Guidance on sampling:

Individual measures	
1a. Mobility – individual scoring 2. Body condition 3. Cleanliness 4. Hair loss, Lesions 5. Swellings	• Assessed on **20 cows** from the dairy herd, sampled randomly from **all groups of milking cows** by assessor. Lying cows need not be included if it might risk their welfare. • **3** or more cows out of the 20 to be assessed jointly with the stockperson (record assessor's score only).
Herd measures	
6. Broken tails 7. Response to stockperson	• Assessed across **all milking cows.**
All animals on farm	
8. Cows needing further care	• Assessed across **all animals on farm.** • For example identify any mobility score three cows not receiving adequate care / treatment.
Records measures	
1b. Mobility – assessment 1c. Mobility – lameness per 100 cows 9. Mastitis 10. Calf / Heifer survivability 11. Cull and Casualty Cows	• From records.

1. Mobility	
a) Individual scoring	**Individual measure**

Sample: **20 cows** selected at random (**3** or more assessed jointly with stockperson)

Assess using the DairyCo scoring method. Observe cows, ideally on a hard (i.e. concrete) non-slip surface. Monitor each cow individually allowing them to make between 6-10 uninterrupted strides. Watch the cow from the side and the rear.

Scoring:

0/1 =   Good/Imperfect mobility

Walks with even weight bearing and rhythm on all four feet, with a flat back; long fluid strides possible; or steps uneven (rhythm or weight bearing) or strides shortened; affected limb/s not immediately identifiable

2   =   Impaired mobility

Uneven weight bearing on a limb that is immediately identifiable and/or obviously shortened stride
(usually with an arch to the centre of the back)

3   =   Severely impaired mobility

Unable to walk as fast as a brisk human pace (cannot keep up with the healthy herd) and signs of impaired mobility (score 2)

Please indicate if mobility scoring is carried out at pasture.

Images kindly supplied by DairyCo

b) Assessment	**Records**

Verify if mobility scoring is being carried out on farm.

Check and comment on who is carrying this out, any formal training they have received and the frequency and scope (e.g. whole herd) of mobility scoring conducted.

c) Lameness per 100 cows	**Records**

From the RT Herd Health Plan (Annual Monitoring and Review section) record the number of recorded cases of lameness per 100 cows for the previous 12 months.

2. Body condition	Individual measure

Sample: **20 cows** selected at random (**3** or more assessed jointly with stockperson)

Visually assess cattle based on the Defra condition scoring method, viewing the animal from behind and from the side, the tail head and loin area:

Scoring:

Thin = **Defra score 1 to less than 2**

Score 1: Tail head – deep cavity with no fatty tissue under skin.
Skin fairly supple but coat condition often rough.
Loin – spine prominent and horizontal processes sharp.

The following list should assist in making a confident decision with cows in BCS <2.

Individual vertebra will be distinct along the backbone.
Individual horizontal processes are visible as individual bones and give a prominent shelf-like appearance to the loin.
Outline of 4 or more ribs are visible.
Outline of the hook bone is visible and angular with no fat padding.
Outline of the pin bone is visible and angular with no fat padding.
Tailhead is prominently visible. Either side of tailhead is sunken and hollow. There are folds of skin in the depression between the tail head and pin bone.
Thurl is sunken and curved in.
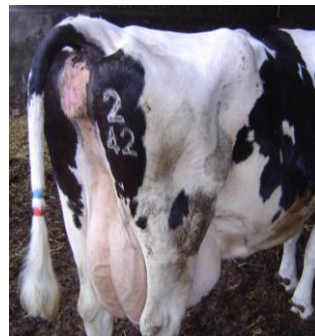
Moderate = Defra score 2 or 3 to less than 4

– Good

Score 2: Tail head – shallow cavity but pin bones prominent; some fat under skin, skin supple.
Loin – horizontal processes can be identified individually with ends rounded.

Score 3: Tail head – fat cover over whole area and skin smooth but pelvis may be seen.
Loin – end of individual horizontal process cannot be seen; only slight depression in loin.

Fat = **Defra score 4 to 5**

Score 4/5: Tail head – completely filled or buried and folds and patches of fat evident.
Loin – cannot see horizontal processes and completely rounded appearance (a slight loin depression may still be seen).

The following list should assist in making a confident decision with cows in BCS ≥4.

Back is solid and straight.
Individual horizontal processes are **no** longer visible as individual bones but a rounded shelf-like appearance is still observable.
Hook bones are rounded with obvious fat padding or may not be obviously visible because they are buried in fat.
Pin bones are rounded with obvious fat padding or may not be obviously visible because they are buried in fat.
Tail head and thurl is filled in.

3.	Cleanliness	Individual measure

Sample: **20 cows** selected at random (**3** or more assessed jointly with stockperson)

Visually assess the one randomly selected <u>side</u> of the animal <u>and behind</u>, only including the hind quarters to coronary band and udder:

Scoring: **0 = Clean**
No dirt or only minor splashing present

2 = Very Dirty
An area of dirtiness (i.e. layer or plaques of dirt) amounting to at least forearm length (40cm) in any dimension.
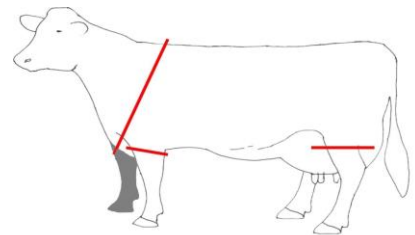

4.	Hair loss and Lesions	Individual measure

Sample: **20 cows** selected at random (**3** or more assessed jointly with stockperson)

Visually assess the following regions of one (randomly selected) side of the animal, from a distance not exceeding 2m (see picture):

a. Head & Neck
b. Body (including flank, back & hindquarter)
c. Front leg
d. Rear legs (including outside of the near leg and inside of the far leg as well as the udder with teats)

Scoring:

0 = No hair loss or lesion
No lesions or hairless patches ≥2cm diameter.
No hair is missing or any hairless/bald patch is smaller than a £1 coin (2cm diameter).

H = Hairless patches
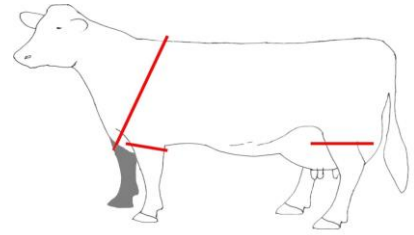One or more hairless patches (may include scars) ≥2cm diameter

L = Lesion
One or more lesions (areas of skin damage i.e. wound or scab) ≥ 2cm diameter.
(Score as a lesion even if accompanied by a hairless patch. Do not include scars)

5. Swellings	Individual measure

Sample: **20 cows** selected at random (**3** or more assessed jointly with stockperson)

Visually assess the following regions of one (randomly selected) side of the animal, from a distance not exceeding 2m (see picture):

 a. Head & Neck
 b. Body (including flank, back & hindquarter)
 c. Front leg
 d. Rear legs (including outside of the near leg and inside of the far leg as well as the
   udder with teats)

Scoring:

0 = No swelling

No swelling or no swelling ≥2cm diameter (smaller than grape-sized)

1S = Mild swelling (Not included in Red Tractor)

Mild swelling is such that the normal anatomy of the area is enlarged, poorly defined or obscured.
Around the hock and the knee this will be apparent as a lack of definition of the tendons and other structures around the joint, and the hock will appear to have lost the 'waist' to the joint.
On other parts of the body the swelling will be 2- 5cm in diameter e.g. a golf ball.

2S = Substantial swelling

Substantial swelling is an abnormal enlargement which is a prominent / pronounced extension away from the body.
Around the hock and the knee (carpus) this will be apparent as an obviously rounded swelling >5cm in diameter, e.g. the size of a clementine.
On other parts of the body the swelling may be long, rather than round.

NB: swollen hocks = a thickening of the joint such that the usual joint anatomy becomes poorly defined or obscured.

6. Broken tails	Herd measure

Whilst assessing the herd, record the number of animals that show evidence of a broken tail, including tails that are bent, short or injured.

Investigate and record possible causes of any broken tails observed.

7.	Response of cattle to stockperson	Herd measure

Check whether the person present for the assessment is the regular stockperson.

Throughout the visit, observe the response of the cattle to the stockperson as they approach and interact with the cattle. As far as possible assess response to the stockperson alone, rather than the assessor.

Scoring: **0 = Sociable (to the stockperson)**
1 = Relaxed
2 = Nervous

8.	Cows needing further care	All animals on farm

Assess the whole herd - including the milking herd, dry cows, in-calf heifers, calves, hospital pens and animals that are due to leave the farm.

Record and comment on the number of any sick or injured cows that would benefit from further intervention (including mobility score 3 cows).

Further interventions could include further treatment, hospitalisation (i.e. removal from the main herd) or culling.

Do not include sick or injured cows already receiving suitable care.

9.	Mastitis	Records

Record the number of recorded cases of mastitis per 100 cows for the previous 12 months.

This is calculated as: No. of recorded cases of clinical mastitis in the herd over the previous 12 months x100

Average no. of cows in the herd over the previous 12 months

1. Only include cases of clinical mastitis which can be identified on the basis of the relevant clinical signs, which include: observable changes in the cow's milk (e.g. altered milk colour or consistency and/or the presence of clots, flecks/flakes, or pus in the milk); and/or observable changes to the cow's udder (e.g. swelling, reddening, hardening, and the udder being hot or painful to touch) - which may or may not be accompanied by general signs of illness, such as increased body temperature, lack of appetite, depression etc. You should not include instances of subclinical mastitis (i.e. cases of high milk somatic cell count without any of the above clinical signs) or dry cow therapy treatments

2. Count cases at the cow rather than the udder quarter level, i.e. if a cow has two affected quarters this should be counted as a single case

3. Use the 7 day rule to identify a 'new case' in a previously affected cow: if mastitis clears up and then recurs in the same cow after a period of 7 or more days count this as a new case. If it recurs sooner than this, however, it should be thought of as a recurrence of the previous case (regardless of which quarter is affected) and therefore not counted a second time

10.	Calf / Heifer Survivability	Records

Record the number of losses per 100 cows calved (for the previous 12 months) for the following categories:

a) 0 - 24hrs - all calves (including stillborn)
b) 24 hrs - 42 days - all calves
c) 42 days - 1st calving - dairy heifers
d) 1st calving - 2nd calving - dairy heifers.

11.	Cull and Casualty Cows	Records

Check farm records and record the number of animals in the last 12 months per 100 cows for the following categories:

a) No. planned culls
b) No unplanned culls or casualty cows (died or killed on farm) in the last 12 months. Please, where possible, also record reasons here
c) No. of enforced culls, e.g. TB.