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AWARE

Organic Inspector Trainings for Animal Welfare

IO2 – WP 3

Report on the Development of a Common Inspection Concept

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In Cooperation with

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List of Abbreviations

BCS	Body condition score
EU	European Union
IO	Intellectual Output
WP	Work package

1 Introduction to AWARE Intellectual Output 2 – Development of the Common Inspection Concept

The objective of the AWARE project is to develop a common approach to the assessment of animal welfare in organic farming during the inspection process. The project work plan envisages that the objective will be fulfilled through a number of logical steps. These steps are implemented through several discrete intellectual outputs (IO) /work packages (WP). The first of these steps 'Report on existing inspection concepts for animal welfare in organic production for different animal species' has been completed (intellectual output 1, full report available here). The second step, intellectual output 2 (WP 3), which forms the subject of this report, is to develop a common inspection approach for animal welfare inspections in organic farming including exemplary protocols, procedures and forms. Subsequent steps will turn the common inspection approach into a training package (an E-learning–tool), support training of inspectors in a number of countries and finally ensure wide dissemination of the project outputs.

The work of IO2 has been divided into a number of steps. These are:

1. Development and agreement of the features of a common inspection approach to animal welfare assessment including animal related indicators
2. Development of an exemplary common inspection approach including draft protocols
3. Adjustment of the inspection concept and protocols in the light of feedback received

2 Agreement of the features of a common inspection approach to animal welfare assessment including animal related indicators

The starting point for the development of the common inspection approach is primarily informed by the work undertaken in intellectual output 1 and it was, therefore, appropriate for the first phase of IO2 involved a review and evaluation of the key findings of IO1.

2.1 Review and evaluation of the findings of work package 2

Intellectual output 1 involved a wide-ranging review of existing inspection concepts for different animal species. In relation to animal welfare assessment, including the applicability and validity of animal-related welfare indicators in organic inspection the findings and conclusions reported are summarised as:

1) The current inspection concept according to the EU legislation on organic production mainly relies on the use of strict resource-based criteria. These criteria are assumed to deliver good animal welfare, but this assumption or inference of good animal welfare is not underpinned by any formal or systematic criteria for assessing the impact of resources and management on the actual level of welfare of the animals at the time of inspection.

2) In order to guard against the possibility of poor welfare and as a means to further improve animal welfare on organic farms, inspection concepts which also cover animal-related criteria should be introduced as a way of ensuring a consistent, coherent and objective approach to evaluating the welfare status of animals during the inspection process.

3) The concept of animal-related welfare indicators is robust and has been piloted and validated by scientific research projects. The main characteristics of the inspection concepts and assessment protocols developed by research projects include:

    - Scientifically valid
    - Meaningful
    - Good repeatability
    - Time consuming
    - Require a high level of specialist knowledge to apply and interpret
    - Applicable in a wide range of farming systems

The protocols developed by research projects clearly provide a strong basis for using this approach to ensure that the high welfare potential of organic farming systems, which is established through the strict requirements on resource provision, is actually being fulfilled through undertaking an objective assessment of the welfare outcomes that are actually achieved. However, IO1 also noted that some critical limitations associated with the

protocols developed by researchers which mean that they are impractical or of limited use in the context of an organic inspection. The key limitations are the time taken (time consuming) and the requirement of a high level of specialist knowledge required to apply and interpret the measures in a robust and repeatable fashion.

The IO1 report went on to identify that only a small number of organisations have developed and piloted the use of animal-related welfare indicators in the context of on farm inspection for organic certification and other relevant farm assurance schemes. The main characteristics of the inspections concepts and protocols developed in this way are:

- Ease of understanding and relevance to the farmer
- Ease of understanding and relevance to the inspector and their role in organic inspection and certification
- Practicability – this relates to the context of a complex organic inspection which must be sensitive to other factors such as additional time taken particularly on farms with more than one species, as well as seasonal influences which determine whether animals are housed or at pasture
- Applicable in the context of organic farming throughout Europe in a range of climatic and geographical conditions

Prior to undertaking IO1 the AWARE project partners had no pre-conceptions about the extent to which animal–related welfare indicators were being used in situations and circumstances that could help to inform the development of the AWARE common inspection approach. The conclusion that the collective experience of the partners represents the current state of applied practice and there are no other significant relevant concepts that the IO2 should be considering was an important finding of IO1. This outcome was, therefore, taken into account in designing the final work plan of IO2. Originally it had been anticipated that a number of other relevant organisations would be identified in IO1 and that they would be involved in the development of the AWARE common approach to inspection through surveys and consultations. The fact that the relevant information and opinions needed to inform the common inspection approach were identified as being within the AWARE partnership meant that it was appropriate to revise the implementation plan for IO2 with the focus now being on maximising the input from the AWARE partners to support the development of the initial draft of the common inspection concept. Additionally, the final conclusions in IO1, that ‘the use of animal-related indicators

during organic inspections is not common and that training of inspectors is perhaps insufficient to support any sophisticated evaluation of the level of welfare achieved on farm' was seen as important in informing decisions about the nature of the AWARE common inspection approach.

2.2 Identification of the key characteristics of the common approach

The methodology adopted to develop an initial draft of the common inspection approach was to use correspondence to exchange views between the AWARE partners and for this dialogue to inform the agenda and provide a framework of content for an intensive two day-workshop attended by the key experts from the AWARE partner organisations. It was agreed that the workshop, in addition to the exchange of project partners about the progress of the project and the organization of functional responsibilities and achievements, would draw on and develop the initial ideas into a draft concept and protocols which could then be reviewed and finalised following the workshop.

Overall framing of the AWARE common inspection approach

The overall approach to framing and developing the common inspection approach was designed to take maximum advantage of existing knowledge and learnings of the AWARE partners. A number of the partner organisations already have some experience of developing, piloting and implementing an approach to inspection of animal welfare in organic farming for various species. The experience gained in each organisation is of course most relevant to the needs and situation of that organisation e.g. country, type of farming and level of awareness of animal welfare issues, but it was apparent that generic lessons learned by the partners formed a very strong basis for the work of IO2. In particular, the wide range of knowledge of developing ideas and approaches that actually work in practice provided a high level of confidence that an AWARE common approach will be practicable and credible.

It was firstly agreed that the AWARE inspection concept should be capable of being presented to potential users as defining the baseline level of competence for any organic inspector carrying out inspections to verify compliance with the EU organic regulations. In order to gain this acceptance, it would be important to ensure that the inspection concept

is seen as relevant in all countries and by all control bodies regardless of the point from which they are starting i.e. taking account of level of expertise, current approach to welfare assessment in organic inspections, level of knowledge amongst inspectors and farmers in different countries. This means that key requirements for the common approach are that it must be easily accessible and as intuitive as possible, with clear, robust criteria. For this to be achieved it was decided to maximise the use of common elements and common terminology in all aspect of the inspection approach. It was agreed that this will allow inspectors and farmers to be clear and confident about those issues that are important to all animals as well as allowing scope to include additional specific critically important measures relevant to particular species or stages of production.

The AWARE experts also identified that it is very important to acknowledge and start with ideas and concepts that are already familiar to all organic inspectors and farmers. For example, this means that protocols and measures need to be clearly relevant and linked to requirements in the EU organic regulations (834/2007 & 889/2008). It was felt that if a clear cross referencing could be achieved that this would be seen as a particularly strong element of the AWARE common inspection approach by potential users. This is because all organic inspectors currently assess the various records and resource based requirements in the EU organic regulation and these are also already reflected in check lists and reports used by all organic inspection bodies. By making these clear links it would be possible to ensure that the common inspection approach starts and is clearly rooted in territory which is very familiar to inspectors and farmers. In taking this approach, the intention was to clearly demonstrate that the AWARE inspection concept is simply a logical and incremental way of improving and harmonising implementation of the EU organic regulation. It was anticipated that cross referencing of welfare outcome measures to requirements of the EU regulation would allow inspectors to feel confident in identifying and drawing up non-compliances. Overall this will result in an approach which easily blends into and supplements the current way in which the livestock elements of organic inspections are carried out. If this objective could be fulfilled then this would help to demonstrate that the AWARE inspection concept is logical, sensible and relevant and to ensure that it is not perceived as an unnecessary imposition of new requirements or inappropriate and irrelevant ‘gold plating’ of the control requirements in the EU organic standards.

The use of animal-related welfare indicators is clearly a key and novel feature of the AWARE inspection concept. However, the intention was to use this element as part of a more structured and systematic way of ensuring that inspectors are paying the level of attention to animal welfare that is genuinely needed to satisfactory evaluate compliance with the organic regulation.

The AWARE partners also agreed that it should be clear that the use of welfare indicators, including the animal related indicators, is not intended to replace or supersede the judgement of the inspector by, for example, setting decertification thresholds. On the contrary, it was decided that the intention of the AWARE common inspection approach should be to underpin and inform the overall impression of the inspector who must continue to take into account all relevant factors when confirming compliance or in identifying non-compliance with the requirements of the EU organic standards. To achieve this, it was anticipated that the collective experience of the AWARE partners would allow them to ensure that each inspection protocol would be carefully structured to prepare, prompt and guide the inspector in systematic, efficient and effective inspection of relevant resources and of the associated animals.

2.3 Development of the draft common inspection approach

Having identified the broad framework for the AWARE common inspection approach an intensive two day-workshop involving experts from the AWARE partners was held in Bristol. The objective of the workshop was, among other topics, to draw together relevant ideas and experience from the partner organisations to develop the detailed inspection procedures and protocols which fulfilled the agreed objective set out in 2.2 above.

The workshop also focussed in this regard on the following topics and priorities:

1. Overall framing of the AWARE common inspection approach including
    a. Clear links and relevance to the conducting of an inspection of organic livestock
    b. Clear links and relevance to the EU organic regulation.
2. Evaluation and agreement of candidate welfare outcome measures including animal-related measures using and building on experience of the AWARE partner organisations.

3. Consideration of the feasibility of developing training and learning resources in the next step of the AWARE project i.e. intellectual output 3.

The importance of the experience of the AWARE partners in already having real world experience of developing and using outcome measures cannot be over stated in terms of how this helped to allow rapid progress in the workshop. The range of possible outcome measure, as indicated in IO2, is potentially very large, but the experience of the AWARE partners in using outcome measures in the context of organic inspections and the need to maintain clear links to the EU organic regulation wherever possible, helped to keep a strong focus on those measure that are most relevant. Of course, there are much more animal welfare indicators than those the AWARE partners chose. Especially indicators of behaviour like flight distance, tongue rolling at cattle, suckling at each other, the way a cow is rising, biting into the bar at sows and so on are important indicators but they are not so easy for the inspector to identify and they are not at as reliable to find at the moment of the inspection as different indicators do. You can control records about claw trimming, milk records, non-return rates, performance of laying eggs, egg quality, use of antibiotics, and so on. These indicators can tell a lot about animal welfare but the AWARE partners decided to assess animal based indicators that are easily to collect in regard to time and inspector's knowledge.

2.3.1 Exemplary AWARE welfare assessment protocols – Introductory description of how to carry out the AWARE inspection protocol

The welfare assessment protocols shall serve as a reference for control bodies, leavin flexibility for their integration into existing inspection concepts.

It was agreed that each inspection protocol should start with introductory elements that give a clear stepwise lead into the inspection. A preliminary section was developed which describes how to apply the protocol and includes practical suggestions as to how to undertake the assessment. Then it is explained why the different indicators are important measures for animal welfare. The layout and much of the content is identical for all protocols, but also includes some tips relevant to each species. As discussed in 2.2 the focus on common elements and themes is seen as important in allowing the inspector to be easily familiar with the protocols and to understand that they can apply core approaches and skills across a range of species allowing them to build and retain their

competence and their confidence in the AWARE inspection approach. The introductory section of the exemplary cattle protocol is presented below by way of an example (figure 1).

Cattle

Assessment protocol

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspection then unannounced inspection should be favoured.
- Inspectors must complete one checklist for each species; if there are differences in the protocol for one species (e.g. cows and calves) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos of all non-compliances made against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the animals assessed. These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.
- For inspector health and safety regards bulls, assessment should be done at a safe distance. This may be from outside the pen if required.

Figure 1: Introductory section of the AWARE cattle protocol (see Annex I for all protocols)

This introductory section starts by reminding the inspector and control body about the importance of carrying out welfare assessments as a regular part of the annual farm inspection and clearly states that non-compliances should be followed up (possibly as an unannounced inspection which may be important to ensure that the true situation on the farm can be assessed) to verify that corrective action has been undertaken and that it is having the desired effect. It then goes on to prompt the inspector to ensure that they are prepared in advance to carry out assessments of all species and where there are

differences in the protocol for one species (e.g. cows and calves) to fill out a checklist for each group.

The next bullet points remind the inspector to provide contemporaneous notes and objective evidence such as photographs (they should be provided with a suitable camera or phone) as these are important to support any findings which result in the issuing of a non-compliance. The checklist doesn't make notes and other evidence redundant.

Good notes can also include positive remarks which help the control body to gain a good picture of the care of the animals and help to build up a comprehensive picture of the standards of livestock husbandry on the farm.

The section concludes with a reminder that inspection of some categories of animals, generally breeding males, can be dangerous and reminds the inspector to take special care when observing these animals.

2.3.2 Exemplary AWARE welfare assessment protocols – Biosecurity and hygiene measure for inspectors

The introductory section to each AWARE protocol also includes clear guidance on biosecurity and hygiene measures for inspectors.

This states:

Biosecurity and hygiene measures for inspector

a. Ensure clean boots and clothing (wear overalls and shoe cover where needed)
b. If boots become soiled during inspection ensure not to walk on and contaminate feed
c. Assess youngest animals first, then in order of age or health risk.
d. Wash hands after the visit

These remarks might be superfluous where inspectors are experienced, but they are intended to ensure that in all cases the inspector behaves as the farmer would expect and

does not inadvertently undermine their own credibility and authority or put the health of animals at risk by failing to comply with these basic guidelines.

2.3.3 Exemplary AWARE welfare assessment protocols – overall animal observation

The next section of the protocol guides the inspector to begin focussing their attention on the animals in a structured manner so as to gain an overall impression of the livestock by observing them prior to carrying out the more detailed welfare assessment measures. There are common elements for all species, but the observations are broadly differentiated into two groups i.e. mammals (cattle, sheep, goats and pigs) and birds (laying hens, broilers and turkeys).

For cattle, this section of the introduction states:

Overall animal observations (after a short period to allow the animals to setting (c. 3 minutes)

a. Assess the response of the animals to the stockman
b. Look for animals in corners that may be sick or hiding or calving
c. Listen to the overall demeanour of the herd (coughing, vocalising)

The first element (a) of observing the reaction to the stockman can reveal whether animals are used to the presence of people or might demonstrate a particularly good or bad relationship between the farm staff and the animals in their care.

The next step (b) guides the inspector to look at the animals and to pay particular attention to locating and observing those which may be sick or hiding or not exhibiting normal behaviour. The inspector is then prompted (c) to listen for sounds which might indicate disease (e.g. coughing) or distress or aggressive interactions within the herd or flock.

For laying hens, this section of the introduction states:

Overall flock observations (after a short period to allow the animals to settle (c. 3 minutes)

a. Assess the response of the birds to the stockman, for example if a flock appears nervous and flighty it may indicate they are not walked regularly.

b. Listen to the overall demeanour of the flocks (vocalising, this could include content chatter, alarm calling, loud squawks from aggressive pecking or injurious feather pulling).

c. Record flock details such as size, age, if they are moulting, breed and average production. Additionally, if they have had any disease challenges or issues with feed quality.

d. Record pullet sourcing details – home bred, bought in (where from, what age, does the farmer visit the rearer before placement and details of placement/transition preparation).

Sections a and b are comparable with sections a and c of the protocol for mammals described above.

Sections c acknowledges that birds are almost always kept in single age groups that are subjected to the same management and history. The final bullet point (d) is specific to laying hens and acknowledges that it is also possible that the birds have spent their early life (often the case for laying hens) on a different farm as they are often raised in the first weeks of life by specialist pullet rearers. This early stage of life can have a profound and lasting effect on health and welfare of the birds.

2.3.4 Exemplary AWARE welfare assessment protocols – overall assessment of housing, feed and water provision

The final introductory section of the AWARE common inspection approach protocol involves an overall assessment of housing feed and water provision. This section is designed to be rooted in familiar territory for inspectors as it relates to assessment of resource provision which is very much the approach explicitly set out in the EU organic regulations.

The period during which any farmed animals are fully housed is generally acknowledged as being the most challenging in terms of meeting the needs and ensuring good welfare of farmed animals. During this time, the dependency of the animals on the quality and

adequacy of the physical resources, food and water provided and competence of the stockman is at a maximum. Of course, the adequacy of feed and water is also important when animals are at pasture. When birds have access to range they are generally still heavily reliant on resources provided in their house.

Once again, the checks are broadly differentiated into two groups i.e. mammals (cattle, sheep, goats and pigs) and birds (laying hens, broilers and turkeys).

For cattle, this section of the introduction states:

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all animals to feed together

Check there are sufficient lying spaces for all animals to lie down together

Check there is sufficient, clean bedding

Check there is sufficient loafing area/access passages that allows good cow flow with no dead ends. The layout needs to allow animals to move freely and permit access to feed/water/lying area

Check there are sufficient water troughs

a. Check water troughs are clean and functioning with sufficient flow to ensure continuous supply
b. Check the quality of the feed by touch and smell to ensure it is fresh and palatable (not rancid or mouldy)
c. Assess the shed/stable interior for sharp edges, broken gates/cubicles/fencing that could cause injury
d. Ensure light levels are sufficient (allowing animals to be easily assessed). If insufficient light the inspector should use a torch/headlamp to ensure a full inspection can be made
e. Assess the air quality for ammonia and dust levels

These points ensure that the inspector is aware of the space available to the animals to feed and rest (a and b) which is important in preventing bullying or disadvantage for low

status or younger animals. The state of the bedding (c) impacts on the comfort and cleanliness of the animals. Sufficient and clean water (e) is essential to prevent thirst and avoid disease. The inspector is prompted to pay close attention to the feed provided (f) to ensure that is acceptable to the animals. The state of the building (including arcs or other shelters) is assessed (g) in terms of avoidance of injury, freedom of movement (d), sufficient light (h) and air quality (i) – ammonia and dust can lead to respiratory difficulties and disease. These elements are also covered in the protocols for sheep, goats and pigs.

For birds, a similar approach is taken, but tailored to be appropriate to the different housing conditions.

For laying hens, this section of the introduction states:

Overall assessment of housing, feed and water provision

a. Check there are sufficient feed spaces for all birds to have easy access
b. Check feeders are clean and functioning
c. Check there are sufficient drinkers
d. Check drinkers are clean and functioning
e. Assess the litter provision. Consider the area, type and condition (friability/capped areas) of litter provided.
f. Ensure light levels are sufficient (allowing animals to be easily assessed) and investigate lighting plan if artificial light provided
g. Assess the air quality for ammonia and dust levels in housing
h. Assess the perching provision. Consider the provision of aerial perching. Consider length, height, type and position of perches.
i. Assess housing for sharp edges, broken slats, ramps, equipment that could cause injury or birds to become trapped.
j. Look for evidence of red mite
k. Assess the quality of the range and access to range. Vegetation cover, overhead shelter (natural and artificial), additional resource (log piles, cover

crops, other livestock on the range), number pop holes and ground conditions around pop holes).

The protocols for birds have a number of elements in common with those for mammals (e.g. a, b, e, f, h,) but there are of course specifically adapted observations. Litter quality is (d) critical to birds in that it can profoundly impact on their ability to keep clean and to exhibit important behaviours such as scratching and pecking. Poor litter can contain high levels of ammonia which can cause skin damage (breast, footpad and hocks) as well as respiratory problems for birds. For laying hens perch provision (g) is required by the EU organic regulation and is essential to allow normal behaviour such as roosting to provide refuge and to allow birds to exhibit dominance behaviour. For broilers and turkeys, the large size and greater weight of birds (particularly as they approach slaughter age) can mean that they are reluctant or unable to use perches, however, sufficient provision of perches or platforms is likely to be important in allowing birds an opportunity to exhibit an innate behaviour.

Red mite (i) is a particular pest of laying hens, due to the length of time the flock is in the house. The mites cause intense irritation to the birds resulting in restlessness, loss of condition and even death in young birds. Mites can be seen by looking in crevices in dark parts of the house with a torch or swiping a piece of paper in the crevice – blood spots indicate the presence of mites.

Access to range (j) and attractive conditions on the range which encourage birds to go outside are strongly related to good bird welfare. The range allows birds to exhibit natural behaviours such as pecking and scratching. When these needs are not fulfilled they can result in so called vices such as feather pecking and cannibalism, especially if the birds do not have sufficient pecking material in the barn.

2.4 Identification of candidate welfare outcome assessment measures including animal related measures

In section 2.2 the need to ‘maximise the use of common elements and common terminology in all aspect of the inspection protocols and welfare outcome measures proposed for each species’ was identified. In considering candidate welfare outcome

measures the AWARE experts agreed on the importance of ensuring that organic inspections must include an assessment of the welfare of all of the animals on the farm and for this farm level assessment to be followed by a more detailed welfare assessment of a sub-group(s) of animals in case if needed. This meant that it was desirable that the candidate welfare outcome assessment measures should be meaningful when used at farm and sub group level, however, it was agreed that consideration should also be given to additional sub group measures that would allow a clearer or more detailed assessment and characterisation of welfare. The sub group(s) should be selected based on the findings of the overall assessment of the animals. If concerns are identified in any management or age group then each of these should be subjected to the sub group level assessment to further identify and clarify the nature and prevalence of the issues identified. In the absence of any concerns at the farm level the sub group can be selected at random, however, for poultry the oldest flock on the farm must be selected in all cases.

The exemplary protocols contain suggested sample sizes for individual animal assessment within the subgroup. For the ruminant species sample selection is based on herd/flock size and tables to aid in sample size selection are included in each protocol. For pigs and poultry, a minimum suggested sample has been suggested. The AWARE experts accept that flexibility is required in order for these protocols to be made practical and relevant to all control bodies. Therefore, the final sample size selected should be at the discretion of the individual control body. It is important, however, that as part of the training package within IO3 it is clearly explained to control bodies that the size and robustness of the sample size selected bares directly on what can be said about the data collected at farm level and scheme level. In all cases regardless of individual animal sample size the sub group level assessment provides an opportunity for the inspector to hone their skills in a more focussed and controlled setting than will usually be the case for the farm level assessment. This is also an important opportunity for closer interaction with the farmer, which can prompt and promote their interest in and understanding of the welfare indicators. It also allows a structured and detailed discussion about the condition and welfare of the animals. This more focussed aspect of the protocols can be used to clearly highlight and affirm good welfare outcomes. However, this phase of the protocol can be of critical importance as a clear opportunity to identify, agree on and understand any concerns or issues, which require corrective action.

Taking account of the above requirements farm and sub group level welfare indicators were agreed for all of the major species i.e. cattle, sheep, goats, pigs, poultry (laying hens, broilers and turkeys).

By way of an example the measure for cattle are presented in figure 2 below.

Step 1. Assessment - all cattle on farm	
1. Lameness 2. Body condition score 3. Cleanliness 4. Hair loss, lesions, swelling and injury e.g. broken tails 5. Mastitis 6. Cattle needing further care (e.g. respiratory disease) 7. Cattle needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all groups on farm,** including cows, calves, fattening animals, bulls, the hospital pen and animals, due to leave the farm. • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Lameness 2. Body condition score 3. Cleanliness 4. Hair loss, lesions, swelling and injury e.g. broken tails 5. Mastitis 6. Cattle needing further care (e.g. respiratory disease) 7. Cattle needing immediate care (e.g. euthanasia/hospitalisation)	• Select a sub group based on level of concern. If no group is of concern select the largest, easily accessible group. • Assess a sample of randomly selected animals. A minimum sample of 20 cows or if less than 20 animals in the group, all animals should be assessed. When possible or if there is concern about the welfare status of the herd/subgroup a larger sample should be assessed based on sample table below*. (*sample size selection to be further agreed by control bodies*) • Based on that sample report if o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Records measures	
5.a. Somatic Cell Count 8. Mortality	• From records.

Figure 2: Welfare indicators for cattle (see Annex I for all protocols)

A scoring system was also devised to allow rapid assessment and categorisation of the results obtained. The animal related indicators are scored in simple categories:

- o no animals affected
- o Individual animals affected
- o Less than a third of the animals affected

- Less than half of the animals affected
- More than half of the animals affected (predominant across assessed animals)

The use of the same scoring system across a wide range of measures is once again designed to ensure that the inspector is not overburdened by having to learn a large number of individual systems of scoring and categorisation. Nevertheless, this approach is robust and in most cases a scientifically valid objective assessment of the prevalence of each welfare indicator.

Other record based measures such as mortality (assessed for all species) and somatic cell count (relevant only for dairy cows) are also collected based on the farm records. These records are widely kept to in fulfilment of the requirements of the EU organic regulations. This means that there is no extra bureaucratic burden on the farmer and the information is already familiar to the inspector.

In all cases, the AWARE experts used their knowledge and experience to identify an appropriate number of relevant measures. For each measure, clear assessment criteria were also agreed. By way of an example, the assessment of body condition for pigs is given below in Figure 3.

2. Body condition score

Assess all pigs. View the pig from behind and beside the pig and assess the body condition visually only. Look especially at hip, the spine and tuber ischii and assess, if bones are easily visible and prominent.

Scoring:

0 = Moderate/good (BCS 3 – 4)

1 = Thin (score 1 – 2)
The animal is visibly thin with prominent hip, tuber ischii and spine with minimal fat cover. In a group of growing/finishing pigs the most obvious indicator is a prominent spine. The sow is visibly thin, with hips and backbone very prominent with no fat cover.

2 = Fat (score 4 and 5)
When looking from behind the animal is looking rounded with fat covering the tail head area and down to the thigh. It is impossible to see the tuber ischium and the hip bone (tuber coxae) at all.

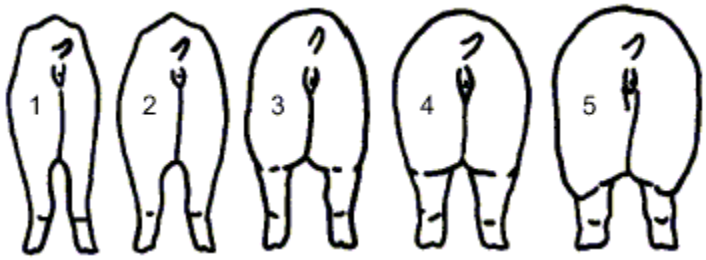


Figure 3: Body condition for pigs (see Annex I for all protocols)

At the conclusion of the workshop a full set of draft protocols comprising the introductory section, welfare outcome measures, including animal based indicators for each of the major farm species was in development. As with the introductory section of the protocols, the welfare outcome measures were selected to be applicable to as many species as possible, so as to encourage confidence and familiarity with the measure by the inspector.

Adjustment of the inspection concept in the light of feedback received

The draft exemplary inspection protocols were circulated to the AWARE partners and further refinements were made to the protocols and measures. The next step was to develop supporting documents, which explain the significance of each measure. The

explanation of each measure can be used to help the inspector and the farmer to understand the significance of each welfare indicator and why it has an impact on animal welfare.

These resulted in protocols and explanations of the significance of each measure for the following species which can be found in Annex I of this report:

A: Cattle

B: Small ruminants: goats

C: Small ruminants: sheep

D: Pigs

E: Laying hens

F: Broilers and turkeys

The measures are also summarised in Annex I G: Welfare outcome assessment summary.

It was agreed that the objectives, as set out in section 2.2, for establishing common approaches that are applicable to all species and can clearly be related to criteria in the EU organic regulation have been met.

The welfare outcomes measures are also carefully cross referenced to requirements in the EU organic regulation (see Annex II: AWARE welfare assessment protocols cross referenced to the EU organic regulations). This will facilitate the identification of non-compliance with the requirements of the organic regulations.

Annex I: Exemplary AWARE welfare assessment protocols

A: Cattle

General remarks

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection by a welfare/ cattle specialist inspector is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspections, then unannounced inspections should be favoured.
- Inspectors must complete one checklist for each species; if there are differences in the protocol for one species (e.g. cows and calves) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos to provide evidence of the condition of the animals assessed. This is particularly crucial if non-compliances have been issued against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the animals assessed. These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.
- For inspector health and safety regards bulls should be considered, assessment should be at a safe distance. This may be from outside the pen if required.

Biosecurity and hygiene measures for inspector

Ensure clean boots and clothing (wear overalls and shoe cover where needed).

If boots become soiled during inspection ensure not to walk on and contaminate feed.

Assess youngest animals first, then in order of age or health risk.

Wash hands after the visit.

Overall animal observations (after a short period to allow the animals to setting (c. 3 minutes))

Assess the response of the animals to the stockman.

Look for animals in corners that may be sick or hiding or calving.

Listen to the overall demeanour of the herd (coughing, vocalising).

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all animals to feed together.

Check there are sufficient lying spaces for all animals to lie down together.

Check there is sufficient, clean bedding.

Check there is sufficient loafing area/access passages that allows good cow flow with no dead ends. The layout needs to allow animals to move freely and permit access to feed/water/lying area.

Check there are sufficient water troughs.

Check water troughs are clean and functioning with sufficient flow to ensure continuous supply.

Check the quality of the feed by touch and smell to ensure it is fresh and palatable (not rancid or mouldy).

Assess the shed/stable interior for sharp edges, broken gates/cubicles/fencing that could cause injury.

Ensure light levels are sufficient (allowing animals to be easily assessed). If insufficient light the inspector should use a torch/headlamp to ensure a full inspection can be made.

Assess the air quality for ammonia and dust levels.

Assessment protocol

Step 1. Assessment - all cattle on farm	
1. Lameness 2. Body condition score 3. Cleanliness 4. Hair loss, lesions, swelling and injury e.g. broken tails 5. Mastitis 6. Cattle needing further care (e.g. respiratory disease) 7. Cattle needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all groups on farm,** including cows, calves, fattening animals, bulls, the hospital pen and animals, due to leave the farm. • From observations record if: o No animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Lameness 2. Body condition score 3. Cleanliness 4. Hair loss, lesions, swelling and injury e.g. broken tails 5. Mastitis 6. Cattle needing further care (e.g. respiratory disease) 7. Cattle needing immediate care (e.g. euthanasia/hospitalisation)	• Select a sub group based on level of concern. If no group is of concern select the largest, easily accessible group. • Assess a sample of randomly selected animals. A minimum sample of 20 cows or if less than 20 animals in the group, all animals should be assessed. When possible or if there is concern about the welfare status of the herd/subgroup a larger sample should be assessed based on sample table below*. (*sample size selection to be further agreed by control bodies*) • Based on that sample report if o No animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Records measures	
5.a. Somatic Cell Count 8. Mortality	• From records.

***Best practice sample size for individual assessment of sample group (taken from Welfare Quality© cattle protocol minimum sample size)**

Herd size	Sample size to score	Herd size	Sample size to score	Herd size	Sample size to score
30	30	120	43	210	51
40	30	130	45	220	52
50	30	140	46	230	52
60	32	150	47	240	53
70	35	160	48	250	53
80	37	170	48	260	54
90	39	180	49	270	54
100	40	190	50	280	54
110	42	200	51	≥ 290	55

1. Lameness

Observe cattle, ideally on a hard (i.e. concrete) non-slip surface. Where possible observe the animals moving, either to feed, to or from milking. Where possible watch the cow from the side and the rear. If required ask farmer to encourage lying animals to rise.

Scoring:

0 = 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

1 = Lame

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)

2 = Severely lame

Unable to walk at fast as a brisk human pace (cannot keep up with the healthy herd) and signs of impaired mobility (as above). Animal is likely to require further care.

Images kindly supplied by DairyCo

2. Body condition

Visually assess the tail head and loin area of cattle, viewing the animal from behind and from the side.

Scoring:

0 = Moderate/Good (BCS 2-3)

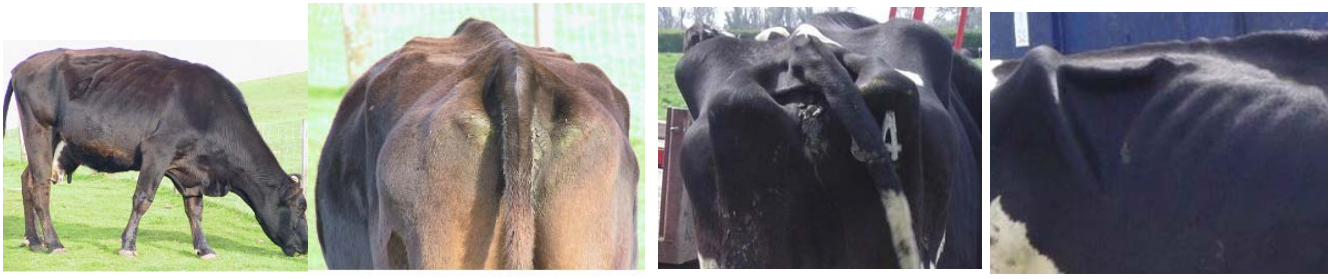
1 = Thin (BCS < 2)

Tail head: Deep cavity with no fatty tissue under skin or shallow cavity with some fat under skin but pin bones prominent. Skin supple/fairly supple and coat condition may be rough.

Loin: Spine prominent. Vertebra may be identified individually, horizontal processes can be identified individually with either sharp or rounded ends.

The following list should assist in making a confident decision for thin cows:

- Horizontal processes give a prominent shelf-like appearance to the loin
- Outline of the hook bone is prominent with no or only some fat padding
- Outline of the pin bone is prominent with no or only some fat padding
- There are folds of skin in the depression between the tail head and pin bone
- Thurl is sunken and curved in.

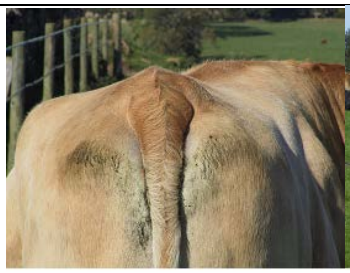


2 = Fat (BCS 4-5)

Tail head: Completely filled and folds and patches of fat evident or almost buried in fatty tissue.
Loin: Cannot see horizontal processes and the loin area, has a completely rounded appearance.

The following list should assist in making a confident decision with cows in BCS 4/5:

- Back is solid and straight
- Hook bones are rounded with obvious fat padding or bones are/may not be visible because they are buried in fat
- Pin bones are rounded with obvious fat padding or bones are/may not be visible because they are buried in fat
- Ribs are covered with a thick layer of fat
- Thurl is filled in.



3. Cleanliness

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

Scoring:

0 = Clean
No dirt or only minor splashing present

1 = 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, lesions, swelling and injury e.g. broken tails

Visually assess from a distance not exceeding 2 m.

Scoring:

0 = No hair loss or lesion or swelling
No lesions, hairless patches or swelling ≥2cm diameter

1 = Hairless, lesion, Swelling
Hairless patches ≥ 2cm diameter or
Lesions ≥ 2cm diameter or
Swellings ≥ 2cm in diameter

2 = Hairless, lesion, swelling and injury
Hairless patches ≥ 5cm diameter or
Lesions ≥ 5cm diameter or
Swellings ≥ 5cm in diameter
Additional injury including broken tails, torn ears etc.

5. Mastitis

Visually assess animals, identify any with signs of mastitis. Swollen red udders.

5.a. Somatic cell count

Record the rolling average somatic cell count for the last 3 months.
Record if herd average for the last 3 months is greater than 300,0000

6. Cattle needing further care

Assess the whole herd. Record and comment on the number animals that would benefit from further assessment and intervention. Further interventions could include veterinary assessment or treatment, improved/altered housing/feeding or level of attention and care. E.g. animals with respiratory symptoms; signs of diarrhoea, overall ill health.

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

7. Cattle needing immediate care
Assess the whole herd. Record and comment on the number of any sick or injured animals that would benefit from further immediate intervention. Further interventions could include immediate further treatment, hospitalisation (i.e. removal from the main herd) or culling., e.g. severely lame cows **Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.**

8. Mortality
Record the number of losses for the previous 12 months for the following categories: a. 0 – 48 hours – all calves including still born (before registration) b. 48 hours – 90 days – all calves c. Older than 90 days This record should include all unplanned culls, animals found dead and animals euthanized on farm

If the inspector has anything else to remark about animal welfare in the herd he may note it here by “other matters”:

Explanation of indicators

Lameness

Lame cows are not only in considerable discomfort and pain, but are predisposed to further disease challenges (e.g. mastitis, swollen hocks), reduced fertility, lowered milk yield and decreased appetite. They lie most of the time, walk less often to the feeding place and water troughs and do less ruminate. They have a high risk to fall back in the herds rank order, so they may not use the most comfortable cubicles, are frequently dirty and they are edged off the feeding place. Often lame cows are thin as well. Primarily all these factors significantly affect the welfare of the cow, but in addition they have hefty financial implications both in the short and long term. Early recognition, investigation and treatment of any lame animal are essential to limit pain, aid recovery and minimise any additional complications. Therefore, regular on farm mobility assessment is an important step in resolving lameness issues. Lameness caused by foot lesions can be both infectious (digital dermatitis, foul) and non-infectious (sole haemorrhages, sole ulcers and white line disease) and it is important for farmers to identify the types of lesions present in order that likely causes can be addressed.

Body condition

Body condition scoring is a technique for assessing the condition of livestock at regular intervals. The purpose of condition scoring is to achieve a balance between economic feeding, good production and welfare. Body condition will vary during a healthy cow's lactation. She will most likely be at her thinnest around peak milk yield and at her fattest around drying off. However, despite this variation her condition should not fall outside of acceptable limits. Depending on the breed some cows are skinny and other thicker.

A cow with a body condition score which indicates that she is thin is not meeting the nutritional demands of her body. This may be as a result of feed quality or quantity, access to feed or disease. Thin animals may suffer from chronic hunger, discomfort (especially in hard cubicles with few straw), are predisposed to health issues (metabolic, infectious and physical) and are more likely to have reduced fertility. Often under conditioned cows are lame and dirty as well.

A cow with a body condition score that indicates that she is 'fat' is overweight. Fat cows are at risk of dystocia (difficulty calving), more likely to develop metabolic diseases such as ketosis, fatty liver disease and milk fever and are prone to mastitis, lameness and infertility.

Cleanliness

Areas of dirt (faeces/mud) within different regions of the cow's body are as a result of different causes and can affect welfare in different ways. In general, if given the choice, cows will choose to lie in clean dry areas. Dirtiness on the coat can irritate the skin,

provide optimal conditions for ectoparasites, increase cold stress, indicate dirty lying areas or lack of grooming facilities (brushes, trees etc.), increase the risk of disease and cause hygiene issues at or prior to slaughter.

The lower legs: A high level of dirtiness in this region is associated with increased risk of lameness, digital dermatitis, interdigital dermatitis, slurry heal and mastitis. It can also obscure skin damage and foot lesions preventing early detection, treatment and increasing recovery times. It can be caused by poor slurry systems, lack of bedding, overstocking, or poached paddocks.

The hind quarters: Dirtiness in this region may be as a result of incorrect feeding, change in feeding, lush grass, endoparasites, infectious disease or dirty environments (lack of bedding, poor cubicle maintenance, overstocking etc.).

The udder and teats: Dirtiness in this region can be caused by anything listed above. Dirt on the udder is strongly associated with the development of mastitis, increases the pre-milking cleaning (which adds time to the milking routine) and increases the risk of poor milk quality.

Cattle like to brush and scrub themselves, a brush should be available whenever it is possible; it helps a lot to keep them clean.

Hair loss, lesions swellings and injury e.g. broken tails

Hair loss, lesions and swellings all demonstrate some form of damage to the skin and in some cases the underlying tissues. Occasional small areas of skin damage or swelling may be inevitable amongst a herd of cattle but areas larger than 2cm may give reason for concern.

Hairless patches indicate repeated rubbing or irritation, ectoparasite presence or previous injuries (scars). Lesions indicate skin damage and can be as a result of poor management, poor building and or cubicle design and maintenance, damaged gates or fences or cow interactions like horn thrusts. Swellings can be as a result of similar poor cubicle design or maintenance, feed trough or barrier design, abscesses, cysts or injection sites. The location of lesions, hair loss and swellings is important in determining the likely causes of them.

Hocks with any lesion, hair loss or swelling are strongly indicative that the lying area is not comfortable with abrasive surfaces, insufficient bedding and or hard lying surfaces. Hocks damaged in this way cause pain and discomfort, are strongly linked to lameness, can become secondarily infected and may lead to reduced lying times. Similarly, knees (carpus) with swellings, hair loss or lesions are also suggestive that lying areas are not comfortable and have similar causes and associated problems. The resultant effect of a strong presence of either is one of reduced welfare, productivity and profitability.

Neck swellings and hair loss or lesions tend to indicate either a problem with the feed barrier, feed trough or cubicle neck rails. If the feed space is not designed appropriately then cattle will repeatedly rub their necks causing damage, pain and a possible reduction

in feed intake. Feed barriers and neck rails need to be placed at the correct height and create the right angle for the type of feed trough. Where feed is fed without a trough it must be regularly pushed up in order to prevent over reaching and continual pressure on the necks.

Presence of lesions or swellings over other parts of the body may indicate that there are injurious environments (lying area, feeding place, parlour, automatic scraper), the cows are repeatedly bumping.

Tails can get broken, damaged or shortened through mechanical damage (from scrapers, doors, parlour), inappropriate handling or other individual reasons. Tail injury is painful to the cow particularly given the constant activity of the tail and therefore compromises the cow's welfare. Broken tails strongly suggest a problem within the system. However, it must be remembered that evidence of a broken tail will remain for the lifetime of the cow and therefore the presence of broken tails within a herd may demonstrate a historical problem and not necessarily a present one.

Mastitis

Mastitis is a common problem across the dairy industry. It is caused by pathogens that can be either found environmentally or passed from cow to cow. It is a painful condition that can vary in severity from being a fairly mild easily curable case to a severe life threatening toxic case. Mastitis has considerable financial implications through costs of treatments, veterinary advice, milk withdrawal periods, reduction in milk yields, increased labour and reduced fertility. Hygiene in the milking parlour, pre-milking routine, cow flow, bedding materials, slurry systems, housing design, cow groups, management of cows throughout stages of lactation amongst others can all affect mastitis levels.

Somatic cell count

The Somatic cell count (SCC) is a main indicator of milk quality. The majority of somatic cells are leukocytes (white blood cells) - which become present in increasing numbers in milk usually as an immune response to a mastitis-causing pathogen - and a small number of epithelial cells, which are milk-producing cells shed from inside of the udder when an infection occurs. Cell counts tend to reflect a response to contagious mastitis pathogens

The SCC is quantified as the number of cells per ml of milk. In general terms:

An individual cow SCC of 100,000 or less indicates an 'uninfected' cow, where there are no significant production losses due to subclinical mastitis.

A threshold SCC of 200,000 would determine whether a cow is infected with mastitis. Cows with a result of greater than 200,000 are highly likely to be infected on at least one quarter.

Cows infected with significant pathogens have an SCC of 300,000 or greater.

The SCC in the milk increases after calving when colostrum is produced before the cow settles into lactation, and tends to rise towards the end of lactation, most likely due to the concentrating effect of lower amounts of milk being produced. SCCs vary, however, due to many factors, including seasonal and management effects.

Milk with an SCC of more than 400,000 is deemed unfit for human consumption by the European Union.

Essentially, a lower SCC indicates better animal health, as somatic cells originate only from inside the animal's udder. SCC monitoring is important because as the number of somatic cells increases, milk yield is likely to fall, primarily due to the damage to milk-producing tissue in the udder caused by mastitis pathogens and the toxins they produce, particularly when epithelial cells are lost.

Cattle needing further care

Further care could include veterinary assessment or treatment, improved or altered housing or feeding or level of attention and care. Animals in this category may be showing signs of respiratory illness (coughing), discharges from the eyes or nose, diarrhoea, poor coat condition, animals that don not feed or ruminate or show other abnormal behaviour.

Cattle needing immediate care

Any animal that is clearly sick or injured must be provided immediately with the necessary treatment and care, regardless of whether it is a cull animal or not. Animals that are sick or injured and not receiving adequate attention are suffering pain, discomfort and distress. This not only compromises their welfare but also reduces their likelihood and speed of recovery, increases the risk of disease spreading and reduces the productivity. Especially for sick calves, it is important not to lose time. ‘Treatments’ may not always constituent drugs or homeopathic remedies, but will depend upon the cause of the illness or injury. Management changes such as separation from the herd, provision of soft bedding, easy access to feed and water, application of a claw block etc. may be included. If sick or injured animals are already separated and treated that is not a non-compliance.

Mortality

Common reasons for mortality include infectious diseases (particularly scour and pneumonia), congenital abnormalities, injuries, parasite burdens, difficult calvings and metabolic imbalances. All these have the potential to negatively affect welfare and result in significant financial costs through treatment, reduced growth rates, labour and losses. Lower mortality rates can be achieved by avoiding ill health, through good stockmanship, suitable housing and bedding, adequate nutrition, biosecurity and appropriate vaccination protocols. Sufficient colostrum intake, navel dipping and close observation are all key in avoiding calf losses whilst parasite control, good stock handling, good nutrition and

appropriate selection of service bulls is important in ensuring heifers go on to become part of the dairy herd. Young calves can die very fast by infections but the older they become the scarcer cases of death should be. High rates of dead animals may be an indicator of failings in management as sick animals are not identified and treated in time. If reasons of death are known, they should be recorded.

B: Small ruminants: goats

General remarks

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection by a welfare/ small ruminant specialist inspector is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspections then unannounced inspections should be favoured.
- Inspectors must complete one checklist for each species; if there are differences in the protocol for one species (e.g. adults and kids) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos to provide evidence of the condition of the animals assessed. This is particularly crucial if non-compliances have been issued against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the animals assessed. These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.
- For inspector health and safety regards bucks/billies should be considered, assessment should be at a safe distance. This may be from outside the pen if required.

Biosecurity and hygiene measures for inspector

Ensure clean boots and clothing (wear overalls and shoe cover where needed).

If boots become soiled during inspection ensure not to walk on and contaminate feed.

Assess youngest animals first, then in order of age or health risk.

Wash hands after the visit.

Overall animal observations (after a short period to allow the animals to setting (c. 3 minutes)

Assess the response of the animals to the stockman.

Look for animals in corners that may be sick or hiding or kidding.

Listen to the overall demeanour of the herd (coughing, vocalising).

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all animals to feed together.

Check there are sufficient lying spaces for all animals to lie down together.

Check there is sufficient, clean bedding.

Check there is a sufficient loafing area/access passages that allows good animal flow with no dead ends. The layout needs to allow animals to move freely and permit access to feed/water/lying area.

Check there are sufficient water troughs.

Check water troughs are clean and functioning with sufficient flow to ensure continuous supply.

Check the quality of the feed by touch and smell to ensure it is fresh and palatable (not rancid or mouldy).

Assess the shed/stable interior for sharp edges, broken gates/fencing that could cause injury.

Ensure light levels are sufficient (allowing animals to be easily assessed). If insufficient light the inspector should use a torch/headlamp to ensure a full inspection can be made.

Assess the air quality for ammonia and dust levels.

Assessment protocol

Step 1. Assessment - all goats on farm	
1. Lameness 2. Body condition score 3. Cleanliness 4. Hair loss/coat condition 5. Abscess, lesions and swellings 6. Udder condition (including mastitis) 7. Goats needing further care (e.g. nasal discharge, respiratory problems) 8. Goats needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all groups on farm,** including breeding animals, followers, kids and bucks/billy goats, also animals, due to leave the farm. • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 1. Assessment in addition for all pre-weaned kids on farm	
9. Overall health 10. Diarrhoea	• Assessed across **all groups of pre-weaned kids on farm** • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Lameness 2. Body condition score 3. Cleanliness 4. Hair loss/coat quality 5. Abscess, lesions and swellings 6. Udder condition (including mastitis) 7. Goats needing further care (e.g. nasal discharge, respiratory problems) 8. Goats needing immediate care (e.g. euthanasia/hospitalisation)	• Select a sub group based on level of concern. If no group is of concern select the largest, easily accessible group. • Assess a sample of randomly selected animals. A minimum sample of 20 goats or if less than 20 animals in the group, all animals should be assessed. When possible or if there is concern about the welfare status of the herd/subgroup a larger sample should be assessed based on sample table below*. (*sample size selection to be further agreed by control bodies*) • Based on that sample report if o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)

Records measures	
11. Mortality	• From records.

***Best practice sample size for individual assessment of sample group (taken from AWIN 2015 Goat protocol, minimum sample size)**

Farm size – number of lactating goats	Sample size to score	Farm size – number of lactating goats	Sample size to score
<15	13	225-249	53
15-19	16	250-299	54
20-24	19	300-349	56
25-29	21	350-399	57
30-34	24	400-449	57
35-39	26	450-499	58
40-49	28	500-599	59
50-59	29	600-699	60
60-69	32	700-799	61
70-79	35	800-899	62
80-89	37	900-999	63
90-99	39	1000-1099	63
100-124	41	1100-1299	64
125-149	44	1300-1499	65
150-174	47	1500-1699	65
175-199	49	1700-1799	66
200-224	51	>1800	66

1. Lameness

Assess the individual goat by watching them walk.

Scoring:

0 = Good/Imperfect mobility
Regular or slight to irregular gait. Inexistent or slight head nodding and arched rump.

1 = Lame
Lame goats will have a clearly identified irregular gait.Moderate head nodding and arched rump. One or more limbs may be only partially weight bearing and or rested when standing. They may be reluctant to stand and graze whilst on their "knees" (carpus).

Severely Lame - NO weight bearing on one or more limbs

2 = A goat should be considered severely lame if they have and extremely irregular gait, with one or more limbs to be bearing no weight and or rested when standing. Additionally, they may have:

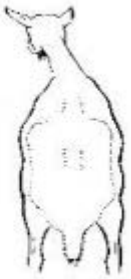
- pronounced "goose" walking (limbs stretched);
- moving on "knees" (carpus) (kneeling);
- severe head nodding;
- accentuated arched rump

2. Body condition score

Visually assess the tail head and loin area of cattle, viewing the animal from behind and from the side.

Scoring:

0 = Normal (0)
General condition: Backbone not prominent but still visible and ribs difficult to assess visually.
Rump region: Hip and pin bones still visible, but not prominent. The line that connects the hip bone and the thurl assumes a slightly concave or straight shape. It is possible to see some muscle and/or fat between the skin and bone structures.



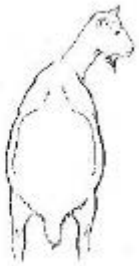
1 = Thin (-1)
General condition: Raw or slightly raw-boned goat, with backbone and some ribs visible.
Rump region: Hip and pin bones are prominent. The line that connects the hip bone and the thurl

assumes a markedly concave shape. There is little muscle and/or fat between the skin and bone structures.

2 = Fat (1)

General condition: Backbone and ribs not visible. Goat has a rounded appearance, sometimes with abdominal fat deposits visible.

Rump region: Hip and pin bones are difficult to identify. The line that connects the hip bone and the thurl assumes a slightly or markedly convex shape. The entire rump region is coated by muscle and fat, contributing to the rounded appearance of the goat.



3. Cleanliness

Assess the whole herd for goats seen with a dirty coat. Visual assessment of one side and behind.

Scoring:

0 = Clean

No dirt or only minor splashing present.

1 = Dirty

An area of dirtiness (fresh and old mud or slurry) larger than hand size (10 x 15cm) and or diffuse soiling

2 = Very Dirty

An area of dirtiness (fresh and old mud or slurry) larger than forearm length (40cm) in any dimension and or diffuse soiling

4. Hair loss/coat condition

Assess the whole herd for goats seen with hair loss or suffering from poor coat condition (matted, rough, scurfy and uneven). Visual assessment of one side and behind.

Scoring:

0 = No hair loss/good coat quality

1 = One or more bald areas larger than 5cm in any dimension on the body
Additionally, including rough coat with some matting and scurf

2 = Severe hair loss/very poor coat condition
One or more larger (>10cm) areas of hair loss
Additionally, including very rough, matted coat, potentially signs of ectoparasites

5. Abscess, lesions and swellings

Assess the whole herd for goats with abscesses, lesions and swellings ≥ 2cm.
Visually assess from a distance not exceeding 2 m.

Scoring:

0 = No abscess, lesion or swelling
No sign of abscess or lesion or swelling ≥2cm diameter.

1 = Abscess, lesion or swelling
Any abscess
Lesions ≥ 2cm diameter or
Swellings ≥ 2cm in diameter

6. Udder condition (including mastitis)

Assess the whole herd for goats with signs of injury, inflammation (mastitis) or asymmetry of the udder.

Asymmetric udders are those in which one half is at least 25% longer than the other (excluding teats).

0 = Udder normal
1 = Udder is asymmetrical or is inflamed (mastitis) or injured

7. Goats needing further care

Assess the whole herd. Record and comment on the number animals that would benefit from further assessment and intervention. Further interventions could include veterinary assessment or treatment, improved/altered housing/feeding or level of attention and care.

E.g. animals with overgrown claws, respiratory symptoms, including nasal or ocular discharge; signs of diarrhoea, overall ill health.

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

8. Goats needing immediate care

Assess the whole herd. Record and comment on the number of any sick or injured animals that would benefit from further immediate intervention. Further interventions could include immediate further treatment, hospitalisation (i.e. removal from the main herd) or culling.

E.g. severely lame goats, severe lesions or abscess.

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

9. Kids – overall health

Assess un weaned kids for overall health and level of hydration

0 = Healthy (well hydrated)
1 = Dehydrated
2 = Needing further treatment or euthanasia

10. Kids - diarrhoea

Assess un-weaned kids for signs of diarrhoea

0 = No signs of diarrhoea
1 = Kid with diarrhoea

11. Mortality

Record the number of losses for the previous 12 months for the following categories:

a. 0 – 48 hours – all kids including still born (before registration)
b. 48 hours – 90 days – all kids
c. Older than 90 days

This record should include all unplanned culls, animals found dead and animals euthanized on farm.

If the inspector has anything else to remark about animal welfare in the herd he may note it here by “other matters”:

Explanation of indicators

Lameness

Lameness is an indicator of pain characterised by abnormal locomotion. The degree of lameness may range from slight to severe. However, due to husbandry constraints and diversity of management and resources at dairy goat farms, it is impossible to follow a standard protocol to identify slight and moderate cases of lameness. Therefore, the identification of only the most severe cases of lameness is suggested. Anyway, lame goats must be treated by the farmer. Lame goats are predisposed to further disease challenges (e.g. mastitis, swollen hocks), reduced fertility, lowered milk yield and decreased appetite. They lie most of the time, walk less often to the feeding place and water troughs and do less ruminate. They have a high risk to fall back in the herds rank order, so they may not use the most comfortable lying places or are edged off the feeding place.

Body condition

Body condition score is performed to help to assess the nutritional and health status of goats. Only extreme conditions (very thin and very fat goats) are assessed, as these can be related to welfare problems. A goat with a body condition score which indicates that she is thin is not meeting the nutritional demands of her body. This may be as a result of feed quality or quantity, access to feed or disease. Thin animals may suffer from chronic hunger, discomfort (especially in hard cubicles with few straw), are predisposed to health issues (metabolic, infectious and physical) and are more likely to have reduced fertility.

A goat with a body condition score that indicates that she is ‘fat’ is overweight. Fat goats are at risk of dystocia (difficulty calving), more likely to develop metabolic diseases such as ketosis, fatty liver disease and milk fever and are prone to mastitis, lameness and infertility.

Cleanliness

In general goats, given the choice, will choose to lie in clean dry areas. Dirtiness (faeces/mud) on the coat can provide optimal conditions for ectoparasites (particularly blow fly), increase the risk of disease and cause issues at or prior to slaughter. Areas of dirt on different regions of the goat’s body are as a result of different causes and can affect welfare in different ways. Dirtiness around the hind quarter is most likely to be caused by loose faeces which can result from dietary change, parasites, illness or nutritional imbalances. Dirtiness on the belly or legs maybe more linked with environmental issues, such as wet ground, poached areas, dirty bedding (if housed).

Hair loss/coat condition

Hair and coat condition should not be assessed during the moulting season.

Coat condition is usually associated with health or nutritional problems or the presence of parasites. Goats with poor coats and hair are generally thin (low BCS) and may be suffering from chronic diseases such as pneumonia or with mineral imbalances.

Hairless patches indicate repeated rubbing or irritation, ectoparasite presence or previous injuries (scars). Neck hair loss or lesions tend to indicate either a problem with the feed barrier or feed trough. If the feed space is not designed appropriately then goats will repeatedly rub their necks causing damage, pain and a possible reduction in feed intake. Feed barriers need to be placed at the correct height and create the right angle for the type of feed trough. Where feed is fed without a trough it must be regularly pushed up in order to prevent over reaching and continual pressure on the necks.

Abscess, lesions or swellings

The presence of abscesses is most often associated with chronic contagious diseases called caseous lymphadentitis. These abscesses usually coincide with superficial lymph nodes. Other less common causes in goats are infected wounds or injection sites.

Lesions indicate skin damage and in some cases of the underlying tissues. Small areas of skin damage and swelling may be inevitable but areas with lesions or swellings larger than 2 cm may give reason for concern.

Lesions and swellings can be as a result of lack of bedding material, similar poor building design and maintenance, feed trough or barrier design, damaged gates or fences or goat interactions like horn thrusts.

Swelling of the carpus and hocks is often a symptom of CAE (caprine arthritis encephalitis) a chronic incurable disease.

The location of abscesses, lesions and swellings is important in determining the likely causes of them. Neck swellings and hair loss or lesions tend to indicate either a problem with the feed barrier or feed trough. If the feed space is not designed appropriately then goats will repeatedly rub their necks causing damage, pain and a possible reduction in feed intake. Feed barriers need to be placed at the correct height and create the right angle for the type of feed trough. Where feed is fed without a trough it must be regularly pushed up in order to prevent over reaching and continual pressure on the necks.

Udder conditions including mastitis

Asymmetry is the most prevalent udder problem in goats and it relates to infection and inflammation of the mammary gland. It is associated with pain and discomfort. It can vary in severity from being a fairly mild easily curable case to a severe life threatening toxic case.

Goats needing further care

Further care could include veterinary assessment or treatment, improved or altered housing or feeding or level of attention and care. Animals in this category may be showing signs of respiratory illness (coughing), poor coat condition, discharges from the eyes or nose, signs of diarrhoea, etc.

Goats needing immediate care

Any animal that is clearly sick or injured must be provided immediately with the necessary treatment and care, regardless of whether it is a cull animal or not. Goats that are sick or injured and not receiving adequate attention are suffering pain, discomfort and distress. This not only compromises their welfare but also reduces their likelihood and speed of recovery, increases the risk of disease spreading and reduces the productivity. Goats falling into this category are likely to be severely lame or suffering from severe lesions or abscesses.

Kids – overall health

Un-weaned kids can suffer from a range of infections which can lead to rapid dehydration, loss of vigour, recumbency and death. Animals that are not able to feed for any reason also show similar symptoms.

Kids – diarrhoea

Signs include watery or sticky faeces which contaminate and soil the hair. Causes can include a range of infections and parasites (internal worms). Accurate diagnosis and appropriate treatment – including rehydration – are important to prevent suffering and death.

Mortality

Every farmer has to record the number of born kids and the number of dead animals.

Common reasons for mortality include infectious diseases (particularly scour and pneumonia), congenital abnormalities, injuries, parasite burdens, difficult birth and metabolic imbalances. All these have the potential to negatively affect welfare and result in significant financial costs through treatment, reduced growth rates, labour and losses. Lower mortality rates can be achieved by avoiding ill health, through good stockmanship, suitable housing and bedding, adequate nutrition, biosecurity and appropriate vaccination protocols. Sufficient colostrum intake, navel dipping and close observation are all key in avoiding losses whilst parasite control, good stock handling, good nutrition and avoidance of extremes of body condition are all important. Young kids can die very fast by infections but the older they become the more rare cases of death should be. High rates of dead

animals may be an indicator of failings in management as sick animals are not identified and treated in time. If reasons of death are known, they should be recorded.

C: Small ruminants: sheep

General remarks

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection by a welfare/ small ruminant specialist inspector is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspection then unannounced inspection should be favoured.
- Inspectors must complete one checklist for each species; if there are differences in the protocol for one species (e.g. adults and lambs s) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos to provide evidence of the condition of the animals assessed. This is particularly crucial if non-compliances have been issued against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the animals assessed. These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.
- For inspector health and safety regards rams should be considered, assessment should be at a safe distance. This may be from outside the pen if required.

Biosecurity and hygiene measures for inspector

Ensure clean boots and clothing (wear overalls and shoe cover where needed)

If boots become soiled during inspection ensure not to walk on and contaminate feed

Assess youngest animals first, then in order of age or health risk.

Wash hands after the visit.

Overall animal observations (after a short period to allow the animals to setting (c. 3 minutes)

Assess the response of the animals to the stockman.

Look for animals in corners that may be sick or hiding or lambing.

Listen to the overall demeanour of the flock (coughing, vocalising).

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all animals to feed together.

Check there are sufficient lying spaces for all animals to lie down together.

Check there is sufficient, clean bedding.

Check there is a sufficient loafing area/access passages that allows good animal flow with no dead ends. The layout needs to allow animals to move freely and permit access to feed/water/lying area.

Check there are sufficient water troughs.

Check water troughs are clean and functioning with sufficient flow to ensure continuous supply.

Check the quality of the feed by touch and smell to ensure it is fresh and palatable (not rancid or mouldy).

Assess the shed/stable interior for sharp edges, broken gates/fencing that could cause injury.

Ensure light levels are sufficient (allowing animals to be easily assessed). If insufficient light the inspector should use a torch/headlamp to ensure a full inspection can be made.

Assess the air quality for ammonia and dust levels.

Assessment protocol

Step 1. Assessment - all sheep on farm	
1. Lameness 2. Body condition score 3. Cleanliness 4. Fleece loss/quality 5. Abscess, lesions and swellings 6. Tail docking (docked short) 7. Sheep needing further care (e.g. nasal discharge, respiratory problems) 8. Sheep needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all groups on farm,** including breeding animals, followers, lambs and rams, also animals, due to leave the farm. • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 1. Assessment in addition for all pre-weaned lambs on farm	
9. Overall health 10. Diarrhoea	• Assessed across **all groups of pre-weaned lambs on farm** • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Lameness 2. Body condition score 3. Cleanliness 4. Fleece loss/quality 5. Abscess, lesions and swellings 6. Tail docking (docked short) 7. Sheep needing further care (e.g. nasal discharge, respiratory problems) 8. Sheep needing immediate care (e.g. euthanasia/hospitalisation)	• Select a sub group based on level of concern. If no group is of concern select the largest, easily accessible group. • Assess a sample of randomly selected animals. A minimum sample of 20 sheep or if less than 20 animals in the group, all animals should be assessed. When possible or if there is concern about the welfare status of the flock/subgroup a larger sample should be assessed based on sample table below*. (*sample size selection to be further agreed by control bodies*) • Based on that sample report if o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)

Records measures	
11. Mortality	• From records.

***Best practice sample size for individual assessment of sample group (taken from AWIN 2015 Sheep protocol minimum sample size**

Farm size – number adult ewes	Sample size to score	Farm size – number adult ewes	Sample size to score	Farm size – number adult ewes	Sample size to score
<15	All animals	80-81	37	450-499	58
15-19	13	90-99	39	500-599	59
20-24	16	100-124	41	600-699	60
25-29	19	125-149	44	700-799	61
30-34	21	150-174	47	800-899	62
35-39	24	175-199	49	900-1099	63
40-44	26	200-224	51	1100-1299	64
45-49	28	225-249	53	1300-1699	65
50-59	29	250-299	54	>1700	66
60-69	32	300-349	56		
70-79	35	350-449	57		

1. Lameness

Assess the individual sheep by watching them walk.

Scoring:

0 = 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.

1 = Lame
Lame sheep display an uneven walking rhythm. They may also show shortened strides and obvious head nods when moving. One or more limbs may be only partially weight bearing and or rested when standing. They may be reluctant to stand and graze whilst on their "knees" (carpus).

2 = Severely lame - NO weight bearing on one or more limbs
One or more limbs to be bearing no weight and or rested when standing. They may be reluctant to stand and graze whilst on their "knees" (carpus).

2. Body condition score

i. This will only be possible if the sheep are contained and can be easily caught to allow a physical assessment or are recently shorn and a confident visual assessment can be made. If possible feel the spine in the centre of the sheep back, behind its last rib and in front of its hip bone. Feel for the tips of the transverse processes, feel for fullness of muscle and fat cover.

ii. If flock is fully fleeced record if any obviously thin or fat sheep seen across the whole flock.

Scoring:

0 = Moderate/good (BCS 2 – 4)

1 = Thin (BCS <2)
In animals with BCS less than 2, the spinous processes are sharp and prominent. Loin eye muscle has little/no fat cover. Transverse processes are sharp and fingers can pass under ends.

2 = Fat (BCS >4)

Spinous processes can only be detected with pressure if at all. Transverse processes cannot be felt. Loin eye muscle is full with fat cover. Spine is only detected as a line.

3. Cleanliness

Assess the whole flock for sheep seen with a dirty fleece. Visual assessment of one side and behind.

Scoring:

0 = Clean

No dirt or only minor splashing present.

1 = Dirty

An area of dirtiness (fresh and old mud or slurry) larger than hand size (10 x 15cm) and or diffuse soiling

2 = Very Dirty

An area of dirtiness (fresh and old mud or slurry) larger than forearm length (40cm) in any dimension and or diffuse soiling.

4. Fleece loss and quality

Assess the whole flock for sheep seen with fleece loss or suffering from poor fleece condition. Visual assessment of one side and behind.

Scoring:

0 = No fleece loss/good quality

1 = Moderate fleece loss/quality

One or more bald areas larger than hand size (10x15cm) in any dimension on the body

Additionally, including some lumpy wool and plucked wool

2 = Severe fleece loss/poor quality

One or more bald areas larger than a forearm length (40cm) in any dimension on the body

Additionally, including severe lumpy/thickened wool and obvious irritation/evidence of ectoparasites

5. Abscess, lesion or swelling

Assess the whole flock for sheep with abscesses, lesions and swellings ≥ 2cm
Visually assess from a distance not exceeding 2 m.

Scoring:

0 = No abscess, lesion or swelling
No sign of abscess or lesion or swelling ≥2cm diameter.

1 = Abscess, lesion or swelling
Any abscess
Lesions ≥ 2cm diameter or
Swellings ≥ 2cm in diameter

6. Tail docking (docked short)

Assess the whole flock for sheep seen where the tail has been docked short, i.e. the tail is over shortened or almost not present (e.g. the vulva and anus is not covered by the remaining tail).

image kindly supplied by AWIN

7. Sheep needing further care

Assess the whole flock. Record and comment on the number animals that would benefit from further assessment and intervention. Further interventions could include veterinary assessment or treatment, improved/altered housing/feeding or level of attention and care.

E.g. animals with respiratory symptoms, include nasal or ocular discharge; signs of diarrhoea, overgrown hoofs, overall ill health.

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

8. Sheep needing immediate care

Assess the whole flock. Record and comment on the number of any sick or injured animals that would benefit from further immediate intervention. Further interventions could include immediate further treatment,

hospitalisation (i.e. removal from the main herd) or culling.

E.g. severely lame sheep, severe lesions or suffering flystrike

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

9. Lambs – overall health

Assess un weaned lambs for overall health and level of hydration

Scoring:

0 = Healthy (well hydrated)
1 = Dehydrated
2 = Needing further treatment or euthanasia

10. Lambs – diarrhoea

Assess un weaned lambs for signs of diarrhoea

Scoring:

0 = No signs of diarrhoea

1 = Lamb with diarrhoea

11. Mortality

Record the number of losses for the previous 12 months for the following categories:

a. 0 – 48 hours – all lambs including still born
b. 48 hours – 90 days – all lambs
c. Older than 90 days

This record should include all unplanned culls, animals found dead and animals euthanized on farm

If the inspector has anything else to remark about animal welfare in the herd he may note it here by “other matters”:

Explanation of indicators

Lameness

Lameness is one of the greatest welfare challenges currently facing the sheep sector. Whilst there are other non-contagious causes of lameness, a major cause of sheep lameness is infection (footrot, scald or CODD). Lame sheep are not only in considerable discomfort and pain, but are predisposed to further disease challenges (e.g. metabolic imbalances, mastitis), reduced fertility, weight loss and are a risk of infection to the rest of the flock. Early recognition, investigation and treatment of any lame animal is essential to limit pain, aid recovery and minimise the spread of disease. It is important for farmers to identify the causes of lameness present in order that appropriate treatment protocols and future prevention strategies can be developed.

Body condition

Body condition scoring is a technique for assessing the condition of livestock and should be carried out at regular intervals. Its purpose is to achieve a balance between economic feeding, good production and good welfare. Whilst body condition will vary throughout a lambing year, ensuring ewes and rams are at the correct score for the system and the time of year has a positive impact on fertility and health (e.g. reducing metabolic and other disease incidence) and lamb performance. Ewes and rams should be palpated manually in order to body condition score throughout the year so that target scores can be achieved for tupping, lambing, mid lactation and weaning. Visually assessing body condition score (as carried out in the AWARE protocol) is unlikely to reflect as accurate a score (particularly when animals are fully fleeced) when compared to manual palpation. However, body condition is so fundamental to sheep welfare that it needed be included within the protocol despite the limitations of an assessor being unable to manually palpate the sheep during a farm visit. Instead it has been accepted that whilst there may be significant underscoring of this measure it will help identify some very thin animals.

Cleanliness

In general sheep, given the choice, will choose to lie in clean dry areas. Dirtiness (faeces/mud) on the fleece can provide optimal conditions for ectoparasites (particularly blow fly), increase the risk of disease and cause issues at or prior to slaughter. Areas of dirt on different regions of the sheep's body are as a result of different causes and can affect welfare in different ways. Dirtiness around the hind quarter is most likely to be caused by loose faeces which can result from dietary change, parasites, illness or nutritional imbalances. Dirtiness on the belly or legs maybe more linked with environmental issues, such as wet ground, poached areas, stubble grazing, dirty bedding (if sheep housed) and this can lead to thermo-discomfort and an increased risk of lameness and mastitis.

Fleece loss and quality

Areas of fleece loss can be the result of several causes. Some breeds of sheep (e.g. Easy-care) naturally shed their fleece as the weather warms and therefore at certain times of year these sheep may show fleece loss. In other breeds and at other times of year fleece loss can be caused by a period of stress (serious illness, parasite burden, malnutrition etc.) which may cause wool slip, injury, external parasites, skin infections (e.g. lumpy wool), poor handling or be a result of environmental hazards such as gateways, feeders or housing. Whilst fleece loss could potentially have an effect on thermoregulation it is the cause that is likely to compromise sheep welfare. This measure is therefore an indicator for issues.

Abscess, lesions or swellings

Assessment of these conditions in sheep with full fleece can be difficult, but for some breeds and at some times of year assessment is possible. Lesions and swellings all demonstrate some form of damage to the skin and in some cases the underlying tissues. Occasional small areas of skin damage or swelling may be inevitable amongst a flock of sheep but areas larger than 2cm may give reason for concern.

Bald patches indicate repeated rubbing or irritation, ectoparasite presence or previous injuries (scars). Lesions indicate skin damage and can be as a result of poor management, poor building or cubicle design and maintenance, damaged gates or fences or sheep interactions. Swellings can be as a result of similar poor cubicle design or maintenance, feed trough or barrier design, abscesses, cysts or injection sites. The location of lesions, hair loss and swellings is important in determining the likely causes of them.

Tail docking (docked short)

Tails are docked to keep the sheep region of the anus clean. This area being dirty by faeces there is a very high risk of myasis, that means flies lie their eggs in some wrinkles and the maggots intrude in the sheep´s skin. That is very harmful for the sheep, but a tail too short cannot protect anus and vulva.

For tail docking sufficient tail must remain to cover the anus of male sheep and the vulva of female sheep. Many farmers are moving away from both tail docking, realising that they can manage their flocks without the need for this.

Sheep needing further care

Further care could include veterinary assessment or treatment, improved or altered housing or feeding or level of attention and care. Animals in this category may be showing signs of respiratory illness (coughing), poor fleece condition, discharges from the eyes or nose, signs of diarrhoea, etc.

Sheep needing immediate care

Any animal that is clearly sick or injured must be provided immediately with the necessary treatment and care regardless of whether it is a cull animal or not. Sheep that are sick or injured and not receiving adequate attention are suffering pain, discomfort and distress. This not only compromises their welfare but also reduces their likelihood and speed of recovery, increases the risk of disease spreading and reduces the productivity. Sheep falling into this category are likely to be severely lame or suffering from flystrike or acute diseases.

Lambs – overall health

Un-weaned lambs can suffer from a range of infections which can lead to rapid dehydration, loss of vigour, recumbency and death. Animals that are not able to feed for any reason also show similar symptoms.

Lambs – diarrhoea

Signs include watery or sticky faeces which contaminate and soil the fleece. Causes can include a range of infections and parasites (internal worms). Accurate diagnosis and appropriate treatment – including rehydration – are important to prevent suffering and death.

Mortality

Every farmer has to record the number of born lambs and the number of dead animals.

Common reasons for mortality include infectious diseases (particularly scour and pneumonia), congenital abnormalities, injuries, parasite burdens, difficult lambings and metabolic imbalances. All these have the potential to negatively affect welfare and result in significant financial costs through treatment, reduced growth rates, labour and losses. Lower mortality rates can be achieved by avoiding ill health, through good stockmanship, suitable housing and bedding, adequate nutrition, biosecurity and appropriate vaccination protocols. Sufficient colostrum intake, navel dipping and close observation are all key in avoiding lamb losses (in particular if sheep are lambed indoors) whilst parasite control, good stock handling, good nutrition and appropriate body condition are all important. Young lambs can die very fast by infections but the older they become the scarcer cases of death should be. High rates of dead animals may be an indicator of failings in management as sick animals are not identified and treated in time. If reasons of death are known, they should be recorded.

D: Pigs

General remarks

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection by a welfare/ pig specialist inspector is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspection then unannounced inspection should be favoured.
- Inspectors must complete one checklist for each species; if there are differences in the protocol for one species (e.g. sows and fattening pigs) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos to provide evidence of the condition of the animals assessed. This is particularly crucial if non-compliances have been issued against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the animals assessed. These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.
- For inspector health and safety regards boars should be considered, assessment should be at a safe distance. This may be from outside the pen if required.

Biosecurity and hygiene measures for inspector

Ensure clean boots and clothing (wear overalls and shoe cover where needed

Assess youngest animals first, then in order of age or health risk.

Wash hands after the visit.

Overall animal observations (after a short period to allow the animals to setting (c. 3 minutes)

Assess the response of the animals to the stockman.

Look for animals **not** demonstrating normal behaviour (eating and drinking, rooting, resting and sleeping and social play behaviour) that may be sick or bullied. Look for fighting and excessive mounting behaviour.

Listen to the overall demeanour of the herd (coughing, vocalising).

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all animals to feed together and that troughs are clean and in good condition (e.g. no sharp edges).

Check the quality of the feed by touch and smell to ensure it is fresh and palatable.

Check there is sufficient lying spaces for all animals to lie down together.

Check there is sufficient, clean bedding.

Check there are sufficient water troughs.

Check water troughs are clean and functioning with sufficient flow to ensure continuous supply.

Assess housing (arks/pens) for sharp edges, broken gates/fencing that could cause injury.

Ensure light levels are sufficient with indoor housing (allowing animals to be easily assessed). If insufficient light the inspector should use a torch/headlamp to ensure a full inspection can be made.

Assess the air quality for ammonia and dust levels in housing.

Assessment protocol

Step 1. Assessment - all pigs on farm	
1. Lameness 2. Body condition score 3. Injuries 4. Skin condition 5. Pigs needing further care (e.g. nasal discharge, respiratory problems) 6. Pigs needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all groups on farm,** including breeding animals, followers, lambs and rams, also animals, due to leave the farm. • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Lameness 2. Body condition score 3. Injuries 4. Skin condition 5. Pigs needing further care (e.g. nasal discharge, respiratory problems) 6. Pigs needing immediate care (e.g. euthanasia/hospitalisation)	• Select a sub group based on level of concern. If no group is of concern select the largest, easily accessible group. • Assess a sample of 20 animals within that group or if less than 20 animals in the group, all animals should be assessed. When possible or if there is concern about the welfare status of the herd/subgroup a larger sample should be assessed (*sample size selection to be further agreed by control bodies*) • Based on that sample report if o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Records measures	
7. Mortality 8. Slaughter house measures	• From records.

1. Lameness

Assess the individual pigs by watching them walk. Make the individual pigs rise if necessary to observe them up and walking.

Scoring: 0

= Not lame

Lame

1 = When identifying lame pigs, include those which are:

- Standing but not bearing full weight on the affected limb and/or appears to be standing on its toes; and / or
- Walking with a shortened stride with minimum weight-bearing on the affected limb and a swagger of the hindquarters (may still be able to trot and gallop); and / or
- Severely lame with no weight-bearing on the affected limb.

Do not include pigs that are showing only stiffness or uneven gait.

2. Body condition score

Assess all pigs. View the pig from behind and beside the pig and assess the body condition visually only. Look especially at hip, the spine and tuber ischii and assess, if bones are easily visible and prominent.

Scoring:

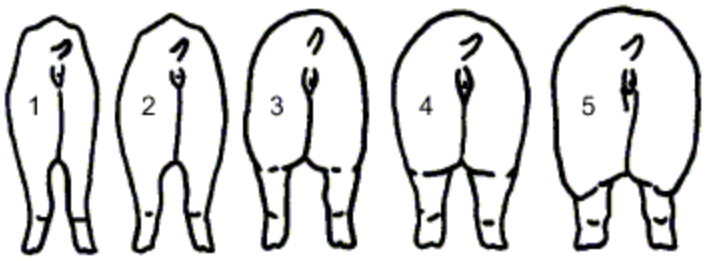
3 = Moderate/good (BCS 3 – 4)

4 = Thin (score 1 – 2)

The animal is visibly thin with prominent hip, tuber ischii and spine with minimal fat cover. In a group of growing/finishing pigs the most obvious indicator is a prominent spine. The sow is visibly thin, with hips and backbone very prominent with no fat cover.

5 = Fat (score 4 and 5)

When looking from behind the animal is looking rounded with fat covering the tail head area and down to the thigh. It is impossible to see the tuber ischium and the hip bone (tuber coxae) at all.



Thin Moderate Fat

3. Injuries

Visually assess **one** side of the animal only and record injury occurring on head, neck, sides, tail, hindquarters and additionally with sow's udder and vulva.

Scoring:

0 = No injury

1 = Injury

Injury includes **lesions**, **any swellings** (to include inflammation in the udder (mastitis), and **hernia**. Record a linear lesion longer than 10cm; or 3 or more 3cm lesions; or a circular area larger than 1x1 cm is seen. Definition of lesion includes grazed/broken skin, fresh (i.e. bleeding) wounds and healing lesions (scabs). Scar tissue is not included.

Typical fight lesions show parallel lines while lesions from flank biting are generally round.

Lesion on the tails and ears as a result of biting should be carefully looked for. Pig should be assessed from behind. Investigate carefully if the tail is swollen or shorter than normal and for scabs and lesions. Any identified injury to tails should be recorded.

Additionally, carefully check ears or signs of biting wounds. Any identified injury to ears should be recorded.

4. Skin condition

Visually assess **one** side of the animal only and record any occurrence of skin condition:

Scoring:

0 = Good skin condition

1 = Poor skin condition
sunburn (such as reddening, oedema, scabs and peeling of the skin) **or signs of mange** (which may include either little red spots all over the body of growing pigs or in sows reddish/brownish scabs behind or in the ear) or other **ectoparasites.**

5. Pigs needing further care

Assess the whole herd. Record and comment on the number animals that would benefit from further assessment and intervention. Further interventions could include veterinary assessment or treatment, improved/altered housing/feeding or level of attention and care.

E.g. animals with respiratory symptoms, include nasal or ocular discharge; signs of diarrhoea, parasites overall ill health.

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

6. Pigs needing immediate care

Assess the whole flock. Record and comment on the number of any sick or injured animals that would benefit from further immediate intervention. Further interventions could include immediate further treatment, hospitalisation (i.e. removal from the main herd) or culling.

E.g. severely lame pigs, severe lesions from fighting

Do not include sick or injured animals already receiving suitable care in the record. But additional comment

should be provided regards the care and state of these animals.

7. Mortality

Check farm records and record the number of losses for the previous 12 months for the following categories:

a. 0 – 48 hours – all piglets including still born
b. 48 hours – weaning – all piglets
c. Post weaning finishers and sows

This record should include all unplanned culls, animals found dead and animals euthanized on farm

8. Slaughter house measures

Where available obtain post slaughter records:

a. Number of condemned carcases
b. Number of carcases identified with liver condition
c. Number of carcases identified with lung condition

If the inspector has anything else to remark about animal welfare in the herd he may note it here by “other matters”:

Explanation of indicators

Lameness

Lameness is a sign that an animal is in pain and is therefore considered a serious welfare issue. Lameness in pigs can be due to injury or infection in the foot or joint, or to longer term skeletal and joint problems such as osteochondrosis. Osteochondrosis is caused by cartilage damage in the joint and can be due to fast growth. Under foot conditions are a key risk factor for the development of foot lesions. There is an increased risk of abnormal gait in sows housed on slatted floors compared with sows housed on solid concrete floors with straw bedding or sows housed outdoors on soil. There is also an increased risk of callus or bursitis on the hocks as lame pigs spend more time lying increasing the risk of limb lesions developing. Routine monitoring of pigs to identify lame pigs is key to identifying early cases for isolation and treatment, enabling rapid recovery.

Body condition

Score 1 and 2: The animal is visibly thin with prominent hip, tuber ischii and spine with minimal fat cover. The hip bones and backbone are easily felt without pressure on the palms.

Score 3: It takes firm pressure with the palm to feel the hip bones and backbone.

Score 4: it is impossible to feel the bones at all even with pressure on the palm of the hands.

Score 5: the vertical processes are only detectable as a line the ends of horizontal processes cannot be felt. The loin muscles are full and have a thick covering of fat.

Regular body condition scoring of pigs can identify suboptimal feed, health and environmental management of sows during previous lactation or during pregnancy. Good stockmanship should take into consideration the nutritional needs of every pig as serious weight loss may be difficult to regain, especially in group feeding systems. Sows with poor body condition produce litters with low birth and weaning weights and are likely to have smaller subsequent litters; they are at increased risk of shoulder lesions and may display increased stereotypic behaviour. Fat sows may suffer from leg weakness, increasing the risk of injury and are at increased risk of certain diseases including Mastitis Metritis Agalactia.

Preferably in piglets or fattening pigs a group should be homogenous. Thin animals should be held in a separate group so they are not subdued by fatter ones. Often thin pigs are runts who suffer from endoparasites or diseases.

Injuries

Occasional small lesions, swellings, injuries or scratches may be inevitable. But **for sows and fattening pigs** one **swelling or** linear lesion longer than 10cm or 3 or more linear

lesions of 3 cm length or a circular area larger than 1x1 cm may give reason for concern, for piglets also smaller areas.

Every kind of swelling or injury fresh or healing should be recorded. That can be wounds at the ears, the tail, the flanks, the udder, the vulva, the penis or any other part of the body.

Injuries may cause pain and discomfort. There is a risk they become infectious and by that more painful or cause fever and the pig becomes generally sick.

Besides of that injuries can be an indicator for management problems or behavioural disorders in a group of pigs who for example don´t get sufficient enrichment in the pen. Swellings due to an abscess, bursitis, hernia, or by other reasons may also cause pain and discomfort and can be an indicator of management problems like lack of bedding material.

Tail biting is an abnormal behaviour which indicates a reduced opportunity to perform foraging and exploratory behaviour and can also occur when pigs are frustrated. Tail biting is a serious welfare concern as it is painful for the receiver and can lead to internal abscesses and infection. Tail biting may also be stressful for the group, indicating frustration and reduced welfare in the biting pig. Condemnations resulting from tail biting can result in significant financial losses.

Ear and flank biting behaviour has a similar aetiology to that of tail biting, indicating that the environment is insufficient to meet the behavioural and / or physiological needs of the pig, for example a lack of sufficient manipulable substrate or insufficient space. The presence of lesions is likely to be associated with pain and may additionally provide a route to infection.

Body marks are primarily caused by aggressive interactions between pigs, but may also be caused by a poorly designed environment. Aggressive interactions, fear and the wounds associated with fighting are considered detrimental to the welfare of the pig. The location and type of body marks present and any obvious patterns on pigs within a pen can help identify risk factors and appropriate action to reduce these risks in the future. For example: wounds of the head and shoulder are associated with fights for social rank particularly in a restrictive environment that limits effective dispersal and the display of appropriate submissive behaviour; those of the rear with competition for food and lesions on the back may be caused by persistent mounting behaviour. There is a general trend for an increased risk of limb and body lesions in sows housed on slatted floors.

The aggressive interactions associated with body marks result in energy expenditure and therefore poorer feed conversion. Lesions of the ear and shoulder are associated with the greatest reduction in growth and may result in a greater impact on productivity.

Shoulder lesions at sows are likely to be painful, are usually present for a prolonged period and often recur. They are caused when a thin sow is lying for a longer period on hard floor and may be a swelling or and open wound. They indicate that aspects of housing, feeding or management of the sow are suboptimal, that levels of comfort are poor and suggest the presence of a long-term welfare issue.

Vulva lesions are painful and can become infected. Sows bite each other for competition of food, restricted water access, low feed levels and inadequate roughage in the diet.

Skin condition

Pigs with poor skin condition show reddening, oedema, scabs and peeling. Often the skin is itching and pigs have scratches caused by rubbing themselves. Skin diseases in the pig can be broadly divided into two categories, specific infections or conditions that only infect the skin and those that are signs of more generalised disease. The most common forms of skin conditions are greasy pig disease, mange, necrosis, vesicular diseases and sunburn. The first four diseases have a significant impact on the pig's health and welfare and cause poor growth. Sunburn can be painful and cause irritation of the skin in outdoor pigs that do not have access to adequate shade and wallowing during summer months. Cracked and abraded skin may provide a route for infection. In every case the pigs should be treated.

Pigs needing further care

Further care could include veterinary assessment or treatment, improved or altered housing or feeding or level of attention and care. Animals in this category may be showing signs of respiratory illness (coughing), lameness, discharges from the eyes or nose, signs of diarrhoea, parasites, tail biting etc.

Pigs needing immediate care

A sick or injured pig has compromised welfare and best practice is to alleviate suffering when necessary through euthanasia or treatment in a dry, comfortably bedded hospital pen following consultation with a veterinary surgeon. Pigs which may benefit from being in a hospital pen include those who are sick, injured or lame and are unable to compete for resources, those being bullied or tail bitten or that would benefit from access to bedding that is more comfortable than that available in the pen. A high prevalence of pigs that need to be housed in hospital pens may indicate a disease problem.

Mortality

Mortality includes pigs that have died and those that have been culled prematurely on welfare grounds due to chronic injury or disease. Young piglets can die very fast by infections or crushed to death by the sow. The older the pigs become the more scarce cases of death should be.

High levels of mortality and culling rates within a herd may suggest suboptimal management, inadequate environmental conditions or disease challenge, amongst others. In sows, the major contributors to culling include lameness and poor reproductive performance. Good stockmanship, husbandry, housing, nutrition, health and welfare

planning and regular monitoring and early detection of pigs in need of further care can minimise the number of pig deaths.

If reasons of death are known, they should be recorded.

Slaughter house measures

Many slaughter houses provide formal feedback on the number of condemned carcasses, liver conditions and lung conditions.

They can give very important information about the health status like pneumonia, pleuritis or endoparasites. This data should be made available at the inspection. If the farm is well managed when a high number of livers are condemned the farmer gives the pigs an endoparasite treatment.

E: Laying hens

General remarks

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection by a welfare/ poultry specialist inspector is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspection then unannounced inspection should be favoured.
- Inspectors must complete one checklist for each species; if there are differences in the protocol for one species (e.g. pullets and laying hens) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos to provide evidence of the condition of the animals assessed. This is particularly crucial if non-compliances have been issued against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the birds assessed. Further observations could include dirtiness of poultry or presence and number of cockerels for example. Also, the thermal comfort of the birds, is there evidence of birds panting (hot) or huddling (cold)? These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.

Biosecurity and hygiene measures for inspector

Ensure clean boots and clothing (wear overalls and shoe covers where needed). Additionally, follow any on farm biosecurity requirements and protocols.

Assess youngest flocks first, then in order of age or health risk.

Wash hands after the visit.

Overall flock observations (after a short period to allow the animals to settle (c. 3 minutes)

Assess the response of the birds to the stockman, for example if a flock appears nervous and flighty it may indicate they are not walked regularly.

Listen to the overall demeanour of the flocks (vocalising, this could include content chatter, alarm calling, loud squawks from aggressive pecking or injurious feather pulling).

Record flock details such as size, age, if they are moulting, breed and average production. Additionally, if they have had any disease challenges or issues with feed quality.

Record pullet sourcing details – home bred, bought in (where from, what age, does the farmer visit the raiser before placement and details of placement/transition preparation).

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all birds to have easy access.

Check feeders are clean and functioning.

Check there are sufficient drinkers for all birds to have easy access.

Check drinkers are clean and functioning.

Assess the litter provision. Consider the area, type and condition (friability/capped areas) of litter provided.

Ensure light levels are sufficient (allowing animals to be easily assessed) and investigate lighting plan if artificial light provided.

Assess the air quality for ammonia and dust levels in housing.

Assess the perching provision. Consider the provision of aerial perching. Consider length, height, type and position of perches.

Assess housing for sharp edges, broken slats, ramps, equipment that could cause injury or birds to become trapped.

Look for evidence of red mite.

Assess the quality of the range and access to range. Vegetation cover, overhead shelter (natural and artificial), additional resource (log piles, cover crops, other livestock on the range), number pop holes and ground conditions around pop holes).

Assessment protocol

Step 1. Assessment - all hens on farm	
1. Feather loss 2. Birds needing further care (e.g. injuries, pale combs, dirty vent, respiratory problems) 3. Birds needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all flocks on farm** • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Feather loss 2. Birds needing further care (e.g. injuries, pale combs, dirty vent, respiratory problems) 3. Birds needing immediate care (e.g. euthanasia/hospitalisation) *4. Head conditions* *5. Foot abnormalities* *6. Keel bones*	• Select a sub flock based on level of concern. If no flock is of concern select the oldest flock. • *Sub group 1:* Assess a randomly selected sample of **50 birds** within that group to **visually assess** for feather loss and birds needing further or immediate care. • *Sub group 2:* Select a second sub group of **25 birds** at random within the house and pen them to assess each bird for head conditions, foot abnormalities and keel bone damage, along with closer assessment of the other measures. • If you pen more than 25 birds then select 25 birds at random for assessment**. Birds are required to be picked up to assess for these measures, this should be done by the farmer.** If picking up birds is not possible post slaughter data should be reviewed where available for foot abnormalities and keel bone damage. • Based on that sample report if o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Records measures	
7. Mortality	• From records.

1. Feather loss

Assess birds for feather damage, visually assess the whole hen giving particular attention to head, neck, back and vent areas. If handling the birds for sub group also include assessment of the breast and underside of the bird.

Scoring:

0 = No/Minimal feather loss
No bare skin visible, no or slight wear, only single feathers missing.

1 = Slight feather loss
Moderate wear, damaged feathers or 2 or more adjacent feathers missing up to bare skin visible < 5cm maximum dimension.

2 = Moderate/Severe feather loss
Bare skin visible ≥ 5cm maximum dimension.

2. Birds needing further care

Assess the whole flock. Record and comment on the number animals that would benefit from further assessment and intervention. Further interventions could include veterinary assessment or treatment, improved/altered housing/feeding or level of attention and care.

E.g. animals with signs of minor pecking wounds/scabs (no fresh blood) or red/inflamed skin indicating high levels of injurious feather pecking, animals with respiratory symptoms, dirtiness around vents (sign of parasites), pale combs, overall ill health.

Do not include sick or injured birds already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

3. Birds needing immediate care

Assess the whole flock. Record and comment on the number of any sick or injured birds that would benefit from further immediate intervention. Further interventions could include immediate hospitalisation (i.e. removal from the main flock) or culling.

This would include obviously sick birds (with fluffed up feathers and an inactive, unresponsive appearance) and birds with body wounds that have fresh blood that might attract cannibalistic attention from other birds. Include birds in hospital pen that should be culled.

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

4. Head conditions (birds to be picked up)

Birds to be picked up and assessed for head conditions. Conditions would include comb condition, eyes, discharges and beak condition.

Scoring:

0 = Good condition
Eyes clear, normal breathing, no discharge, no sneezing
Even red coloured comb, with no scratches

1 = Head condition

- Comb abnormalities: very pale, blue or black areas, injuries, comb appears dried out.
- Eye or nose discharge
- Discoloured/inflamed eyes
- Sneezing or breathing difficulties

5. Foot abnormalities (birds to be picked up)

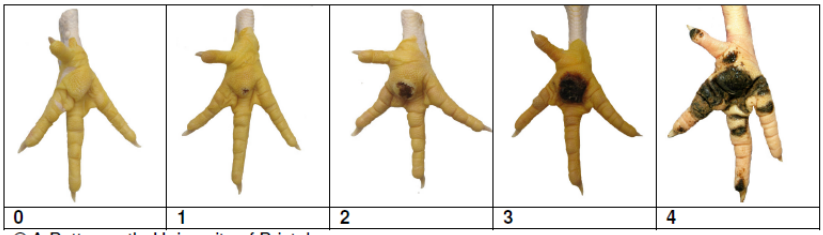
Birds to be picked up and assessed for foot abnormalities. Conditions would include toe damage and footpad dermatitis.

Scoring:

0 = Good condition

1 = Foot abnormality

- Toe damage (wounds, breaks, missing parts)
- Footpad dermatitis (lesions/damage, thickened or inflamed skin and swelling). Record if any sign of lesions, i.e. score 1 and above on this scale.



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Where available post slaughter data should be reviewed.

6. Keel bones *(birds to be picked up)*
Birds to be picked up and assessed for keel bone damage. Inspect the keel area visually and palpate the keel bone. **Scoring:** **0 = No damage** No deviation, deformation or thickened sections. Keel bone completely straight **1 = Keel bone damage** Deviation or deformation of keel bone (including thickened sections) *Where available post slaughter data should be reviewed.*

7. Mortality
Check farm records and record the number of losses for the following categories: a. Mortality of previous flock b. Mortality to date c. Mortality to 40 weeks (where applicable) Record if possible, the predominant cause of mortality for each of a, b and c.

If the inspector has anything else to remark about animal welfare in the herd he may note it here by “other matters”:

Explanation of indicators

Feather loss

Feather loss can be a result of various issues; however, the location of the feather loss on the bird can help to provide an indication of potential cause. Loss of feathers to the back and vent areas usually indicate feather pecking. The causes of feather pecking are multifactorial but can include breed, nutritional imbalance, housing issues, poor range use and rearing conditions. Feather pecking can be very painful and can result in severe injury. If there is evidence of feather pecking in a herd it is very important to take countermeasures. That can be more enrichment of the pen or dimming the light. The hens imitate each other's behaviour so if few hens start feather pecking after some days the others will do it too. If there are wounds and blood marks feather pecking is becoming more intense up to cannibalism and death.

The resulting poor feather cover can lead to thermal discomfort (cold/sunburn) and reduced productivity. It is understood that the birds carrying out feather pecking are in a stressed state leading them to start this behaviour.

Damage to feathers on the head and neck can indicate the occurrence of aggressive pecking, often aimed at the head and with the potential to lead to further injury.

Other causes of feather loss are mechanical damage (equipment wear, usually head/neck areas affected), high levels of egg production and disease.

It is important to record how old the herd is. In young hens, feather loss is less tolerable than in old hens at the end of the laying period.

Birds needing further care

Further care could include veterinary assessment or treatment, improved or altered housing or feeding or level of attention and care. Birds with signs of minor pecking wounds or scabs (no fresh blood) or red or inflamed skin indicating high levels of injurious feather pecking, animals with respiratory symptoms, dirtiness around vents (sign of parasites), pale combs, overall ill health fall into this category.

Birds needing immediate care

Sick birds require additional attention to ensure any suffering is alleviated as soon as possible. Early recognition, treatment or culling of sick birds is the key to reducing any potential welfare compromise. A high level of birds requiring further care may indicate that flocks are not being inspected regularly enough or have an underlying health issue.

Birds that are obviously very sick (fluffed up feathers and inactive or unresponsive) and birds with body wounds that have fresh blood that might attract cannibalistic attention from other birds.

Head conditions (birds to be picked up)

This measure is applied only at the sub-group level as it requires close examination of the bird that cannot be achieved from a distance. Any abnormalities are likely to indicate injuries (obvious mechanical damage) or disease. For example, a pale comb may be an indicator for parasites. At different pests of poultry, the birds show symptoms like dark areas of the comb and wattle, closed, dull, inflamed or discoloured eyes, eye or nose discharge may be symptoms too. Hens with infections of the respiratory tract may be sneezing or have breathing difficulties.

Foot abnormalities (birds to be picked up)

This measure is applied only at the sub-group level as it requires close examination of the bird that cannot be achieved from a distance.

Any level of damage should be recorded and the prevalent cause noted. There are several grades of footpad dermatitis beginning with light swelling and hyperkeratosis up to deep necrosis. This is very painful, the birds have problems to walk and to sit on the perch as well, especially if both feet are affected.

Footpad dermatitis is a very important indicator of welfare both in terms of the individual and conditions experienced by the flock.

High prevalence is likely to be related to poor litter condition and management.

Where reliable slaughter house data is available (not always the case for laying hens), then this should be reviewed.

Some hens have an irregular position of the toes which has a genetic origin. These birds have some problems when walking. Also, some hens like pecking at other hens' feet and wounds at the toes can be found. Both items should be recorded as well.

Keel bones (birds to be picked up)

You can feel whether a keel bone is damaged or not. It may be deformed or even fractured by accidents when hens fly against the facilities and perches. The origin can be multifactorial. Young hens didn´t learn to fly to the perches, perches are metallic and slippery, lack of vitamin D and calcium, the stable is crowded, the flock is very nervous or flighty, the lighting is insufficient and so on.

The damage is thought to be painful and can have a long-term impact on welfare.

Where reliable slaughter house data is available (not always the case for laying hens), then this should be reviewed.

Mortality

A key welfare measure that can reflect incidence of disease, predation, high levels of injurious feather pecking, or other serious welfare issues. Recording levels and cause of mortality can help establish relationships between potential welfare issues (e.g. injurious feather pecking) and resulting levels of mortality.

F: Broilers and turkeys

General remarks

- To be complete in all inspections, at a minimum of once a year.
- Where non-compliance related to animal welfare have been issued, follow up inspection by a welfare/ poultry specialist inspector is required within appropriate time scale.
- Inspections can be announced or unannounced. If non-compliances have been issued at previous inspection then unannounced inspection should be favoured.
- Inspectors must complete one checklist for each species. If there are differences in the protocol for one species (e.g. rearing and fattening) a checklist must be filled out for each group separately.
- Inspectors should provide detailed comments and photos to provide evidence of the condition of the animals assessed. This is particularly crucial if non-compliances have been issued against welfare standards.
- Inspectors are encouraged to provide further detailed comment regards the welfare state of the birds assessed. Further observations could include thermal comfort of the birds, is there evidence of birds panting (hot) or huddling (cold)? These comments can include positive remarks about good care, husbandry and health.
- If animals are not in good health or maintenance but are being treated, this should be written down but is not a non – compliance.

Biosecurity and hygiene measures for inspector

Ensure clean boots and clothing (wear overalls and shoe covers where needed). Additionally, follow any on farm biosecurity requirements and protocols.

Assess youngest flocks first, then in order of age or health risk.

Wash hands after the visit.

Overall flock observations (after a short period to allow the animals to settle (c. 3 minutes)

Assess the response of the birds to the stockman, for example if a flock appears nervous and flighty it may indicate they are not walked regularly.

Listen to the overall demeanour of the flocks (vocalising, this could include content chatter, alarm calling, loud squawks from aggressive pecking or injurious feather pulling).

Record flock details such as size, age, breed and growth details. Additionally, if they have had any disease challenges, predator problems or issues with feed quality.

Overall assessment of housing, feed and water provision

Check there are sufficient feed spaces for all birds to have easy access.

Check feeders are clean and functioning.

Check there are sufficient drinkers for all birds to have easy access.

Check drinkers are clean and functioning.

Assess the litter provision. Consider the type and condition (friable/capped) of litter provided.

Ensure light levels are sufficient (allowing animals to be easily assessed) and investigate lighting plan if artificial light provided

Assess the air quality for ammonia and dust levels in housing

Assess perching provision (horizontal perches, bales/platforms)

Assess housing for sharp edges, broken equipment that could cause injury or birds to become trapped.

Assess the quality of the range and access to range. Vegetation cover, overhead shelter (natural and artificial), additional resource (log piles, cover crops, other livestock on the range), number pop-holes and ground conditions around pop-holes.

Assessment protocol

Step 1. Assessment – all turkeys or broiler chicks on farm	
1. Feather loss **(turkeys only)** 2. Runts and dead birds 3. Dirtiness/condition of plumage 4. Walking ability 5. Birds needing further care (e.g. respiratory problems) 6. Birds needing immediate care (e.g. euthanasia/hospitalisation)	• Assessed across **all flocks on farm** • From observations record if: o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Step 2. Assessment – sub group	
1. Feather loss **(turkeys only)** 2. Homogeneity of the group (Runts) 3. Dirtiness/condition of plumage 4. Walking ability 5. Birds needing further care (e.g. respiratory problems) 6. Birds needing immediate care (e.g. euthanasia/hospitalisation *7. Foot abnormalities* *8. Hock burns*	• Select a sub flock based on level of concern. If no flock is of concern select the oldest flock. • *Sub group 1:* Assess a randomly selected sample of **50 birds** within that group to **visually assess** for feather loss **(turkeys only),** dirtiness/condition of plumage, walking ability and birds needing further or immediate care. • *Sub group 2 (**only for broilers**):* Select a second sub group of **25 birds** at random within the house and pen them to assess each bird for foot abnormalities and hock burns, along with closer assessment of the other measures. • If you pen more than 25 birds then select 25 birds at random for assessment**. Birds are required to be picked up to assess for these measures, this should be done by the farmer.** If picking up birds is not possible post slaughter data should be reviewed where available. • Based on that sample report if o no animals affected o Individual animals affected o Less than a third of the animals affected o Less than half of the animals affected o More than half of the animals affected (predominant across assessed animals)
Records measures	
9. Breast blister 10. Mortality	• From slaughter house records • From records.

1. Feather loss (turkeys only)

Assess birds for feather damage, visually assess the whole bird giving particular attention to head, neck and back.

Scoring:

0 = No/Minimal feather loss
No bare skin visible, no or slight wear, only single feathers missing.

1 = Slight feather loss
Moderate wear, damaged feathers or 2 or more adjacent feathers missing up to bare skin visible < 5cm maximum dimension.

2 = Moderate/Severe feather loss
Bare skin visible ≥ 5cm maximum dimension.

2. Runts and dead birds

Record the number of runts and the number of dead birds found.

3. Dirtiness/condition of plumage

Assess birds for dirtiness/condition of plumage.

Scoring:

0 = None/Minor
plumage is not significantly dirty or only lightly soiled/stained.

1 = Mild dirtiness
slightly dirty plumage, medium soiling on at least one part of the bird, but no area ≥5cm

2 = Severe dirtiness
Large patches of dirty / severely soiled plumage - maximum dimension of ≥5cm, one or more areas heavily soiled.

4. Walking ability

Watch the birds walk

Record the number of birds with a Gait **score 3** and the number of birds with a Gait score of **4 or 5**.

3. An obvious gait defect that affects the bird's ability to move: the bird may have a limp, jerky or unsteady strut, or splay one leg as it moves, it will prefer to squat, and will not run.

4/5. Severe gait defect, capable of walking but only with difficulty and will squat at first opportunity, or the bird is incapable of sustained walking.

Birds that do not rise should be encouraged to stand and walk so they can be assessed.

Video guides to help assess walking ability can be found here: www.assurewel.org/broilers/walkingability

5. Birds needing further care

Assess the whole flock. Record and comment on the number animals that would benefit from further assessment and intervention. Further interventions could include veterinary assessment or treatment, improved/altered housing/feeding or level of attention and care.

E.g. animals with respiratory symptoms, overall ill health, turkeys with signs of minor pecking wounds/scabs (no fresh blood) or red/inflamed skin indicating high levels of injurious feather pecking

Do not include sick or injured birds already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

6. Birds needing immediate care

Assess the whole flock. Record and comment on the number of any sick or injured birds that would benefit from further immediate intervention. Further intervention will in most cases be culling.

This would include obviously sick birds (with fluffed up feathers and inactive, unresponsive appearance) and birds (especially Turkeys) with body wounds that have fresh blood that might attract cannibalistic attention from other birds

Do not include sick or injured animals already receiving suitable care in the record. But additional comment should be provided regards the care and state of these animals.

7. Foot abnormalities (birds to be picked up - broilers only)

Birds to be picked up and assessed for foot abnormalities. Conditions would include toe damage and footpad dermatitis. Record the number of birds that fall within each score.

Scoring:

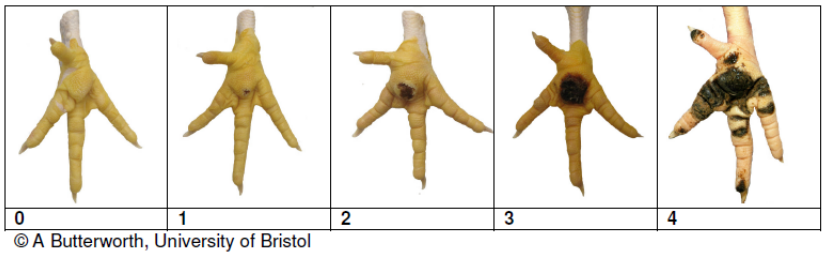
0 = Good condition

1 = Mild foot abnormalities

- Toe damage (**Mild** - wounds)
- Footpad dermatitis (**Mild** - area affected does not extend over the entire plantar pad, substantial discolouration, dark papillae, superficial lesion, and no ulceration. (**score 1 and 2 on scale below**))

2 = Severe foot abnormalities

- Toe damage (**Severe** – wounds, breaks, missing parts)
- Footpad dermatitis (**Severe** - greater surface of plantar pad usually affected, sometimes with lesions on toes. Deeper lesion/s with ulceration, sometimes haemorrhage, scabs of significant size, severely swollen foot pad (**score 3 and 4 on scale below**).



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For both broilers and turkeys where available post slaughter data should be reviewed.

8. Hock burns *(birds to be picked up – broilers only)*

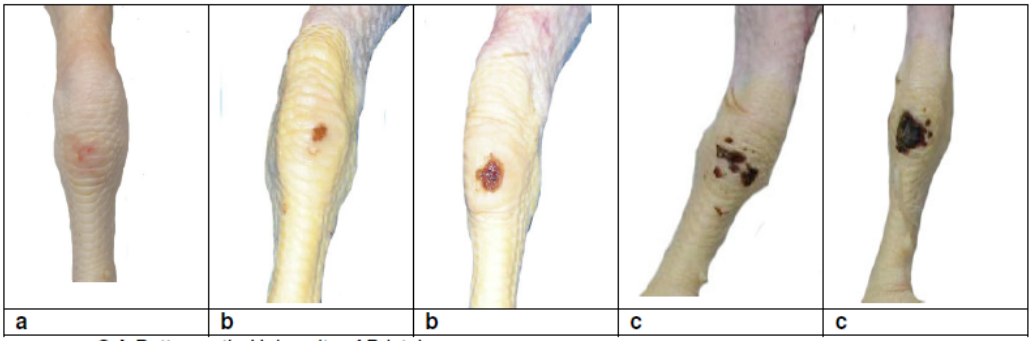
Birds to be picked up and the hocks assessed. Record the number of birds that fall within each score.

Scoring:

0 = None
No lesion/s or very small and superficial (<1mm), slight discolouration in a limited area, mild hyperkeratosis (thickening of the skin).

1 = Mild
Area affected does not extend over hock, substantial discolouration, dark papillae, superficial lesion, no ulceration (**score b on scale below**).

2 = Severe
Greater surface of hock affected. Deeper lesion/s with ulceration, sometimes haemorrhage, scabs of significant size, severely swollen area (**score c on scale below**).



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For both broilers and turkeys where available post slaughter data should be reviewed.

9. Breast blister

Review slaughter house data where available. Percentage of birds recorded with breast blister.

10. Mortality

Check farm records and record the number of losses for the following categories:

- First week mortality, including culls (%).
- Mortality to date - dead birds only, i.e. not including culls (%).
- Culls to date, not including leg culls (%).
- Leg culls to date - leg culls only (%).

Also record this information for the previous flock.
If possible, record predominant cause/s of mortality and culls.

If the inspector has anything else to remark about animal welfare in the herd he may note it here by “other matters”:

Explanation of indicators

Feather loss (turkeys only)

This measure is not applied to broilers as they are immature for most of their life and therefore do not develop full plumage which makes assessment of feather loss unreliable.

Feather loss to the head, neck and back can be a result of aggressive pecking by other birds. This aggression is in response to stressors including crowding, bright light, dietary deficiencies, insufficient feed or water, lack of space and boredom. If there is evidence of feather pecking in a herd it is very important to take countermeasures. That can be more enrichment of the pen or dimming the light. The birds imitate each other's behaviour so if few turkeys start feather pecking after some days the others will do it too. If there are wounds and blood marks feather pecking is becoming more intense up to cannibalism and death.

Runts and dead birds

Birds that are abnormally small are unlikely to reach slaughter weight and will be subjected to bullying. Their small size may also be indicative of an underlying health or disease problem. It is generally better if these birds are euthanized.

The presence of dead birds can indicate disease or inadequate management. Broilers and turkeys should be walked regularly and all dead birds removed to prevent disease, cannibalism and attracting vermin and predators.

Dead birds on the range might indicate predator problems which can result in fear and stress for the birds and inhibit their use of the range causing further welfare problems.

Dirtiness/condition of plumage

Under normal circumstances healthy birds keep themselves clean, they will avoid dirty areas and carry out regular preening. Dirt around the vent can indicate diarrhoea. Dirt on feathers might indicate inadequate litter quality, a wet and muddy outside run and/or poor design of the perching area.

Often birds that show a gait defect have dirty breast plumage. They move less a rest most of the time at one place. If the litter is wet and dirty the feathers become dirty very fast. At these birds frequently you can find breast blisters post mortem.

Birds who suffer with pain or are sick are calm and don´t preen their plumage. Broilers and turkey at the end of fattening may not be flexible enough to clean the feathers.

It is a potential source for spreading disease and of relevance for general hygiene and bird wellbeing.

Walking ability

Inability or reluctance to stand or walk and lameness are a sign that an animal is in pain and is therefore considered a serious welfare issue. It can be due to injury or infection in the foot or joint, to skeletal and joint problems because of the fast growth rate. The birds growing too fast can cause leg deformities and lameness.

Reduced walking ability might also result from foot pad dermatitis linked to poor litter management.

Lame birds are predisposed to further disease challenges, decreased appetite and reduced growth. They sit most of the time at one place, walk less often to the feeding place and water.

Anyway, lameness is a painful condition. The reasons should be found and brought to an end when possible.

Birds needing further care

Further care could include veterinary assessment or treatment, improved or altered housing or feeding or level of attention and care.

This would include birds with respiratory symptoms and overall ill health. Turkeys with minor pecking wounds or scabs (no fresh blood) or red and inflamed skin resulting from injurious pecking.

Birds needing immediate care

Sick birds require additional attention to ensure any suffering is alleviated as soon as possible. Early recognition, treatment or culling of sick birds is the key to reducing any potential welfare compromise. A high level of birds requiring further care may indicate that flocks are not being inspected regularly enough or have an underlying health issue. Birds that are obviously very sick (fluffed up feathers and inactive or unresponsive) and birds (especially turkeys) with body wounds that have fresh blood that might attract cannibalistic attention from other birds.

Foot abnormalities (birds to be picked up – broilers only)

This measure is applied only at the sub-group level as it requires close examination of the bird that cannot be achieved from a distance.

Footpad dermatitis is a very important indicator of welfare both in terms of the individual and conditions experienced by the flock.

There are several degrees of footpad dermatitis beginning with light swelling and hyperkeratosis up to deep necrosis. This is very painful, the birds have problems to walk and to sit on the perch as well, especially if both feet are affected.

High prevalence is likely to be related to poor litter condition and management.

Where reliable slaughter house data is available, then this should be reviewed

Some turkeys like pecking at other turkeys' feet and wounds at the toes can be found. This should be recorded as well.

Hock burns (birds to be picked up – broilers only)

This measure is applied only at the sub-group level as it requires close examination of the bird that cannot be achieved from a distance.

Hock burn identified as a welfare concern. It impacts on bird welfare as it is considered to cause pain.

It is associated with poor litter quality and so has other welfare implications in addition to pain e.g. causes discomfort and damage to skin that can result in chronic infection.

Hock burn is an indicator of flock health and if prevalence of hock burn can be reduced flock health may improve.

It is related to poor litter quality and management.

Where reliable slaughter house data is available, then this should be reviewed.

Breast blister

Contact dermatitis affects skin surfaces that have prolonged contact with wet litter or flooring, including the foot pad, hocks and breast. Breast blisters are a form of contact dermatitis. They are painful in their own right and represent serious discomfort, management and could be result of genetic issues. If bacterial infections penetrate skin contact dermatitis can cause secondary infection potentially leading to blood poisoning and chronic infection.
Breast blisters have a negative impact on welfare.

Use slaughter house data only.

Mortality

A key welfare measure that can reflect incidence of disease, predation, high levels of injurious feather pecking, or other serious welfare issues. Recording levels and cause of mortality can help establish relationships between potential welfare issues (e.g. injurious feather pecking) and resulting levels of mortality.

G: Welfare outcome assessment summary

1. Lameness		2. Body condition score		3. Cleanliness	4. Hair loss, lesions, swelling and injury	
1. Lame	2. Severely lame	1. Thin	2. Fat	Dirty	1. Mild	2. Severe
Step 1. Assessment - all cattle on farm						
no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant
Step 2. Assessment – sub group						
tally no. /n (min. 20)	tally no. /n (min. 20)	tally no. /n (min. 20)	tally no. /n (min. 20)	tally no. /n (min. 20)	tally no. /n (min. 20)	tally no. /n (min. 20)
no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant

Using the example of cattle:

5. Mastitis		6. Cattle needing further care	7. Cattle needing immediate care	8. Mortality
Swollen udder	Somatic cell count			
Step 1. Assessment - all cattle on farm				
no animals Individual animals Less than a third Less than half predominant	> 300,000 yes no	no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	0 – 48 hours 48 hours – 90 days Older than 90 days
Step 2. Assessment – sub group				
tally no. /n (min. 20)		tally no. /n (min. 20)	tally no. /n (min. 20)	
no animals Individual animals Less than a third Less than half predominant		no animals Individual animals Less than a third Less than half predominant	no animals Individual animals Less than a third Less than half predominant	

Annex II: AWARE welfare assessment protocols cross referenced to the EU organic regulations

Animal based indicators may be used to provide an objective assessment of animal welfare. The animal based indicators as set out in the tables below may be used to inform a decision by inspectors on compliance to the requirements as set out in the EU organic regulation 834/2007 and its implementing rules.

Article 3

Organic production shall pursue the following general objectives:

a) establish a sustainable management system for agriculture that:
   (iv) respects high animal welfare standards and in particular meets animals' species-specific behavioural needs;

Article 5

In addition to the overall principles set out in Article 4, organic farming shall be based on the following specific principles:

e) the maintenance of animal health by encouraging the natural immunological defence of the animal, as well as the selection of appropriate breeds and husbandry practices;
h) the observance of a high level of animal welfare respecting species-specific needs;
j) the choice of breeds having regard to the capacity of animals to adapt to local conditions, their vitality and their resistance to disease or health problems;
l) the application of animal husbandry practices, which enhance the immune system and strengthen the natural defence against diseases, in particular including regular exercise and access to open air areas and pastureland where appropriate;

Article 14

1. In addition to the general farm production rules laid down in Article 11, the following rules shall apply to livestock production:

b) with regard to husbandry practices and housing conditions:

(i) personnel keeping animals shall possess the necessary basic knowledge and skills as regards the health and the welfare needs of the animals;
(ii) husbandry practices, including stocking densities, and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met;
(iii) (viii) any suffering, including mutilation, shall be kept to a minimum during the entire life of the animal, including at the time of slaughter;

Besides of the general principles and objectives of the EU organic regulation 834/2007 the EU Regulation 889/2008 lays down detailed rules for the implementation of EU organic regulation 834/2007. Articles 10(1), 10(3), 11 (2), 23(4), 24(1),76 (c) define some guidelines about animal husbandry and health. To validate whether they are observed or not the animal based indicators described in the AWARE welfare assessment protocols can be used.

In addition to these general principles, animal based indicators enable inspectors to better understand what impact the resources being provided and management practices being implemented are having on the animals. In following tables we have indicated which animal based indicators may be used to inform compliance to EU organic regulation requirements. The following tables detail the most common indicators which can be observed and measured on farm. Inspectors are encouraged to write down further detailed comment regards the welfare state of the animals assessed. These comments can include positive remarks about good care, husbandry and health

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Cattle	
Animal based indicators	**Corresponding EU Organic regulation requirement**
Lameness	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 834/2007 Art. 14(1)(e)(ii) Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Body condition score	***(EC) Reg. 834/2007 Art. 14(1)(d)(ii)*** Livestock shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development. A part of the ration may contain feed from holdings which are in conversion to organic

	farming.
Cleanliness	***(EC) Reg. 889/2008 Art. 11(2)*** The housing shall be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area. The litter shall comprise straw or other suitable natural material. The litter may be improved and enriched with any mineral product listed in Annex I.
	(EC)Reg. 834/2007 Art.14(1)(b)(ii) Husbandry practices, including stocking densities and housing conditions shall ensure that the development, physiological and ethological needs of animals are met.
Hair loss, lesions, swelling and injury	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the buildup of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 10(3) The stocking density in buildings shall provide for the comfort, the well being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the

	group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
	(EC) Reg. 889/2008 Art. 11(2) The housing shall be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area. The litter shall comprise straw or other suitable natural material. The litter may be improved and enriched with any mineral product listed in Annex I.
Mastitis; swollen udder, somatic cell count (SCC)	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.

Cattle needing further care (e.g. respiratory diseases)	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 10(1) Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building shall permit plentiful natural ventilation and light to enter.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Cattle needing immediate care (e.g. euthanasia/hospitalisation)	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of

	treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007 animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Mortality	***(EC) Reg. 889/2008 Art.76(c)*** Livestock records shall be compiled in the form of a register and kept available to the control authorities or bodies at all times at the premises of the holding. Such records shall provide a full description of the herd or flock management system comprising at least the following information: (c) details of any animals lost and reasons thereof;
Goats and sheep	
Lameness	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 834/2007 Art. 14(1)(e)(i) Disease prevention shall be based on breed and

	strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Body condition	***(EC) Reg. 834/2007 Art. 14(1)(d)(ii)*** Livestock shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development. A part of the ration may contain feed from holdings which are in conversion to organic farming.
Cleanliness	***(EC) Reg. 889/2008 Art. 11(2)*** The housing shall be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area. The litter shall comprise straw or other suitable natural material. The litter may be improved and enriched with any mineral product listed in Annex I.
	(EC)Reg. 834/2007 Art.14(1)(b)(ii) Husbandry practices, including stocking densities and housing conditions shall ensure that the development, physiological and ethological needs of animals are

	met.
Fleece loss and quality (hair/coat condition in goats)	***(EC) Reg. 834/2007 Art. 14(1)(b)(ii)*** Husbandry practices, including stocking densities, and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met.
	(EC) Reg. 834/2007 Art. 14(1)(e)(ii) Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 834/2007 Art. 14(1)(d)(ii) Livestock shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development. A part of the ration may contain feed from holdings which are in conversion to organic farming.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Abscess, lesions and swellings	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-

	infection and the buildup of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 10(3) The stocking density in buildings shall provide for the comfort, the well-being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
	(EC) Reg. 889/2008 Art. 11(2) The housing shall be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area. The litter shall comprise straw or other suitable natural material. The litter may be improved and enriched with any mineral product listed in Annex I. ***(EC) Reg. 889/2008 Art. 24(1)*** Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Tail docking (docked short) (sheep only)	***(EC) Reg. 889/2008 Art. 23(4)*** Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the buildup of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise

	smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 18(1) Operations such as attaching elastic bands to the tails of sheep, tail docking, cutting of teeth, trimming of beaks and dehorning shall not be carried out routinely in organic farming. However, some of these operations may be authorised by the competent authority for reasons of safety or if they are intended to improve the health, welfare or hygiene of the livestock on a case-by-case basis. Any suffering to the animals shall be reduced to a minimum by applying adequate anaesthesia and/ or analgesia and by carrying out the operation only at the most appropriate age by qualified personnel.
Udder (including mastitis) (goats only)	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.

Animals needing further care (e.g respiratory diseases)	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Animals needing immediate care (e.g. euthanasia/hospitalisation)	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Mortality	***(EC) Reg. 889/2008 Art.76(c)*** Livestock records shall be compiled in the form of a register and kept available to the control authorities or bodies at all times at the premises of the holding. Such records shall provide a full description of the herd or flock management system comprising at least the following information:

	(c) details of any animals lost and reasons thereof

Lambs and kids	
Overall health – *dehydrated; needing further treatment or euthanasia*	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Diarrhoea	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.

Pigs	
Lameness	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 834/2007 Art. 14(1)(e)(i) Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Body condition score	***(EC) Reg. 834/2007 Art. 14(1)(d)(ii)*** Livestock shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development. A part of the ration may contain feed from holdings which are in conversion to organic farming.

Injuries	***(EC) Reg. 834/2007 Art. 14(1)(b)(ii)*** Husbandry practices, including stocking densities, and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met.
	(EC) Reg. 834/2007 Art. 14(1)(e)(ii) Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 10(3) The stocking density in buildings shall provide for the comfort, the well being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007 animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
	(EC) Reg. 889/2008 Art. 11(2) The housing shall be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area. The litter shall comprise straw or other suitable

	natural material. The litter may be improved and enriched with any mineral product listed in Annex I.
Skin condition	***(EC) Reg. 834/2007 Art. 14(1)(b)(ii)*** Husbandry practices, including stocking densities, and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met.
	(EC) Reg. 834/2007 Art. 14(1)(e)(ii) Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Pigs needing further care - *but not requiring to be in the hospital pen*	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 10(1) Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building shall permit plentiful natural ventilation and light to enter.

	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Pigs requiring immediate care – *sick or injured (hospital pen)*	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Mortality	***(EC) Reg. 889/2008 Art.76(c)*** Livestock records shall be compiled in the form of a register and kept available to the control authorities or bodies at all times at the premises of the holding. Such records shall provide a full description of the herd or flock management system comprising at least the following information: (c) details of any animals lost and reasons thereof
Slaughterhouse measures – *condemned carcasses, liver condition, lung condition*	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 834/2007 Art. 14(1)(e)(ii)

	Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.

Laying hens *NB: measure in italics will require the birds to be picked up*	
Feather loss	***(EC) Reg. 834/2007 Art. 14(1)(b)(ii)*** Husbandry practices, including stocking densities, and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met.
	(EC) Reg. 834/2007 Art. 14(1)(d)(ii) Livestock shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development. A part of the ration may contain feed from holdings which are in conversion to organic farming. ***(EC) Reg. 889/2008 Art. 10(3)*** The stocking density in buildings shall provide for the comfort, the well-being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
Birds needing further care	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 10(1) Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building shall permit plentiful natural ventilation and light to enter.

	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Birds requiring immediate care	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Head conditions	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions;
	(EC) Reg. 889/2008 Art. 10(1)

	Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building shall permit plentiful natural ventilation and light to enter.
	(EC) Reg. 889/2008 Art. 10(3) The stocking density in buildings shall provide for the comfort, the well-being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
Foot abnormalities	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions;
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the buildup of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Keel bones	***(EC) Reg. 834/2007 Art. 14(1)(b)(viii)*** Any suffering, including mutilation, shall be kept to a minimum during the entire life of the animal, including at the time of slaughter.
Mortality	***(EC) Reg. 889/2008 Art.76(c)***

	Livestock records shall be compiled in the form of a register and kept available to the control authorities or bodies at all times at the premises of the holding. Such records shall provide a full description of the herd or flock management system comprising at least the following information: (c) details of any animals lost and reasons thereof

Broilers and turkeys *NB: measure in italics will require the birds to be picked up*	
Feather loss – *turkeys only*	***(EC) Reg. 834/2007 Art. 14(1)(b)(ii)*** Husbandry practices, including stocking densities, and housing conditions shall ensure that the developmental, physiological and ethological needs of animals are met.
	(EC) Reg. 834/2007 Art. 14(1)(d)(ii) Livestock shall be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development. A part of the ration may contain feed from holdings which are in conversion to organic farming. ***(EC) Reg. 889/2008 Art. 10(3)*** The stocking density in buildings shall provide for the comfort, the well being and the species-specific needs of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
Dirtiness/condition of plumage	***(EC) Reg. 889/2008 Art. 23(4)*** Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the buildup of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Walking ability	***(EC) Reg. 834/2007 Art. 14(1)(c)(iv)*** Appropriate breeds shall be chosen. The choice of breeds shall also contribute to the prevention of any suffering and to avoiding the need for the mutilation of animals.

	(EC) Reg. 834/2007 Art. 14(1)(e)(i) Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Birds requiring further care	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 10(1) Insulation, heating and ventilation of the building shall ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building shall permit plentiful natural ventilation and light to enter.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Birds requiring immediate care	***(EC) Reg. 834/2007 Art. 14(1)(e)(ii)*** Disease shall be treated immediately to avoid suffering to the animal; chemically synthesised allopathic veterinary medicinal products including antibiotics may be used

	where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products is inappropriate. In particular restrictions with respect to courses of treatment and withdrawal periods shall be defined.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
	(EC) Reg. 889/2008 Art. 24(1) Where despite preventive measures to ensure animal health as laid down in *Article 14(1)(e)(i) of Regulation (EC) No 834/ 2007* animals become sick or injured they shall be treated immediately, if necessary in isolation and in suitable housing.
Foot abnormalities	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Hock burns	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic

	conditions.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
Mortality	***(EC) Reg. 889/2008 Art.76(c)*** Livestock records shall be compiled in the form of a register and kept available to the control authorities or bodies at all times at the premises of the holding. Such records shall provide a full description of the herd or flock management system comprising at least the following information: (c) details of any animals lost and reasons thereof
Breast blisters	***(EC) Reg. 834/2007 Art. 14(1)(e)(i)*** Disease prevention shall be based on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
	(EC) Reg. 889/2008 Art. 23(4) Housing, pens, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build-up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.