

ACTION



**ON
ANIMAL
HEALTH
AND
WELFARE**

Condition scoring of beef suckler cows and heifers



DEFRA

Department for
**Environment,
Food & Rural Affairs**

Condition scoring of beef suckler cows and heifers

Introduction

Condition scoring is a technique used for assessing the body condition of livestock at regular intervals. The purpose of this booklet is to show how the simple technique of body condition scoring can contribute significantly to good husbandry, welfare and management of beef cows. This will help to ensure that the cow is in the correct condition for each stage of her annual cycle and that appropriate dietary changes can be made in order to correct any deficiencies.

Suckler cows have the ability to lay down fat when feed is plentiful and to mobilise it when the feed supply does not meet nutritional demands. In general, excessive feeding in late pregnancy will increase the birth weight of the unborn calf leading to calving difficulties without improving the body condition of the cows. A low feeding level at the time of service can undermine reproductive efficiency. The condition scoring technique links together three major factors:

- **Good Welfare.** Calving difficulties and calf losses are reduced.
- **Good Husbandry.** Diets can be formulated and fed according to the needs of the cow and calf.
- **Good Performance.**

Why Condition Score?

The purpose of condition scoring is to achieve a balance between economic feeding, good production and good welfare.



Overfatness coupled with the use of large terminal sires (e.g Charolais, Belgian Blue) will accentuate the risks from difficult calving. The problem can be particularly pronounced under lowland conditions. However, most suckler herds are kept on the hills and uplands where being too thin as opposed to too fat is the main welfare concern. This can often be seen in Continental cross cows in their first and second lactations. These animals are still growing and require nutrients to build up muscle and bone. Moreover these relatively young animals do not compete well with older cows for winter food.

Pregnant heifers may also require special attention as they need food for their own body growth as well as their unborn calf. They may become 'nutritionally stressed' and lose body condition. Corrective feeding in the last few weeks of pregnancy can lead to large calves with increased calving difficulties.

Spring Calvers

Spring calvers should be in good body condition in late autumn. A programme of planned weight loss resulting in financial savings on feed can then be installed for the winter. Excess weight loss should be avoided as this can result in the production of poor quality colostrum and a delay in return to service. A delay in weaning at the start of winter feeding can also have similar consequences.

Autumn Calvers

Excessive body condition leading to calving difficulties is often seen in this class of animal. However, an inappropriately low body condition at calving would undermine the milking ability of the cow and adversely affect the onset of oestrus.



Stage of Production and Body Condition:–

- Pre-calving** (drying off) Condition should be “fit not fat”. For autumn calving sucklers, some gain in condition is inevitable under ‘normal’ grazing but it should not be excessive. On the hill, spring calvers may be losing condition and it is important to control this weight loss by providing supplementary feed to avoid suckling and subsequent fertility problems.
- At calving** Cows should not calve in an excessively fat condition as this can lead to calving difficulties. Spring calving sucklers in poor condition can be predisposed to milk fever.
- Early Lactation** Extremely thin cows may not produce sufficient milk for their calves. Rations should be formulated according to factors such as the quantity of milk produced, cow body condition, breed, age and climatic conditions. Outwintered cows for example will require more energy than those kept in buildings.
- At service** Good fertility is achieved only when cows are gaining body condition, an adequate supply of energy is essential.
- At weaning** Spring calving sucklers normally gain body condition over the summertime. If feed is scarce some supplementary feed may be required in order to achieve the desired level of body condition. The energy requirement of cows declines considerably once they are dried off and early weaning may be justified under some circumstances.



How to Body Condition Score

Body condition is assessed on a scale of 1–5. Score 1 is extremely thin and score 5 is extremely fat. Ideally body condition should be assessed to the nearest half score. Consistency between assessments is vital to the success of the technique.

Consistency in the technique is the key to good condition scoring. The scoring system is designed to cover all breeds of cows, but some allowance should be made for different types. For example the very good conformation of a well-muscled Belgian Blue cross may underlie a low level of body fatness. Conversely Holstein/Friesian crosses with a poor conformation may be carrying more body condition than is visually apparent. It is very important not to confuse assessment of animal *condition* with *conformation*.

Cows should be handled at the tail head, ribs and loin area. The main assessment is usually based on the tailhead with the fat covering on the loin and ribs used to confirm the body condition score. The operation should be carried out quietly and carefully using the same hand from cow to cow. An overall visual inspection is also important.

The Tail Head

Assess by standing directly behind the cow. The tailhead is scored by feeling for the amount of fat around the tailhead and the prominence of the pelvic bones.

Loin and Ribs

Stand to the side of the cow. The loin is scored by feeling the horizontal and vertical projections of the vertebrae and the amount of fat in-between them.

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



Description of Scores

Score	Condition	Detailed Description	Visual Guide
1	Poor (very thin)	<p>Tail head – deep cavity with no fatty tissue under skin. Skin fairly supple, coat condition often rough.</p> <p>Loin – spine prominent and horizontal processes sharp.</p> <p>Ribs – sharp with no fat cover.</p>	
2	Moderate	<p>Tail head – shallow cavity but pin bones prominent; some fat under skin. Skin supple.</p> <p>Loin – horizontal processes can be identified individually with ends rounded.</p> <p>Ribs – can be identified individually but feel rounded rather than sharp.</p>	



Score	Condition	Detailed Description	Visual Guide
-------	-----------	----------------------	--------------

2.5



3 Good

Tail head – fat cover over whole area and skin smooth but pelvis can be felt, but only with firm pressure.



Loin – end of horizontal process can only be felt with pressure; only slight depression in loin.



Ribs – individual ribs can only be felt with firm pressure.



Score	Condition	Detailed Description	Visual Guide
4	Fat	<p><i>Tail head</i> – completely filled and folds and patches of fat evident but soft to touch.</p> <p><i>Loin</i> – cannot feel processes and have completely rounded appearance.</p> <p><i>Ribs</i> – folds of fat developing over ribs.</p>	
5	Grossly fat	<p>Bone structure of the animal no longer noticeable.</p> <p><i>Tail head</i> – almost buried in fatty tissue.</p> <p><i>Loin</i> – pelvis impalpable even with firm pressure.</p> <p><i>Ribs</i> – covered with thick layer of fat.</p>	



When to Condition Score Suckler Cows and Heifers

Ideally, condition scoring should be carried out at key times in the production cycle. These are generally before calving, at service, housing and turnout. However, scoring at specific times is not always possible and the procedure may only be carried out at convenient times when cattle are handled for routine veterinary treatments or housing.

Target Scores

Suckler Cows and heifers	Autumn Calving	Spring Calving	Summer Calving
at calving	3	2–2.5	2–2.5
at service	2.5–3	2.5	2.5–3
at turnout	2	2	2
at housing	2.5–3	3	2.5

Modifying Condition Score

Body condition should not be altered rapidly. Always try to change body condition in **mid** pregnancy. Attempting to improve body condition in late pregnancy can lead to bigger calves and more calving difficulties, **not** fatter cows. **Specialist advice should be obtained whenever there is concern about the general condition of the herd.**

One of the biggest influences on body condition is milk production. For example the energy needed to maintain the liveweight of a 550 kg cow producing 5 litres of milk/day is reduced by about 30% once she is dry. It is obvious therefore that weaning can be a useful tool for managing cow condition. If cows are in poor condition early weaning should be considered.

With spring and summer calving suckler cows in the hill/uplands and some lowland farming situations, controlled weight loss



during the wintertime is normal. If cows start the winter in very good condition, then suitable winter rationing can result in a satisfactory body condition being achieved by calving time. If weight loss during pregnancy has been excessive, however, supplementary feeding should be started immediately post-calving. This is particularly important to help cows get back to service condition in good time.

Lowland spring calvers can sometimes become too fat over the wintertime when offered generous amounts of good quality forage (e.g silage). A policy of controlled feeding is necessary in this situation.

For autumn calving sucklers, good grazing in late summer can produce excessive weight gain, and if necessary it should be restricted. There may be a case for putting animals onto bare pasture with straw to maintain rumen function. However, such animals should be closely monitored.

Conclusion

Condition scoring is an easy technique to learn and can be applied even to groups of animals in the field, although individual handling is necessary in most situations. It allows essential management decisions to be made and enables high standards of husbandry to be achieved – and ensures costly welfare problems are avoided.

Remember:

It is unacceptable to neglect or ignore any “at risk” thin, weak or excessively fat cows or heifers. It is the responsibility of all herdsmen or herd owners to take all practical measures to ensure that the body condition of all cows is appropriate to the production system employed. Assessing and rectifying



body condition if necessary should be second nature to all good stockmen.

Farmers are reminded to apply the provisions of DEFRA's Code of Recommendations for the Welfare of Cattle (Ref: PB0074).



NOTES:



NOTES:



For further advice and information on farm animal welfare.

For advice on cattle welfare and on any outbreak of disease – consult your veterinary surgeon.

General welfare advice on cattle welfare may also be obtained from:

- The State Veterinary Service (Local Animal Health Office – address and telephone number in your local telephone directory).
- Specialist consultants.

Other publications available from DEFRA that may be of interest

PB

Number	Title
0074	Codes of Recommendation on the Welfare of Livestock (Cattle)
0621	Farm Fires: Advice on Farm Animal Welfare
1147	Emergencies on Livestock Farms
1151	Lameness in Beef Cattle and Dairy Followers
1381	Guidance on the Transport of Casualty Farm Animals
1875	Condition Scoring of Sheep
2531	Summary of the Law relating to Farm Animal Welfare
2594	Explanatory Guide to the Welfare of Animals (Slaughter or Killing) Regulations 1995
3335	Improving Calf Survival
3426	FAWC Report on the Welfare of Dairy Cattle
3480	Condition Scoring of Pigs
4020	Lameness in Dairy Cattle
4516	TB in Cattle – Reducing the Risk
4517	Farm Biosecurity – Protecting Herd Health
4661	Mastitis in Dairy Cows

Copies of the above publications can be obtained, free of charge from:

DEFRA Publications
ADMAIL 6000
LONDON SW1A 2XX
Tel: 0645 556000

The Welfare of Farmed Animals (England) Regulations 2000 can be viewed on-line at www.legislation.hmso.gov.uk/si/si2000/20001870.htm

Printed copies (ISBN 0 11079 290 4, Price £3.00) are available from HMSO.
Tel: 0870 600 5522 or contact any Stationery Office Bookshop/Agent.

DEFRA Publications ONLINE: www.defra.gov.uk/corporate/publications/pubfrm.htm

DEFRA

Department for
Environment,
Food & Rural Affairs

Produced by the Department for Environment, Food & Rural Affairs

© Crown Copyright January 2001 PB6491

Printed on recycled paper containing 75% post consumer waste
and 25% Elemental Chlorine Free virgin pulp.