important than the absolute value, therefore scoring should be undertaken regularly. A good routine involves scoring:

Stage of lactation	Target BCS
At calving	2.5 - 3.0
60 days post-calving	2.0 - 2.5
100 days before drying off	2.5 - 3.0
At drying off	2.5 - 3.0

Further information on how to Body Condition Score can be found on the DairyCo website, including a short training video.

Step 1



V - angle BCS less than or equal to 3 follow the **YELLOW** steps

Assess the angle between the hooks and pins.

- The first decision you make will divide cows into two groups: those with a BCS less than or equal to 3 and those with a BCS greater than 3.
- This decision may be the most difficult one in the BCS process, especially if the cow is near a 3.0 or 3.25 BCS.



U - angle BCS greater than 3 follow the **GREY** steps

Step 2 (BCS less than or equal to 3)

Standing at the rear of the cow, assess whether the hooks are rounded or angular.



Rounded Hooks

- BCS = 3.0



Angular Hooks

- BCS = 2.75 or less

Step 2 (BCS greater than 3)

Standing at the rear of the cow, assess whether both the sacral and tailhead ligaments are fully visible.



Sacral Visible

Tailhead Visible

- Both ligaments easily seen
- BCS = 3.25

Step 3

Refine the score '2.75 or less' by evaluating the PINS.



Padded Pins

- BCS = 2.75

Step 4

Now we need to feel the pins to assess the presence of a palpable fat pad (one that is not visible to the eye but can be felt) to refine the score of '2.5 or less'.



Palpable Fat Pad on Pins

- Fat pad present
- BCS = 2.5



No Fat Pad on Pins

- No fat pad
- BCS = 2.25 or less

Step 5

Evaluate the visibility of the short ribs.

- Look for the bony ridges of the short ribs.
- Estimate the distance that these ridges are easily seen from the tip of the short ribs to the spine.
- Are the ridges visible half of the distance, three-quarters of the distance, more?



Visible $\frac{1}{2}$ the distance

- Ribs visible halfway to the spine
- BCS = 2.25



Visible $\frac{3}{4}$ the distance

- Ribs visible $\frac{3}{4}$ of the distance of the spine
- BCS = 2.0

Step 6

Cows with sawtooth spine and ribs are severely under-conditioned and will score less than 2.0.

Step 3

Continue to assess the visibility of the ligaments. The tailhead ligament will become covered in fat first.



Sacral Visible

Tailhead Barely Visible

- Tailhead ligament partly covered in fat
- BCS = 3.50

Step 4

The tailhead is now completely covered. Assess the visibility of the sacral ligament to determine the score of 3.75 or 4.0 or more.



Sacral Barely Visible

Tailhead Not Visible

- Neither ligament easily seen
- BCS = 3.75



Sacral Not Visible

Tailhead Not Visible

- Neither ligament visible
- Will score 4.0 or more



All bony prominences rounded and covered in fat

- Tailhead buried in fat
- Fat deposits readily seen on rump and legs
- BCS = 5