Guide to animal welfare control

Explanatory notes 2024

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Legend

Boxes with checklist symbol

... contain special instructions or tips for inspectors.

Boxes with boot symbol

... contain special information or tips for farmers.

Introduction

A high level of animal welfare is a core characteristic of organic farming. Animal welfare includes both the physical health of an animal and its well-being. Welfare is based on an active and successful engagement with its environment, the ability to perform species-specific behaviour and the experience of positive feelings as well as the avoidance of pain and suffering (World Organisation for Animal Health, 2023). The aspects of animal health, animal behaviour and the emotions of the animal are considered.

The animal welfare checklist considers important aspects of animal welfare that can be checked as part of the organic inspection. However, it does not fulfil the requirements of a time-consuming, comprehensive animal welfare inspection.

These guidelines primarily explain the methods for carrying out the mandatory animal welfare inspection by the auditors on the farms of the affiliated organisations. At the same time, it is also intended to serve as transparent assistance and information for farm managers with regard to the expected requirements and their verification. Last but not least, important inspection points can be used for the mandatory self-monitoring required by the Animal Welfare Act by means of regular operational documentation.

On-farm self-monitoring

...is mandatory according to the German Animal Welfare Act §11 paragraph 8 (deutsches Tierschutzgesetz §11 Absatz 8). Suitable animal-related indicators should be used. These guidelines offer a practical way of carrying out self-inspections and can also be used for animal welfare inspections if documented accordingly.

An own honest animal welfare control helps to recognise possible deviations at an early stage and to initiate countermeasures in good time to ensure the welfare of the animals and their performance. Changes over time can also be identified through regular surveys and corrective action can be taken if necessary.

Objective of animal welfare control

Since 2014, a comprehensive animal welfare inspection has been carried out annually as part of the regular inspection of all livestock farms belonging to the organic associations that are organised in the associations' Animal Welfare Working Group (AGT). These are currently Bioland, Naturland, Biokreis, Gäa and Ecoland. The animal populations are assessed based on indicators jointly defined by the associations and a decision is made as to whether there is a need for action. The aim is to provide farmers with clear guidance. The experiences of the inspectors, the associations and the farmers as well as new scientific findings are incorporated into the further development of the animal welfare inspection.

The procedure was agreed at the associations' meetings of members and delegates and has been incorporated into the guidelines.

Our common goal is animal husbandry that fulfils the requirements set out in our production guidelines as well as scientific findings regarding animal health and welfare. Animal husbandry should be presentable with a high level of animal welfare on all farms.

These guidelines explain how to use the checklists. In addition, the Animal Welfare Working Group provides inspectors with training on how to carry out the inspection and how to assess the individual indicators.

New animal welfare inspectors

...must complete the theoretical online training courses (basics + relevant animal species) and at least one practical training course in the first year. Participation in the training courses for the other relevant animal species must take place within the first two years.

The theoretical and practical training must be repeated no later than five years after the respective practical training.

An animal species is to be classified as relevant as soon as the number of animals on the farm to be inspected exceeds the defined framework of the small herd (see Table 1 on page 10).

The procedure

Six key questions are asked in the animal welfare assessment:

1. Are the animals in good nutritional condition?
2. Are the animals in good state of care?
3. Are the animals healthy and largely free of external injuries and technopathies?
4. Are the feeding, drinking troughs, stable equipment, free-range and pasture in order?
5. Are the animal losses below the specified limit?
6. For pigs and poultry additionally: Are the carcass protocols in order?

It should be noted at this point that there are numerous other animal welfare-related regulations in the EU Organic Farming Regulation and the association guidelines (minimum areas for stalls and runs, regulations on grazing, sufficient bedding, pain relief during interventions, etc.). These apply independently of the animal welfare controls described here and compliance with them will continue to be monitored.

There is an **animal welfare checklist** for each of the following animal categories:

- Large herbivores (cattle, horses and others)
- Small ruminants (sheep, goats and others)
- Poultry
- Pigs

Less frequently kept animal species are also checked, most of which can be found on the checklists with a tick box (e.g. wild game under small ruminants, quails under "Other" in poultry). If individual checklist items do not apply to this animal species, this is considered and noted accordingly.

Animals kept in pension are always treated as own animals. Shepherds are responsible for their animals themselves and not the farm on whose land they graze. The tenants and not the landlords are responsible for animals in leased stables.

The animal welfare check should be as short as possible but as long as necessary. A guideline value for medium-sized herds (e.g. 40 cows + offspring) is 60 minutes per animal species. In individual cases, this depends heavily on the type and number of barns, the

size of the flock and also on the preparation for the inspection by the farmer. For larger herds, inspection points are sometimes assessed in random samples (see explanations for the individual types of animal on pages 15, 44, Fehler! Textmarke nicht definiert. and 95)

The control time can be reduced

...if traceable loss data, carcass protocols, documents on cell counts or similar data are already available due to good control preparation by the farmer.

The inspection may take longer if there are many animal welfare deficiencies, groups of animals are in different conditions or at different locations, or if there are insufficient records. In any case, **diligence takes precedence over speed.**

During the animal welfare inspection, the inspectors should focus on the assessment of animal welfare in an unbiased and objective manner, regardless of the size of the herd and other operational situations. Special operational situations at the time of the inspection, which may be related to any deviations found, should be noted as additional information (e.g. current family emergency situation).

How to use the checklists

The animal husbandry must be fully assessed. **All checklist points must be assessed**. If a checkpoint cannot be assessed in a specific control situation or for a specific animal category, this must be noted with the reason or recorded as not relevant (n.r.). If different groups of an animal species are kept in different stables (e.g. dairy cattle, young cattle, calves), but the condition of the animals and the stables is comparable, the assessment can be documented on a checklist. **Different locations** in the case of several premises must be assessed on **separate checklists.**

Before the assessment, the animal species, the respective number of animals on the inspection day, the respective husbandry system and, if applicable, the breed must be indicated in the checklist header.

The information on the number of animals refers to the inspection day, not to the average number of animals kept over the year.

Small herds are defined in the checklists. Here, the respective animal species is only assessed by visual inspection. However, if there are obvious deviations in animal welfare, the entire checklist must be completed. The respective limits for the small herd sizes apply independently of each other and are not added up.

The following limits apply to small stocks:

Table 1 : Maximum limits for small stocks

Animal category/ies	**Number of (mother) animals in each case**
Dairy cows/suckler cow cows	10
Fattening cattle/young cattle (pure fattening/rearing farms)	10
Horses and other species	10
Sheep/goat/pastured game	20
Laying hens/young hens/fattening poultry	100
Sows	5
Rearing piglets	10
Fattening pigs	10

Animal husbandry for personal use must be handled in the same way as small herds.

The **inspection points to be recorded directly on the animals** are only completed in the inspection form if the animals to be assessed were on the farm. Loss values and carcass protocols can also be assessed in production processes in which there are temporarily no animals in the barn (e.g. fattening processes, particularly in poultry fattening or laying hen husbandry). However, the inspection date should - if possible - be scheduled so that the animals to be assessed are on the farm. Otherwise, a follow-up inspection must be carried out when animals are housed again.

The percentages of most test points (exception: losses, carcass protocols) are determined based on an individual animal assessment in the entire herd or in a representative sample. The number of animals affected, and the number of animals analysed must be stated.

It is important to ensure that the **percentage values** (e.g. for losses, cleanliness or injuries to the animals) **relate** to the **age group or animal category** checked and **not to the entire herd**. For example, it is already a deviation if more than 20 % of the young cattle are heavily soiled - even if this picture is not reflected in the cows.

To determine the **animal losses in the period under review** from the last inspection to the current inspection day, an evaluation must be carried out using farm records or database extracts. Information on the correct calculation can be found below at the respective checkpoint. A plausibility check is carried out using the invoice or receipts from the rendering plant. The keeping of records or proof of all types of entries and exits within the livestock is mandatory according to Regulation (EU) 2021/1691. This means that **non-existent records of losses or stillbirths must always be regarded as a deviation**.

The inspectors **pre-classify the severity of the deviations** into the categories "minor", "clear" and "serious":

Table 2: Categorisation of the severity of deviations

Classification Deviation	From	Until
minor	Limit value	Limit value + 50 %
clear	Limit value + 50 %	Limit value + 100 %
serious	Limit value + 100 %	

There are **minor** deviations if the deviation from the limit value is only a few percent or to a small extent. It is clear, however, that the term "minor" must not obscure the fact that a deviation exists and must be criticised and sanctioned.

A deviation is **clear** if it is at least 50 % above the limit value (e.g. 15 % instead of 10 % emaciated cows)

Serious deviations are at least 100 % above the limit value (e.g. 20 % instead of 10 % emaciated cows)

Pre-classification supports the work of the certification bodies, which must impose an appropriate and relevant sanction.

If only a **single animal** leads to a limit value being exceeded, this does not constitute a deviation.

If deviations or anomalies are found, these must be described in the **deviation report** (Bioland, Gäa) or in the **comments field** (Naturland, Biokreis, Ecoland) in such detail that the certification body or the association's quality assurance department is able to impose an appropriate sanction without the need for a further inspection.

The following must be stated:

- **Number and proportion** of animals affected
  (e.g. 3 out of 30 cows = 10 %)
- **Expression or localisation of the change in the** animal
  (e.g. circumferential swelling at the carpal joint)
- **Causes**, if known
  (e.g. insufficient bedding in the lying area)
- **Measures** that have already been taken or are planned
  (e.g. veterinary treatment and more straw bedding)
- **Period** of animal welfare deviation
  (e.g. noticed 2 weeks ago, but these are currently healing)
- **Photos** that can illustrate the situation must also be sent to the association's certification body

For a comment

...of the farm management, a field is provided in the inspection report if there is a deviation in animal welfare. For example, causes of losses, investigations already carried out or measures taken can be specified. This makes it easier to understand the facts.

In the event of serious violations of the EU Organic Regulation (Regulation (EU) 2018/848), the association's certification body will be informed immediately.

The procedure in the barn

Necessary **hygiene measures** when entering stables and when in contact with farm animals are mandatory and must be observed even without special instructions from the farm management (washable fresh overalls or disposable overalls and shoe covers or the farm's own clothing, hand washing and hand disinfection and/or disposable gloves, cleaned and disinfected aids such as clipboards, etc.). **This applies in principle regarding preventing the transmission of animal diseases.** The utmost care must be taken if you have your own livestock or have visited another herd with the same animal species within the last 48 hours. This should be avoided in the planning. If not otherwise possible, showering, and careful disinfection between the farms is advisable before inspections. The basic rule for the order of inspection on a farm is "from young to old", unless otherwise specified by the farm management. Care must also be taken not to walk over the feed

table or even through the feed with faeces-soiled boots. If necessary, the overboots or boots should be cleaned with a water hose or changed from time to time.

Firstly, the inspector gains an **overall impression** of the animals and the barn facilities by standing in the barn, observing the animals for a few minutes and then slowly walking through the barn. They should also look at the less frequently used areas of the barn where sick or injured animals may retreat. Noises such as coughing can also be heard here.

To **assess individual animals,** you walk quietly through the herd in the presence of the farm manager or a person responsible for the animals with an animal survey sheet and record the indicators recorded on the animal. Afterwards or at the same time, you look at the drinking troughs, the barn equipment and the feed and gain an impression of the barn climate and the incidence of light.

For larger herds, a **random sample** is sufficient, i.e. not all animals need to be assessed. Information on the required sample size depending on the herd size can be found in the individual animal species.

Binoculars can be an advantage when checking animals in the pasture so that you can also inspect animals that you cannot get close to.

The safety of the inspectors and the avoidance of accidents have absolute priority. Therefore, the farmer or a person authorised by the farmer should be present during the animal welfare inspection, either directly or within calling distance. If the animals are assessed in the walking area of the barn or on the pasture (e.g. cattle), special care must be taken, as not all herds and groups of animals react in the same way to strangers. If male animals are present, the assessment must be carried out from a safe position and a second person must always be within calling distance. This special caution also applies to pasture inspections of suckler cow herds.

Further information on the procedure in the barn is listed under the individual animal species.

Dealing with the control results

The inspection report will be **sent** to the responsible office of the respective association **within the next 14 days, in serious cases immediately** (within three working days of the inspection at the latest) (see also inspection officer documents).

The certification body sets conditions and, if necessary, the company is requested to write, submit and implement an action plan. If necessary, the advisory service is informed to support the company in achieving an acceptable status.

Depending on the type and severity of the deviations, the certification body may commission a follow-up inspection (usually unannounced) after a reasonable period of time. In the case of minor non-conformities or longer-term measures, a check is carried out in the following year to determine whether the measures have been implemented and/or the defects rectified.

In the event of serious deviations, the possibility of labelling the affected product group with the association trademark may be withdrawn.

If the deficiencies are not remedied in due time, the sanctions will be more severe; in the event of a repeat offence, they may even lead to the withdrawal of the label and termination of the business.

Transparency between the associations

Transparency is established between the associations regarding the number and type of deviations, sanctions and their implementation. Reporting is carried out in anonymised form and summarised by the Animal Welfare Working Group in an annual report.

In the event of a change of association, the association inspection reports for the last few years, including the results of the animal welfare inspection on the holding concerned, must be inspected by the receiving association.

The inspection criteria for each animal species according to the inspection checklist are explained below. Changes to the checklist items for the current year compared to the previous year are highlighted in yellow.

Large herbivores

The large herbivores include cattle and horses and other animal species such as bison and buffalo.

The checkpoints for cell counts (page Fehler! Textmarke nicht definiert.) and animal losses (from page 39) can be dealt with in the office before entering the barn.

The best time to observe a herd is during feeding or, in the case of dairy cows, towards the end of the milking period or at pasture turnout, as this is when the majority of the herd is on the move. In the case of dairy cows and young female cattle, it is easy to assess individual animals while walking quietly through the herd (no loud, hectic movements). However, another person must always be within calling distance.

Caution! Cattle can also sometimes kick out suddenly, especially if they are startled. Particular care should be taken with free-ranging bulls and stallions. It is then not advisable to walk through the herd or only with the additional protection of another skilled person. Work safety always has priority.

If the animals are in the pasture, the time required increases. If there are several groups of grazing animals, possibly spread over a wide area, it is sufficient to inspect only some of the grazing animals. It is recommended that a farm is inspected alternately in the winter and summer months.

When checking the percentage values, an overview assessment is first carried out to see whether the specified proportion of animals can be found. For example, do you find more than 10 emaciated animals in a herd of 100 cows?

The necessary sample size for the exact surveys on the animal can be found in the following table:

Table 3: Minimum number of animals to be assessed depending on herd size

Herd size	Number of animals to be assessed
< 30	All
30 - 50	30
51 - 100	40
101 - 150	50
151 - 200	60
> 200	30 %

The control time can be reduced

...if the following documents are prepared for the inspection:

- Outside Germany: stock register with number of perished animals including age at death since the last inspection
- Somatic cell count since last inspection (monthly)

1. Nutritional status

1.1 Less than 10 % of the animals are emaciated (BCS < 2.5).

Why?

Emaciated animals are either malnourished in relation to their performance or suffer from diseases that lead to reduced feed intake (e.g. lameness, infectious diseases).

How?

When assessing body condition, the fat cover on the bones is to be assessed, but not the meatiness of an animal. Dairy-orientated dual-purpose breeds have less meat than meat-orientated dual-purpose breeds or suckler cow breeds, which can be confusing when assessing them. Therefore, the focus should be on the designated body parts. In view of the fact that emaciation can result from lameness, lying cows should also be considered.

The assessment is carried out according to the so-called body condition score (BCS). Animals with a score of less than 2.5 are classified as significantly emaciated. This can be recognised if the ischial tuberosity (*Figure 1* point4) is only covered like leather without fat deposits and the transverse processes (*Figure 1* point 2) are at least half ribbed
Alternatively, you can orientate yourself on whether at least three of the following criteria are fulfilled

- Deep pit under the base of the tail
- Deep indentation between spine and iliac tuberosity
- Sharp ends of the transverse processes with a clear ledge to the paralumbar fossa
- Ischial and iliac tuberosities, ribs, spinous processes clearly protruding.

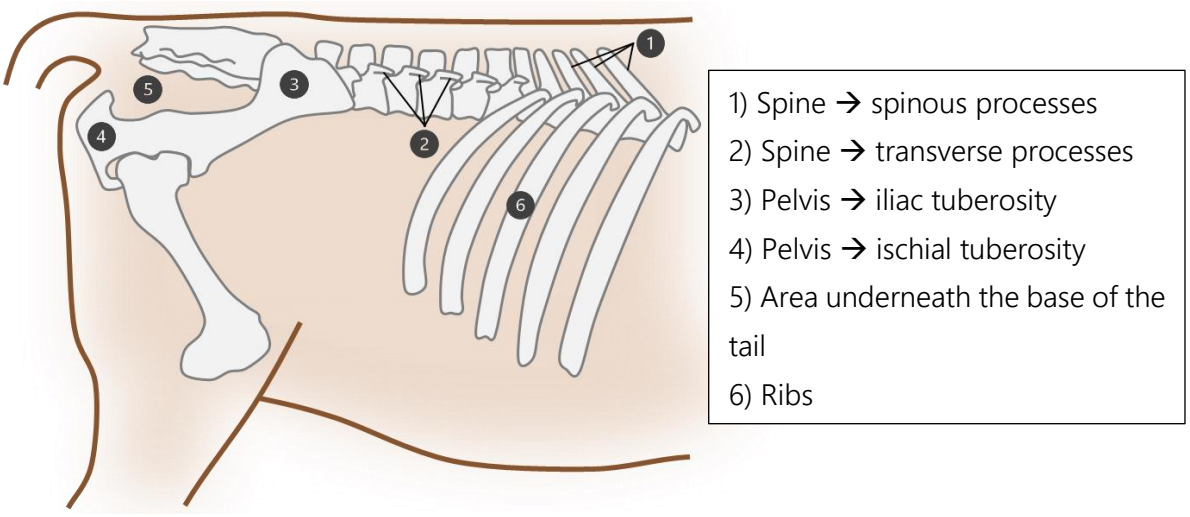


Figure 1: Anatomical structures on cattle relevant for assessing body condition

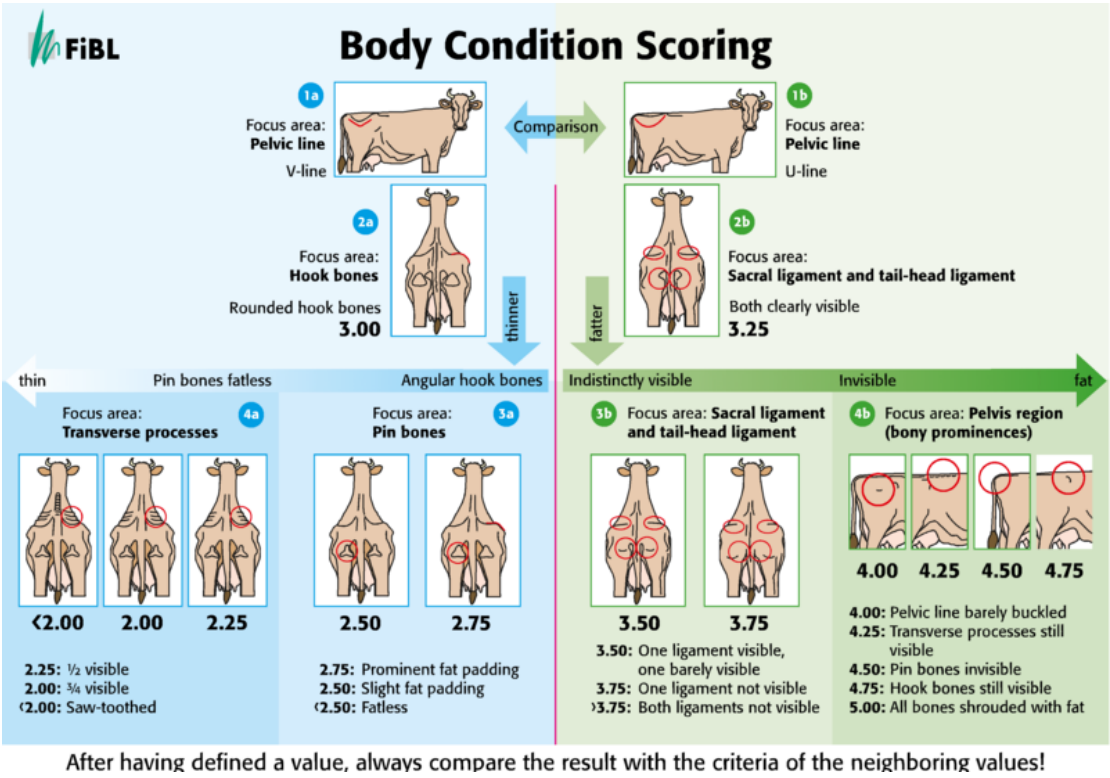


Figure 2: Body condition assessement scheme according to FiBL

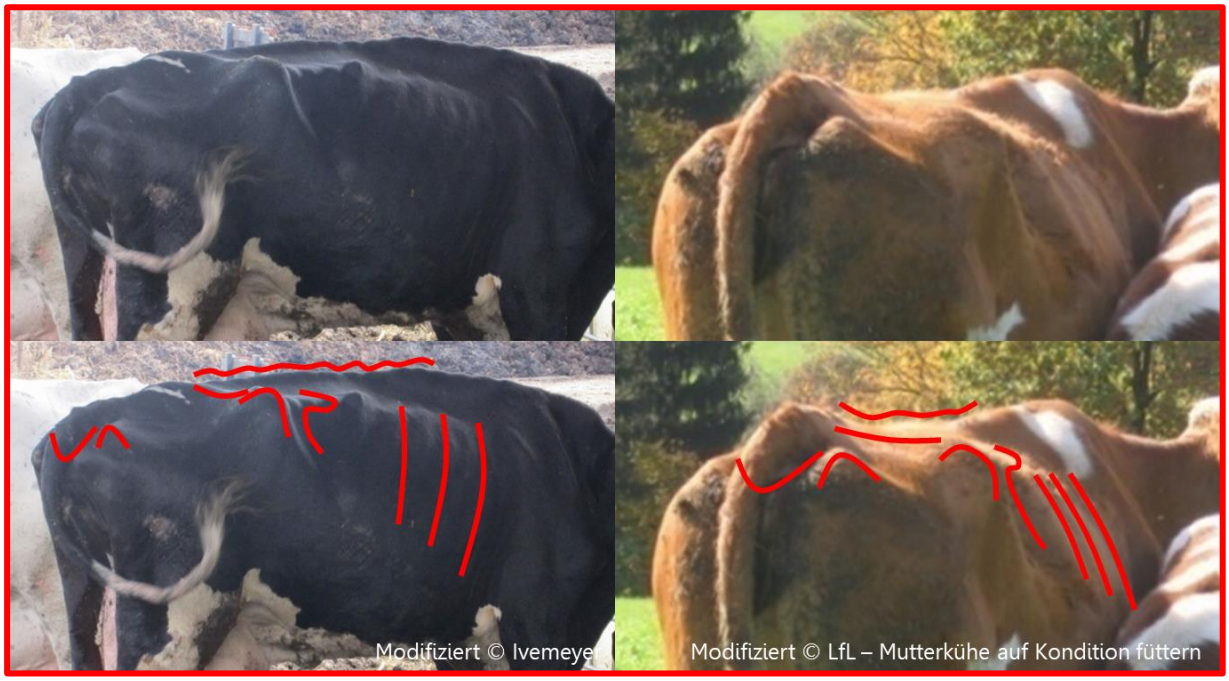


Figure 3: Characteristics of significant emaciation (BCS < 2.5), left: dairy cow breed ("only skin and bones"); right: beef-focused breed (bones visible/ protruding)

Special attention should be paid if, in addition to poor body condition, many animals have a dull coat, do not ruminate, eat or drink, stand around listlessly and are obviously not feeling well. Vital cattle ruminate, eat and are attentive, socialise or rest.

If the reason for the emaciation has already been determined and appropriate countermeasures have been taken, this should be noted.

In the case of horses with severe emaciation, the breed and age of the animal as well as the other care conditions should be recorded.

Recommendations

Emaciation can have various causes. For example, the feed may have too low an energy/protein content in relation to the animal's performance. As the animals have a limited intake capacity for feed, they cannot eat enough to compensate for this deficit. Insufficient feed intake can be caused by poor palatability due to inferior feed quality, lameness of the animals or loss of appetite due to metabolic diseases. Various illnesses lead to fever, malaise and thus to loss of appetite: a calf with diarrhoea has abdominal pain and therefore does not drink, etc. But even if the animals consume enough good feed, they can lose weight. Diseases such as paratuberculosis alter the intestines so that nutrients are not available to the animal. Rumen acidosis damages bacteria that provide nutrients. Endoparasites use the energy provided for their own growth. In the case of the latter, it should be noted that even regular deworming cannot rule them out as a cause, as they can develop resistance.

As lactation begins, a slight energy deficit in the cows is normal (up to a maximum of 0.5 BCS points). However, a drop in BCS below 2.5 should always be avoided.

In order to cover as many causes as possible, the feed (quality, hygiene, quantity provided, ration composition, etc.) should be checked in the case of emaciated animals and the causes of disease should be ruled out. The farm vet or advisor can be the right person to contact here.

2. Maintenance condition

2.1 Less than 20 % of the animals are very dirty at the udder, belly, rear view and/or upper hind leg.

Why?

Soiled animals are a sign of a lack of care and poor husbandry management. Heavy soiling causes itching and thermoregulation is restricted. Skin diseases can develop. Soiling on the udder increases the risk of mastitis infection.

How?

The easiest way to carry out the assessment is if the animals are all standing at the feed fence after feeding and the side and rear views are clearly visible. If the animals are also restrained, this contributes to the safety of the inspector and the farm manager during the inspection.

The animals are examined at the body parts udder, belly, hind leg and/or rear view (Figure 4). Soiled areas from a diameter of about 40 cm (approx. forearm length), as well as three-dimensional adhesions/encrustations and extensive soiling with fresh faeces are recorded. Slight discolouration of the coat, on the other hand, is not assessed. Fresh faeces marks on the hindquarters of some animals are unavoidable.

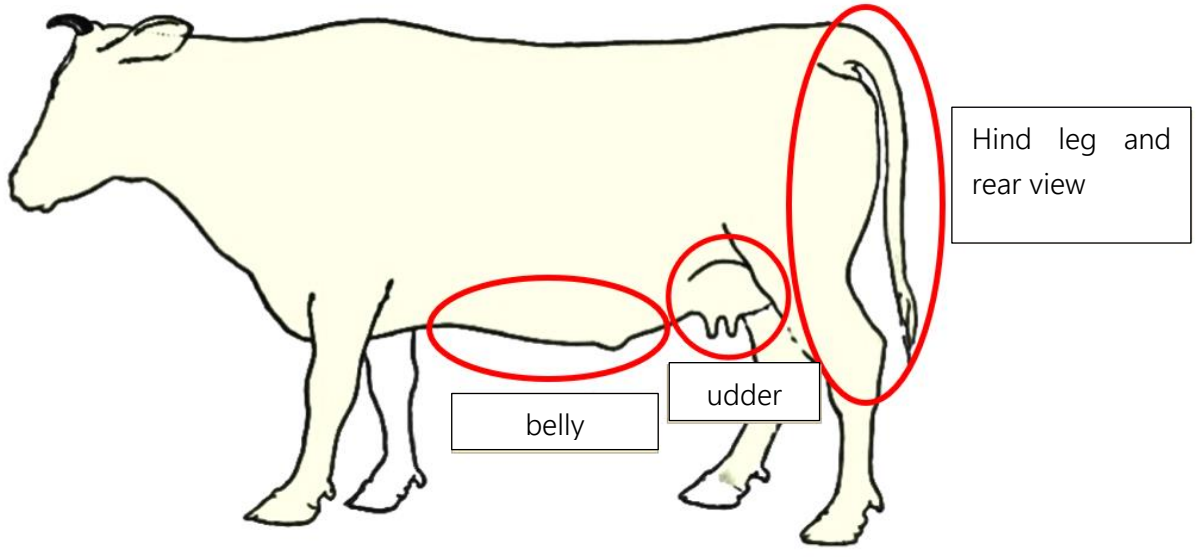


Figure 4: Assessment regions for examination of soiling

Figure 5: from left to right: soiled beef-cow, soiled calf, soiled cow

If the cause of the current high level of soiling in the animals is known (e.g. defect in the slider, lack of bedding), this should be noted. Even if the same body region (e.g. back, belly, flank, tail, legs) is always affected by the soiling, this can be noted and provides important approaches for clarifying the cause for the farm and counselling.

Recommendations

Soiling not only leads to discomfort, reduced temperature exchange and possibly itching in the animals, it can also lead to complaints and deductions from the abattoir.

Soiling can be caused by husbandry management, feeding errors or illnesses. For example, the cubicles may be too short so that the animals prefer to choose another place to lie down or higher-ranking animals may block access to lying areas. It may also be necessary to clean the gangway more frequently. If the animals show diarrhoea, heavy soiling can also develop. The causes here are to be found in the feed composition and hygiene, as well as the exclusion of infectious diseases such as endoparasites, rota and corona viruses (calves), salmonella and many more.

The farm vet, feed advisor or counsellor can be contact persons here to quickly identify and eliminate the cause.

As soon as the grazing period begins, the degree of soiling of the animals often decreases, as they can lie down on the (dry) pasture.

2.2 Less than 10 % of the animals have overlong claws or hooves.

Why?

A high proportion of claws/ hooves that are too long indicates a lack of claw/ hoof care and/or poor husbandry management. This leads to malposition and further impairments as a result.

How?

Claws that are too long can be recognised by the fact that the tip of the claw is bent or that there is no full contact with the ground (Figure 6).

Figure 6: Claws too long and curved

Here too, a quick assessment can be made if all animals are standing at the feed fence after milking or feeding. The assessment is carried out in parallel with the recording of soiling from the side of the barn.

Individual bandages or freshly treated animals show that the farm is taking care of hoof health. If there are deviations, the farm management can indicate when the next hoof care appointment will take place (e.g. if the farm wants to prove that it has already initiated measures). In the event of anomalies in this characteristic, please be sure to note whether regular hoof care by a qualified hoof trimmer or appropriate veterinary treatment takes place on the farm according to the farm management or corresponding documents. Additional attention should be paid to "lameness" in the event of deviations in this point (see page 25), as these points often correlate.

Recommendations

Hoof care should be carried out approximately two to three times a year in the herd. It can prevent claw diseases and the onset of changes can be recognised early so that appropriate measures can be taken, such as claw baths or similar.

3. State of health

3.1 Less than 10 % of the animals have obvious skin or joint issues (hyperkeratosis, scrabs, wounds, horn inflicted or other injuries, swellings, etc.)

Why?

Injuries to the body indicate deficiencies in the stall equipment (risk of injury!), poor husbandry management (e.g. too little bedding) or strong rank fights in the herd.

How?

All external damage to the animal should be recorded, both that caused by the housing facilities and the type of husbandry (so-called technopathies) and that caused by the animals or humans.

If you walk slowly through the herd or examine it in the feed fence, you can easily recognise the typical swellings and skin damage on the front tarsal joint (front) or on the rear hock joint (usually on the side or back of the heel bump) or in the neck. Skin damage of at least 2 cm in size that shows open areas (wounds) or crusts or swellings / circumferential enlargements (joints) should be assessed as deviations (Figure 7). Attention should also be paid to injured, broken or shortened tails (Figure 8).

Figure 7: From left to right: wound/swelling an the ancle, wound/ swelling on the forefoot tarsal joint, wound(swelling on the neck

Figure 8: left: injured tail; centre: broken tail; right: shortened tail

In horned animal herds, rank disputes are more frequently visible in the form of skin damage than in hornless animals. This is tolerable to a certain extent. Animals that show more than 10 horn-related injuries (hairless or wound/crust) on the body are counted as deviant animals. The following diagram shows what horn lesions (fresh and healed) look like. Figure 9 below.

Figure 9: Horn impact injuries, from left to right: fresh, encrusted, healed and different hair lengths/ scarred

Nose rings that perforate the nasal septum (with the exception of breeding bulls) with or without attachments are not permitted. Nose clips to prevent mutual suckling or nose flaps for weaning are permitted, but must not cause injuries to the nose (e.g. nose flaps must not be worn for more than 2 weeks).

At this checkpoint, you should also keep an eye on those animals that withdraw. If there are any deviations and if injuries always appear to be in the same place (e.g. on the hind legs), this should be noted.

Recommendations

If there are clear external injuries, it is essential to identify the cause. Technopathies in the context of slowly developing hairless patches are often caused by the husbandry equipment (protruding screws, tethering device, feed fence). These can also result in open, bloody and/or inflamed injuries if the cause is not rectified. Horn blow injuries are clearly recognisable. The challenge is either to find the animal responsible or to provide enough space everywhere so that lower-ranking animals can always get out of the way.

3.2 Less than 5% of the animals are obviously lame (score 2 for loose housing systems, score 1 if cows are tethered).

Why?

Lameness has a major impact on animal welfare as it is associated with pain and has a huge impact on feeding behaviour and performance. They can lead to secondary diseases due to the pain-related stress and avoidance of movement (e.g. to the feeding table).

How?

This point is concerned with clearly visible lameness that is recognisable to everyone, i.e. animals that are clearly reluctant to take the weight off one leg or, in the worst case, barely walk with one leg (according to the KTBL guidelines for cattle by Brinkmann, et al. (2020): Score 2 for loose housing, pasture, etc.; score 1 for tethering period,). Lame cows walk with a hunched back, lowered head and short strides.

Figure 10: Left: severe lameness in the loose housing system; right: significant relief of one leg when standing (tethering period)

In order to determine how many animals are affected, the recumbent animals in particular must also be driven up. With dairy cows, however, it is better to observe the animals before and after milking (lame animals usually come into the milking parlour at the end) or when they are turned out to pasture.

In conspicuous herds, it may be necessary to subject a relevant sample of randomly selected animals to detailed lameness scoring to determine whether 5% or more of the animals are clearly lame and whether more than 10% of the animals even represent a serious deviation. More time must then be spent on this. An assessment can be made, for example, by having the animals in the selected group walk a short distance individually across an open space (e.g. in the run, at the feed fence or in a waiting area) with the help of the animal keeper and observing them as they do so. In individual cases, it may make sense to announce this procedure in advance when making an appointment for the animal welfare check!

If the check is carried out during the tethering period in the case of combined stance, the animal is assessed while standing to determine whether the back is curved due to lameness or whether one leg (or both hind legs: frequent alternation between relieving the load on one leg and the other) is relieved. As a rule, the animals do not need to be untied. In the event of abnormalities, scoring can also be carried out here, e.g. in the prescribed exercise area.

In the event of deviations, note whether lame animals are already being treated.

Recommendations

Lameness clearly indicates pain in the animals. In most cases, this is due to changes in the hoof, but it can also be caused by joint or back problems. Regular hoof care (two to three times a year, see page Fehler! Textmarke nicht definiert.) is an effective preventative measure.

3.3 Less than 10 % of the animals show other obvious signs of disease (skin diseases, ectoparasites, scrubby and dull coat, etc.).

Why?

The external appearance of the animals, especially the coat, is a good way of recognising feeding and husbandry-related deficiencies that need to be remedied.

How?

Do the animals have abraded areas, do they show itching? In the case of bovine ringworm and warts, this point particularly concerns calves and young cattle (mainly on the head and neck area), as adult animals build up immunity. In the case of frequent, massive and extensive occurrence, a disease with so-called bovine ringworm should be recorded as a deviation (Figure 11). Tail mange (caused by mites) is also common in cows.

Figure 11: Left: just barely acceptable manifestation of bovine ringworm; centre and right: very severe manifestation of bovine ringworm

In addition to the signs of illness mentioned above, there are many more: e.g. raised belly, very shaggy coat, externally visible udder inflammation or teat injuries, purulent discharge from the nose or vagina, drooping ears, calves with acute diarrhoea or severe coughing.

Abnormalities are taken into account when walking through the herd. Healthy animals are attentive, ruminate, eat or engage in personal and social grooming.

In the event of deviations, it must be noted whether countermeasures have already been initiated.

Recommendations

All skin diseases lead to severe discomfort. Skin diseases are favoured by a poor stable climate (damp, stuffy air), among other things. Infections with fungi (*Trichophyton verrucosum*, bovine ringworm, caution when handling such animals: Bovine ringworm is also transmissible to humans (zoonosis).) or endoparasites must be examined and treated by a farm vet in the same way as mastitis, calf diarrhoea or coughing. They impair the milk or growth performance of the animals and thus lead to economic losses.

3.4 The monthly average somatic cell count of the bulk milk does not exceed 300,000 cells per ml over three or more consecutive months).

Why?

Cell counts are an important key indicator for hygiene and health management in dairy farming. They say something about the state of udder health in the herd, which in turn is influenced by herd management, milking hygiene, feeding and cubicle care and bedding quality.

How?

The basic procedure for this test point is shown in Figure 12.

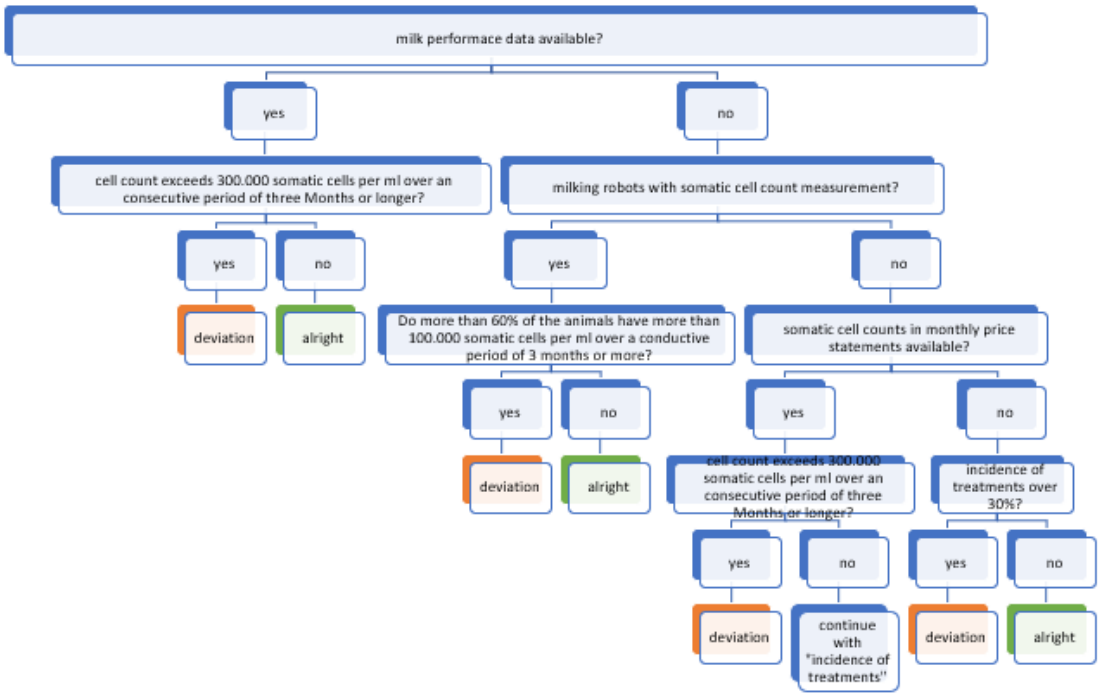


Figure 12: Procedure for the somatic cell count checkpoint

1. farms with milk performance testing:

The analyses of the milk performance test are routinely used for this indicator. In which way these data are provided is different in every country.

The period since the last animal welfare inspection is analysed. If the cell count exceeds 300,000 over a consecutive period of 3 months or longer, a complaint is raised.

If the limit value is exceeded, please note the cell counts for the last 12 months. Only then can a meaningful assessment be made of how serious the problem is whether it still exists and what measures may be necessary.

2. without milk performance testing for milking robots with somatic cell count measurement:

Documentation must be available at least monthly at individual cow level. If, over a period of 3 months, there are more than 60 % clearly conspicuous animals (via increased cell count measurement over 100 thousand), this is considered a deviation.

3. without milk performance testing and without milking robots with cell count measurement:

The monthly milk price statements are checked. If the cell count exceeds 300,000 for more than 3 months, this is considered a deviation.

In addition, if there is no discrepancy based on the milk yield statement, traceable documentation of treatments with chemical-synthetic medicines (antibiotics, painkillers, etc.) for udder infections during lactation (without antibiotic dryers) must also be viewed. Renewed treatments after a 7-day break in treatment count as new treatments, even if they affect the same quarter. An incidence of more than 0.3 treatments per cow in the past year counts as a deviation. Example: On a farm with 100 cows, the limit value is exceeded with 31 treatments in the past year.

Recommendations

Elevated cell counts provide a measurable indication of the health status of the dairy herd. A cell count of 300,000 cells per ml of milk is a clear indication of mastitis in the herd, regardless of the breed or age of the animals. It is therefore essential to look for causes and eliminate them. Quarter milking samples and subsequent bacteriological examinations provide important information and are part of the diagnostic process. The farm vet or advisor should be consulted.

3.5 Ill or injured individuals are treated competently and with care. If necessary, skilful emergency killing takes place immediately.

Why?

Animal welfare legislation imposes strict requirements on the handling of sick animals, which must be complied with on every farm. The presence of a pen to segregate ill individuals is mandatory. This can also be set up provisionally, e.g. with mobile partitions.

How?

Individual animals that are clearly ill (e.g. fever, disturbed general condition, acute accidents) and have no or difficult access to resources such as feed, water and resting areas must be housed and cared for in a pen to segregate ill individuals from the rest of the herd with plenty of bedding, the best feed and drinking water that is always available. This pen should be at least 12 metres^2 in size for adult cattle (single pen) and at least 10 metres^2 per GM for group pens. A calving pen is not a sick pen.

It should be clear that the farmer cares for the sick animal and provides it with professional treatment and caring care. LCT (love, care and tender) is an essential prerequisite for a successful recovery - even for farm animals.

If there is no successful prognosis for the treatment, "professional treatment" can also mean that the animal must be killed in accordance with animal welfare regulations (i.e. after prior anaesthesia). Professional emergency killing is usually carried out by the vet. In the case of acutely injured animals (e.g. muscle tear, leg fracture) that are unfit for transport but otherwise fit for slaughter, emergency slaughter can also be carried out on site by an authorised slaughterhouse after consultation and certification by the veterinarian.

Recommendations

A sick pen (unlike a calving pen!) should be available on every farm. Here the animal has the chance to recover without stress and it is easier to check the feed and water intake as well as the behaviour of the sick animal. It should be ensured that the animals can be restrained in the sick pen so that treatments can be carried out.

Professional euthanasia is necessary if no other measures can end the animal's suffering and there is no good prognosis for recovery. The vet is the best point of contact here. Butchers may also be authorised to carry out professional slaughter (in this case, the animal is stunned in advance using a captive bolt stunner).

4. Shed, pasture and feed

4.1 The feed is of good quality and there is no spoilt, foul, mouldy feed on the feed table or in the trough.

Why?

Feed hygiene is one of the most important measures for keeping livestock healthy.

How?

Except for a period in which the trough is cleaned, there is always feed in the trough or in the racks during winter feeding. This feed must smell pleasant and must not be warm, mouldy or spoiled. Old, spoilt feed should be placed on the manure and must not be within reach of the animals or in the barn or accumulated there; this is also to prevent rodent damage in the barn. Compliance with basic feed hygiene measures must be recognisable.

Recommendations

Optimum feeding is one of the foundations for a healthy herd. If all the necessary ingredients are not provided, the dairy cow, as a "competitive athlete", cannot achieve the desired performance. In addition, a lack of care and hygiene weakens the immune system, making it easier for pathogens to lead to clinically manifest diseases.

Clean and tidy feed storage areas and regular checks of the feed and ration ensure that the animals are optimally supplied.

Calves, as the "cows of tomorrow" or future fattening animals, must also be optimally cared for. Here, too, care must be taken to ensure optimum hygiene. Each farm manager must decide for himself which type of feeding (ad libitum, cold souring, cow-bound calf rearing, etc.) to use. An optimal colostrum supply is essential to prepare the animals for the outside world and its pathogens. As a perfect breeding ground for bacteria, milk also requires special attention in terms of hygiene.

4.2 There are enough drinkers; they are clean and functional. There is also access to drinking water during grazing.

Why?

Sufficient water supply and quality is a basic prerequisite for good livestock farming.

How?

Cattle drinkers must be functional and checked at least daily and cleaned if necessary. The optimum flow rate is at least 10 litres per minute for single animal drinkers and 20 litres per minute for drinkers for several animals. In the case of trough drinkers with a large storage container (drinkers for several animals) that are sufficiently filled with water, the functionality of the flow rate is checked. The exact flow rate does not necessarily have to be determined here. Spigot and nipple drinkers generally **do not** allow species-appropriate water intake for ruminants. Slurping noises when drinking from bowl drinkers indicate that the flow rate is too low.

The following is expected as a guideline for the minimum number of drinking troughs required for cattle: For groups ≤ 20 cattle, two drinking points should be available that are both technically and spatially separated from each other (exception: calving pen, sick pen). An additional drinking trough should be available for every additional 20 cattle. A drinking trough that is accessible from two sides and fully functional and is structurally separated from each other can be regarded as two drinking troughs. In the case of trough drinkers, 120 cm is regarded as one drinking point for 20 cattle.

In calf husbandry, in addition to the milk drinker, an additional supply of drinking water should be provided. This is strongly recommended from the 3rd day at the latest, especially in warm temperatures, and is a legal requirement from the 15th day of life.

When grazing, it must be checked whether functional drinking facilities are available for each animal group. The number may deviate slightly from the above requirements for stable drinkers.

Recommendations

Water is one of the essential supply components. A dairy cow consumes between 70 and 200 litres of water per day, depending on performance and temperature. To ensure that the animals consume sufficient water, the distances to the nearest drinking trough should be kept as short as possible (especially on pasture, a decentralised arrangement of drinking troughs should be aimed for). Attention must be paid to perfect hygiene (drinking troughs themselves, pipes, well water quality, etc.).

4.3 The housing equipment is well maintained and functional.

Why?

The animals' immediate environment has a direct impact on their well-being. Their functionality is a basic prerequisite for good husbandry management and the avoidance of technopathies.

How?

Feeding fences, cubicles etc. must be in such a condition and arranged in such a way that they can be used safely and easily accepted by the animals. The animals must not be able to injure or damage themselves on the housing facilities.

Furthermore, there are no dangerous objects in the stall and driving areas, e.g. structural steel mats, sharp objects, broken stall brackets, non-functioning or protruding bars, straps or lines, etc. Wobbly slatted floor elements and conducting wires/strands in the stall are also objectionable.

The lying surfaces must be sufficiently dimensioned and well bedded. Comfort mattresses, which only require a small amount of bedding, have a mattress thickness of 60 mm or more.

The barn exit to the pasture must also be taken into account for this inspection point. It must be in a condition that allows the animals to walk safely by means of appropriate fastening and must not be heavily silted up or soiled with sharp-edged rubble, for example.

Recommendations

The housing facility must be kept in good working order, particularly because of the risk of injury to the animals and to maintain a calm herd.

4.4 If cattle are tethered: All animals can stand on their well-strewn lying area with all four feet at the same time. All animals can lie down at the same time.

Why?

Tethering is only permitted in combination with summer grazing and twice-weekly exercise during the rest of the year.

How?

The dimensions of the tethering areas must be designed in such a way that the animals do not lie or stand on edges or gratings. All animals can stand with all four feet on their well-bedded lying area at the same time. All animals can lie down at the same time. All body parts in contact with the floor must lie on the littered surface. This must be carefully checked in addition to possible technopathic deviations in the animals.

It is not permitted to keep calving animals tethered.

Recommendations

If animals cannot lie as indicated above, this usually results in soiling. This can be a further indicator that the dimensions of the stalls are inadequate. If all animals can not lie down at the same time, the lower-ranking animals usually remain standing, which on the one hand results in discomfort, but can also lead to hoof problems due to a lack of relief. If the animals are standing, they must be able to stand on the lying surface with all four feet at the same time. Standing permanently on the slatted floor increases the risk of injury to the claws and worsens the blood circulation in the claw.

4.5 The barn air is pleasant and not dusty and/or stuffy.

Why?

Poor barn air is not only unpleasant for the animals, but also for the farmer. It promotes the penetration of pathogens via the respiratory tract. As people become accustomed to (poor) air quality, it makes sense to assess this test point right at the beginning.

How?

Stables for ruminants should be ventilated in such a way that the outdoor climate is as good as possible. The air should smell like stable air, but not have an unpleasant odour of ammonia and sulphur gases or be very dusty. In barns where there is no air movement in the barn under certain climatic conditions ("stifling air"), appropriate ventilation technology (fans, hose ventilation) should be installed and run as required. The air should also be assessed in the area where the animals are lying down (at animal height).

If the answers to the following questions are predominantly in the affirmative, the air change rate must be increased, and a deviation is detected:

- Does it smell strongly of stable air (and less of outside air)?
- Does the air in the animals' lying area cause breathing difficulties and coughing?
- Is there condensation on the ceiling and walls?
- Are there black discolorations on the outer walls above the stall windows?
- Do you see steamed-up windows and rusted metal parts?
- Do many animals remain in corridors and doorways or near the drinking troughs?
- Do cows and cattle not lie in the cubicles?
- Do the animals have an increased respiratory rate?
- Are there a lot of old cobwebs and flies in the barn?
- Do your clothes stink if you only walk through the barn for a short time?
- Is the air very dusty?

Recommendations

Poor stable air (humidity too high, harmful gases, etc.) can weaken the immune defence.

Draughts can also be measured but can also be judged by feel. It is important to get down to the level of the animals. This also means assessing the air inside the calf igloo or squatting in the cows' cubicles. If individual cubicles are not accepted, draughts in the area should be ruled out.

Inadequate bedding and excessively long manure removal intervals lead to high levels of harmful gases in the stable air.

4.6 There is sufficient daylight in the barn.

Why?

Cattle are entitled to natural light and cannot be kept in dark rooms for long periods of time. They need it to orientate themselves in their environment and to recognise conspecifics, other animals and the farmer or other people. Light has a significant influence on the hormonal balance, physiological processes, and performance of the animals. Good lighting conditions in the barn also significantly improve working comfort.

How?

In addition to the equally essential dark night phase (max. 10 lux = emergency lighting), at least 120 lux should be achieved in the barn interior during the 10 to 16-hour day phase, mainly through natural light. Supplementary artificial light is permitted if there is no other structural possibility. 120 lux roughly corresponds to the indoor lighting conditions in a normal bright living room.

For easy checking: The checklist should be easy to read in the darkest corner of the barn in normal daylight. Even in old stables, the window area or the area of open gates/doors or translucent roof surfaces should correspond to at least 5 % of the floor area.

Recommendations

Old buildings and barn extensions are particularly affected by the fact that lighting conditions are insufficient. New buildings are generally designed to prevent this. If conditions are too dark, windows can be cleaned or openings to daylight can be enlarged. Lighter conditions during the day are particularly helpful in the case of fertility problems such as silent oestrus.

4.7 The animals have access to adequate natural or artificial weather protection (shade, shelter, grazing management, etc.) on the pasture in case of extreme conditions.

Why?

The natural regulatory ability of cattle, especially young animals, to cope with the weather conditions on the pasture must not be overtaxed. Extreme weather refers to periods of weather characterised by either heat and strong sunlight or cold combined with wetness and wind.

How?

In the event of weather conditions such as prolonged cold and wet weather (several days of rain and wind) or heat stress that overtax the body's own temperature regulation mechanisms, the animals must be provided with artificial (fixed or mobile shelter, hanger, wind protection in the form of round or square bales) or natural weather protection (bushes, hedges, trees, very uneven terrain, etc.) in the pasture.

Weather protection can also be ensured by management measures, e.g. night grazing instead of day grazing in midsummer or short-term suspension of daily grazing during extreme rainfall or hot days.

In case of permanent outdoor housing in the summer months, e.g. for suckler cows, young cattle, dry cows, it must be checked whether the animals can protect themselves in extreme weather conditions. In cold and wet conditions, natural or artificial weather protection must allow the animals to lie reasonably dry and protected at the same time. This applies to a greater extent to calves and foals and can also be ensured by the fact that the animals can be brought into a barn if necessary.

For the large, tree-poor grassland areas (e.g. coastal regions), it is assumed that the grazing animals (young cattle from one year of age and cows) are accustomed to low-shade pastures without shelters under normal weather conditions. Nevertheless, the animals should be given access to shade in extreme heat or, if the temperatures are appropriate, the grazing management should be changed to night grazing or grazing at cooler times of the day. Not every single paddock needs to offer protection from adverse weather conditions, but this can also be ensured by the grazing management.

It should be noted that extensive breeds are generally less demanding than more intensive cattle breeds.

If the occupancy of grassland with cattle or horses leads to large-scale destruction of the sward due to weather conditions and the time of year in conjunction with an excessively high stocking density, this should also be criticised, as this means that grazing is no longer carried out properly. For year-round outdoor grazing, appropriate locations and an adapted stocking rate are required to be able to practise pasture management that preserves grassland.

Recommendations

Animals are more exposed to the weather on the pasture than in the stables. Weather protection that offers protection from wind, rain and strong sunlight is essential. This is usually achieved through natural shaded areas. It must be sufficient for all animals in the grazing group. Free access to the stable building can also be a solution, but this is not practicable for every farm. It is not possible to specify exact limit values for climatic conditions above which protection from extreme weather must be provided. The thermoneutral zone (the area in which no energy is required for thermoregulation) of cattle is in the range of approx. 0 to 18°C, and 12 to 24°C for calves in the first week of life.

5. Animal mortality

Why?

Animal losses are involuntary losses and a decisive indicator for assessing the animal welfare status of a farm. They are not only to be avoided for the sake of animal welfare, but they also lead to high economic losses.

5.1 The still birth rate (from the 7th month of gestation) and the mortality in the first 7 days of life are together less than 10 %.

How?

Animals that are born dead (at least 8 months gestation, no premature abortions) and losses that occur in the first 7 days of life are considered. This also includes euthanised animals and wolf kills (but it is essential to include these as causes). The reference value for animal losses is the total number of all calves born dead and alive in the reference period.

This calculation is made on the basis of herd documentation (farm records, calf book, herd programme). A plausibility check can be carried out using the collection certificates or invoices from the rendering plant.

By default, the reference period is one year, i.e. 12 months. If, for example, a shorter period is to be considered in the course of a follow-up inspection, this can be taken into account in the calculation.

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation. In the event of a deviation, the causes of losses and countermeasures taken to date must be enquired about and documented in the inspection records. Corresponding records must be requested.

Recommendations

Stillbirths can have various causes. A common problem is calves that are too heavy, caused by unsuitable bulls. For diagnosis in problem farms, where excessively heavy birth weights rarely occur, both the stillbirth itself (the dead calf) and the complete amniotic membranes (afterbirth) should be pathologically examined. It should be noted that some of the more than 25 possible pathogens are zoonoses (self-protection!). Other possible causes: very high fever of the dam during pregnancy, inadequate supply of energy, bulk and trace elements, stress (rehousing, rank fights, heat, etc.).

The most common cause of calf losses after birth up to and including the seventh day of life is diarrhoea and pneumonia. Prompt intake of a sufficient amount of colostrum (target 3-4 litres) is the key to calf health. Hygienic, dry housing and enough milk to drink are further basic requirements for healthy calves.

5.2 The mortality from the 8th day of life until the age of 3 months is less than 8%.

How?

The losses are analysed from the 8th day after birth until the end of the 3rd month of life (91st day of life). Euthanised animals and wolf kills are included.

An evaluation is carried out either in the calf/stall book (farm records) or in the herd register. The losses (including euthanised animals) are counted that occurred in the relevant period from the eighth day after birth until the age of 91 days (or 3 months). The number of losses is set in relation to all calves alive on the 8th day of life (i.e. all animals born minus stillbirths and losses in the first 7 days) in the period under review.

Recommendations

In animals between eight days and three months of age, diarrhoea or pneumonia are often the cause of losses. Diarrhoeal diseases have different causes as the animals get older. Drinking errors (too cold, too contaminated with germs, too little) and a lack of hygiene are the most common weak points. Coccidia are usually problematic in the period around weaning. Measures should focus on preventing infection, particularly hygiene management (clean-out procedure, cleaning and disinfection). As this is a so-called factor disease, all areas of care and all possibilities of minimising stress for the animals should continue to be used.

Vaccination against calf pneumonia is advisable if there is a high incidence in the herd, in addition to optimising the housing environment. Draughts and high levels of harmful gases should be avoided at all costs.

5.3 The mortality from 3 month up to 6 months of age is less than 5 %.

How?

The losses are analysed from the 92nd day after birth until the end of the 6th month of life (183rd day of life). Euthanised animals and wolf kills are included.

An evaluation is carried out either in the calf/stall book (farm records) or in the herd register. The losses (including euthanised animals) are counted that occurred in the corresponding period from the 92nd day after birth until the age of 183 days (or 6 months).

The number of losses is set in relation to all young animals alive on the 92nd day of life (i.e. all animals born minus stillbirths and losses in the first 91 days) in the period under review.

Recommendations

The indication of the cause of loss for each animal that dies is the key to recognising a stock problem. As diseases, accidents and associated losses cannot be completely avoided, it is important to indicate the remedial measures that have already been implemented.

5.4 The mortality from the 7th month until the first lactation or until slaughter is less than 5 %.

How?

All animals that have died or been euthanised since the previous check and that were older than 7 months at the time of loss are counted until the first lactation or until slaughter (simplified ≤ 24 months).

An evaluation is carried out either in the calf/stall book (farm records) or in the herd register. The losses are counted that occurred in the corresponding period from the 184th day after birth until the age of 730 days (or 24 months) or until slaughter or the first lactation. This also includes euthanised animals.

The number of losses is set in relation to the average population of all young animals aged between 6 and 24 months in the period under review.

Recommendations

Increased animal losses in this age group can have many different causes. Documenting these provides information about an incipient herd problem. Contact the farm vet or the advisor.

5.5 The mortality of cows is below 5 %.

How?

All cows from the first calving onwards that died or were euthanised during the period under review are counted. These are put in relation to the average number of all cows.

All cows that have died or been euthanised since the previous inspection are counted.

These are set in relation to the average number of cows in the period under consideration. If the observation period deviates from 365 days, the number of losses must be mathematically corrected to 365 days.

If deviations are detected, the causes of loss should be specified in the control document.

Animal losses that are proven to have been caused by wolf predation are taken into account in the calculation but should be explicitly documented in the results report.

Losses of very old cows over 14 years of age, which lead to deviations in this indicator, should also be documented separately.

Recommendations

If certain causes occur frequently, the farmer must act quickly. Recognising these clusters is essential. Causes may lie in the feed (poor roughage, incorrect Ca/P ratio, too much NPN, etc.). The introduction of infectious agents, e.g. *Escherichia coli,* can also lead to increased animal losses. Metabolic diseases, rumen acidosis, etc. can also lead to increased deaths. The farm veterinarian or advisor can provide helpful advice here.

Small ruminants

In addition to sheep and goats, this checklist is also used to record wild game.

The checkpoints on animal losses can be dealt with in the office before entering the barn.

The best time to observe a flock is during feeding or, in the case of dairy sheep and goats, towards the end of milking time, as this is when the majority of the flock is on the move and no resting animals need to be herded up. When the animals are on pasture, the required time increases. If there are several grazing groups, which may still be widely distributed in the neighbourhood, it is sufficient to inspect only some of the grazing animals, ideally from different age groups. In the case of announced inspections, it is advisable to ask the livestock owner to keep the flock small (pen). Particularly in the case of large flocks of sheep in the countryside, it can happen that the sheep and lambs are only in the barn during the lambing period. In this case, an assessment on the pasture at other times of the year is unavoidable.

Caution! Caution is advised with male goats and rams, especially during the mating season. A walk through the herd should only take place in the presence of the animal owner or another competent person.

For sheep (except hair sheep or freshly shorn), it must be possible to touch part of the animal's back, while for goats (except long-haired goats) it is possible to assess the animals from the feeding table or walking area. The animal welfare check can be carried out well at a distance of 2-3 metres from the animal.

When checking the percentage values, an **overview observation** is carried out to see whether the specified proportion of animals can be found. For example, do you find more than 10 emaciated animals in a herd of 100 goats?

The following number of animals should at least be examined more closely:

Table 4: Minimum number of animals to be assessed depending on herd size

Herd size	Minimum number of animals to be assessed
< 100	10
101 - 300	20
> 300	30

If no clear result is reached after assessing the defined number of animals, if anomalies have already been identified during the herd assessment that require a larger random sample, or if there are doubts about the validity of the result, further animals must be assessed.

The control time can be reduced

...if the following documents are prepared for the inspection:

- Loss documentation

1. Nutritional status

1.1 Less than 10 % of the animals are emaciated (score 1).

Why?

Animals that are too thin are an indication of feeding errors (insufficient quality or quantity, etc.), but dental problems, diseases or infestation with endoparasites can also be the cause of emaciated animals.

How?

To assess the nutritional status, the Body Condition Score (BCS) is used to evaluate the muscle and fat cover in the lumbar region of sheep and goats, in particular the transverse processes and iliac tuberosity (Fehler! Verweisquelle konnte nicht gefunden werden. modified after Russel et al. (1969), Figure 13).

Figure 13: Body condition score (BCS) for small ruminants

Figure 14: Left still normal body condition of a goat (top) and a sheep (bottom); right: too lean goat (top) and too lean sheep (bottom)

In the case of goats, freshly shorn sheep, and hair sheep, this can be done visually, ideally from 2 to 3 metres. Sheep and long-haired goats must be assessed by touch.

Dairy goats often make a rather bony impression, but with a score of less than 2, the animals are not just "thin" (score 2), but clearly too lean or emaciated: the ribs are clearly visible and the hip and ischial tuberosities are clearly protruding. The goat's coat is also often shaggy. In sheep that are too lean, the transverse and spinous processes can be clearly felt.

Emaciated lambs and fawns often differ in size from lambs of the same age, have shaggy fleece or fur, paralumbar fossa on the flanks and a raised back.

Recommendations

As the causes can be many and varied, they must be sought on an individual farm basis. Feeding and nutrient supply should be checked. The performance level and feeding must match. Causes of illness should be eliminated or ruled out. Old animals that no longer have enough teeth to consume sufficient roughage for their nutritional requirements should be slaughtered or euthanised in good time. Chronic infectious diseases such as paratuberculosis or a maedi visna infection lead to severe emaciation (with diarrhoea), especially in older animals.

2. Maintenance status

2.1 Less than 15 % of sheep or 10 % of goats, fallow deer or other species are very dirty at the belly, flank, udder or rear (anal region).

Why?

Healthy sheep and goats have dry faeces that leave no traces of soiling on the animal. Soiling in the anus area is caused by diarrhoea and indicates diseases such as parasite infestation. Significant soiling on the flank, belly or udder (in the sum of the body regions approx. arm's length in adult animals) usually indicates husbandry problems (insufficient bedding, possibly too humid stable climate).

How?

Soiling is defined as fresh and dried faecal deposits at least the size of the palm of the hand (in adult animals, proportionally smaller in lambs and fawns). The focus here is on the anus area (Figure 15).

Figure 15: left: discolored wool around the anus, but still ok; right: more than palm-sized area with faecal adhesions

Recommendations

Short-term feeding imbalances can occur, especially when grazing in spring (protein-rich growth). If possible, hay can be offered for free consumption in the pasture to make transitional feeding less abrupt. However, dirty drinking troughs, a lack of feed and feeding hygiene and poorly fermented or mouldy silage or symptoms of poisoning from specific pasture plants can also be the cause. In general: regular feed checks, especially silage, only feeding good quality feed, checking for poisonous plants in the pasture, checking the mineral and trace element situation. In many cases, however, diarrhoea is caused by endoparasites. Faecal samples should be analysed regularly to adapt pasture management in a targeted manner and to be able to treat against endoparasites (avoiding the development of resistance).

2.2 Less than 10 % of animals have overlong claws.

Why?

The claws bear the weight of the animals. Overlong claws lead to a shift in the centre of gravity on the claw, putting strain on tendons and bones. Unkempt hooves are more susceptible to infectious hoof diseases. The condition of the horn depends on the breed, the condition of the soil, the moisture content of the substrate and the husbandry system.

How?

Long, bent upwards (tips clearly without ground contact) or detached, broken hoof rims indicate that the necessary, regular hoof care is not taking place often enough (Figure 16).

If possible, this assessment should be carried out on paved ground (feeding area, exercise yard, etc.) and at close range (e.g. during BCS assessment). If the animals are only assessed from a distance and the hooves are too deep in the grass or straw, this indicator cannot be recorded. Please make a note of this on the checklist.

Figure 16: Left: Claws in order; right: claws too long (curved upwards)

Recommendations

Depending on the condition of the hooves, they should be trimmed two to four times a year. This involves removing excessively long horn from the hoof and straightening the sole so that it grows back as evenly as possible.

2.3 Sheep: Annual shearing takes place (except for hair sheep breeds).

Why?

If the animals are not shorn, their thermoregulation is disturbed, they suffer from heat stress and in the worst case can die from overheating, the risk of ectoparasites also increases and newborn lambs have more difficult access to the teats.

How?

Shearing that has been omitted over the year can be recognised by matted, sometimes very thick fleece, often with plucked wool (Figure 17).

Figure 17: Left: Wool long but intact; right: wool not shorn and matted over the year

Recommendations

Except for hair sheep, shearing must be carried out regularly and annually. For some breeds, a second shearing per year is also recommended to prevent fleece matting.

2.4 Sheep: Less than 10 % of the animals have tails that are docked too shortly (the tail must cover at least vagina and anus).

Why?

Tails that are docked too short are relevant to animal welfare, as the sheep cannot ward off flies and other insects. If the tail is completely removed, this can favour the occurrence of vaginal or rectal prolapse. The sheep's sensitivity to pain increases significantly from the tip of the tail to the upper region towards the spine. The lower the tail is docked (or the longer the tail remains), the less pain the animal experiences. The aim should be to avoid docking altogether or, if necessary, to dock only to the level of the hock.

How?

Tails should be undocked if possible. Docking is only permitted with a special authorisation. If the tail has been docked, it is docked too short if it does not cover at least the anus and vagina of the sheep (Figure 18).

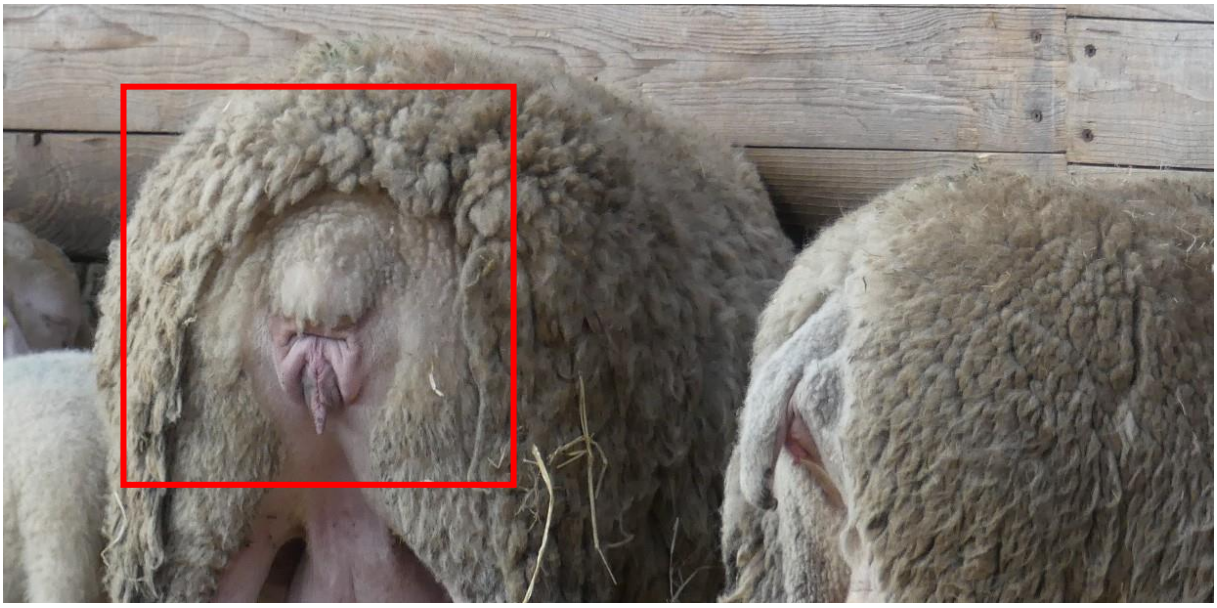


Figure 18: Sheep left: tail docked too short; sheep right: tail docked with sufficient length (vagina and anus covered)

Recommendations

Undocked tails require more attention in the event of prolonged soiling of the anus area to prevent ectoparasites from settling there. Tail docking in organic sheep is only permitted with exceptional authorisation, up to the 7th day of life with local administration of painkillers, only for breeding females and not for all breeds. The deeper the tail is docked the less pain is associated with docking.

3. State of health

3.1 Less than 10 % of the animals have obvious injuries (min. 5 cm large skin-abrasions, scabs and wounds, horn inflicted injuries, swollen joints and swellings etc.).

Why?

External injuries can indicate husbandry-related faults (technopathies). The causes can be many and varied: the feeding area boundaries are often the cause (skin abrasions on the throat and neck). Injuries are also caused by hierarchy fights, especially in horn-bearing goats.

Swelling or crusts (caused by broken swellings) in goats can also be caused by infectious diseases (e.g. pseudo-tuberculosis, CAE).

How?

Wounds that are at least 5 cm in size/length are counted (Figure 19), as well as bumps and significant circumferential enlargement (swelling) of the joints (Figure 20). Hairless or wool-less areas are not to be counted as deviations, but can develop into wounds and swellings.

Figure 19: Husbandry-related damage: on the left only hairless areas (no deviation), on the right with crusts (deviation)

Figure 20: Swelling and crusts due to CAE on carpal joints (left) and pseudo-TB at the transition from haed to neck (centre and right)

This should be noted in the case of swellings at the transition from head to neck in goats due to pseudo-tuberculosis or at the carpal joints in goats due to CAE. If present in the herd, > 10 % of the animals usually show these symptoms. However, treatment is often very lengthy. It is therefore necessary to note whether sanitation has already been started.

Recommendations

If several animals show husbandry-related injuries to the same parts of the body (usually the neck) during housing, check the housing equipment and rectify any defects, e.g. replace the feed fence, position it differently or raise the neck rail. Infectious diseases should be treated or remedied.

3.2 Less than 5 % of the animals are obviously lame.

Why?

Lameness is an expression of pain in the claws or limbs. The animals avoid putting weight on them. Lameness can be caused by misaligned hooves, inflammation, or external influences.

How?

Clearly visible lameness is counted, i.e. animals that clearly relieve at least one limb or do not put any weight on it at all. Lameness can also manifest itself by "slipping on the knees" (carpal joints) (e.g. footrot in sheep).

These animals must be treated promptly. Only then can an improvement be expected. Footrot remediation is often a lengthy process, so it is essential to note whether remediation has already begun.

Recommendations

If an animal is noticeably lame, the cause must be determined. Objects in the interdigital space cause pain and must be removed. Regular hoof trimming prevents lameness.

Another common cause of lameness in sheep is the bacterial claw disease footrot, which requires very consistent treatment. Due to (severe) pain in the claw area, sheep often feed in a "resting posture", i.e. they lean on their carpal joints ("kneeling") when feeding. Sheep with epidemic foot-rot should first be separated and then treated.

3.3 Less than 10 % of the animals have other obvious signs of disease (skin diseases, ectoparasites, scrubby and dull hair, nasal discharge, acute mastitis, etc.).

Why?

You can recognise illnesses or feeding and husbandry-related deficiencies from the external appearance of the animals. All diseases lead to severe discomfort.

How?

Non-injury-related skin damage is counted, e.g. due to ectoparasites, which can be seen in patchy fur. This also includes clearly shaggy, dull coat or patchy fleece (Figure 21). Caution: Healthy Lacaune sheep typically lose their wool over a large area, especially in the neck and belly area!

Figure 21: Left: patchy coat in goats e.g. due to ectoparasites; centre: patchy fleece in sheep e.g. due to previous fever; right: skin eczema

Damage caused by ectoparasites can be seen on the animal, e.g. in the form of clear rubbing marks. Tail mange or ectoparasites are common in young and adult animals. Other signs of illness are externally recognisable udder inflammation, purulent nasal discharge, inflammation of the ears, severe coughing, etc. (Figure 22).

Figure 22: Other obvious symptoms of diseases: left: Nassal discharge in sheep; right: blue coloration of the udder due to severe clinical mastitis

Recommendations

An individual search for the cause of the corresponding disease is necessary. Skin diseases and fleece damage are favoured by a poor stable climate (damp, stuffy air), but can also be triggered by previous febrile illnesses or be caused by nutrition (zinc deficiency in sheep).

3.4 Ill or injured individuals are treated competently and with care. If necessary, skilful emergency killing takes place immediately.

Why?

Sick animals that can no longer reach food, water and/or soft resting places independently must be separated and require increased care. Suffering animals with poor prospects of recovery must be euthanised.

How?

A deviation is when clearly sick animals (e.g. stuck without access to feed, very severely lame) are not housed in a separate pen with plenty of bedding, good feed and drinking water that is always available. The sick pen may also be provisionally furnished. There may also be a deviation if animals look so clearly incurably ill with no chance of recovery that they should be euthanised immediately.

It should be evident that the responsible person at the farm is taking care of the sick animal and providing it with professional treatment and care. If there is no successful prognosis for the treatment, "professional treatment" can also mean that the animal must be euthanised in accordance with animal welfare regulations.

Recommendations

Sick pen must be available or be able to be set up at short notice.

Emergency euthanasia can be carried out by injection by a veterinarian. Animal owners themselves are authorised to carry out euthanasia in their own herd if they have the appropriate expertise (i.e. they must know how to proceed and be physically and mentally capable of doing so). No certificate of competence is required for this, agricultural training is sufficient, unless you must regularly carry out (emergency) culls as part of a business. In this case, the animal keeper must have a certificate of competence; in case of doubt, this is decided by the competent veterinary office. Approved methods for stunning and killing for an emergency killing are the captive bolt pistol with subsequent bleeding for sheep and goats and a head blow with subsequent bleeding for lambs and kids up to 5 kg. It is important that both stunning and killing by bleeding are always carried out.

Emergency slaughter is only possible for animals that have suffered an accident. Sick animals must not be (emergency) slaughtered.

4. Shed, pasture and feed

4.1 The feed is of good quality and there is no spoiled, foul, mouldy feed on the feeding table or in the trough.

Why?

Poor quality feed and dirty feeding facilities reduce feed intake and can lead to health problems and inadequate nutrient supply.

How?

Count as a deviation:

- An obvious lack of feed, usually in combination with 1.1 (page 46) must be considered
- Significantly soiled feeding facilities
- Significant amounts of mouldy food that is accessible to the animals

Recommendations

As a rule, feed should always (or for the majority of the day) be in the trough or in the racks. This feed must smell pleasant and must not be warm, mouldy or spoiled. Old, spoilt feed belongs on the dung heap and should not be left in the stable.

4.2 There are enough drinkers; they are clean and functional. There is also access to drinking water during granzing (exception: nomadic sheep herding).

Why?

Drinking water is essential for animals. A lack of water can lead to a reduced appetite.

How?

Water must be available ad libitum if the animals are kept indoors, especially if they are fed hay. Lambs/fawns must have access to drinking water from the 2nd week of life (e.g. in the lambing pen).

Water availability in the pasture: Water must also be available in the pasture, but water shortages in the pasture are less common. Sources of water in the pasture can be the liquid content of the feed, adhesive water (dew and rain, snow), metabolic water (rumen reservoir) and drinking water. This may mean that no additional drinking water is required if the cattle are fed purely on pasture and the weather is wet.

Except for herding animals without a shed (going on from pasture to pasture): Here it can be assumed that the shepherd provides the animals with access to water during the day, e.g. when the animals are penned. If the flock is found travelling without access to water, this is therefore not a deviation.

The water should not be discoloured (algae formation), cloudy, have a very streaky surface or be clearly contaminated with faeces or food residues. Drinking troughs must be functional and checked at least daily and cleaned if necessary. Drinking troughs should be installed at a height that all age groups kept in the pen can easily reach them (pay attention to lambs and fawns, extra drinking troughs if necessary). A step at the drinking trough is particularly advantageous for goats and reduces soiling, as the drinking troughs can then be mounted higher.

Recommendations

If possible, drinking troughs must be accessible to every animal at all times. They must function properly and be kept clean, as dirty water (contaminated, algae-covered, etc.) reduces the animals' water intake. A helpful assessment criterion for water quality is whether you would drink the water yourself in an emergency. The daily drinking water requirement depends on the water content of the feed, the performance stage of the sheep and goats, the wool cover and the ambient temperature. As water requirements vary greatly, no absolute limit is used here. Recommendations vary between 20 to 50 animals per drinking point.

4.3 The housing equipment is well maintained and functional.

Why?

Injuries caused by husbandry must be avoided (see 3.1. page 52), the lying areas should be dry and largely clean.

How?

Deviations are barn facilities that lead to injuries or damage to the animal. These can be, for example, incorrectly dimensioned feeding areas or objects in the barn that could cause injury (possibly in combination with 3.1 Page 52). Waterlogged, dirty lying areas can also be criticised here (possibly in combination with 2.1 page 48).

Recommendations

Injury-prone housing facilities are dismantled or replaced. Lying areas should be sufficiently littered.

4.4 The barn air is pleasant and not dusty and/or stuffy.

Why?

Sheep and especially goats are sensitive to moist, dusty air, which can lead to respiratory diseases.

How?

The climate in the barn should be of outdoor quality if possible. The air should smell like stable air, but not have an unpleasant odour of ammonia and sulphur gases or be very dusty. Many coughing animals may indicate poor air conditions (other causes are also possible). Slight compromises must be made in weather conditions where there is no air movement in the barn.

Recommendations

If there are significant problems with the air in the barn under these weather conditions, appropriate ventilation technology should be installed (e.g. fans). Care must be taken to ensure that the barn is draught-free at animal height. Furthermore, goats are more sensitive to the weather and draughts than sheep (thermoneutral zone of adult sheep: approx. -10 to 25 °C; of adult goats: approx. 5-27 °C; below and above this, the animals must expend additional energy to regulate their body temperature).

4.5 There is sufficient daylight in the barn.

Why?

Light is important for the vision and well-being of animals.

How?

The checklist should be clearly legible in the darkest corner of the barn in normal daylight. Even in old stables, the window area or the area of normally open gates/doors should correspond to at least 5 % of the floor area.

Recommendations

In dark old buildings, wall sections can be opened up and replaced with open areas or windbreak nets. An outdoor area also gives the animals access to light.

4.6 The animals have access to adequate natural or artificial weather protection (shade, shelter, grazing management, etc.) on the pasture in case of extreme conditions.

Why?

Hot summer days can lead to heat stress. Depending on the thermoneutral zone of an animal species, wet and cold, windy weather conditions in winter without wind protection can lead to discomfort due to freezing.

How?

Extreme weather refers to periods of weather characterised by either heat and strong sunlight or cold combined with wet and windy conditions.

Sheep in particular are sensitive to heat in summer and show this in their behaviour, e.g. by standing close together with their heads lowered to protect themselves from flies or by seeking out any shady areas such as single trees (Figure 23).

Figure 23: In high temperatures, sheep use trees or trailers to lie in die shade

In the event of weather conditions such as wet and cold weather (several days of rain and wind) or heat stress that overtax the body's own temperature regulation mechanisms, goats in particular should be provided with artificial (fixed or mobile shelter, hanger, water wagon, wind protection by means of round or square bales) or natural weather protection (bushes, hedges, trees, stone walls, uneven terrain, etc.) in the pasture.

Weather protection can also be ensured by management measures, e.g. night grazing instead of day grazing in midsummer.

Recommendations

On hot summer days, there should be natural protection from the weather in the pasture. If this is not possible, mobile trailers, for example, can be placed on the pastures to provide shade.

The thermoneutral zone of sheep is in the range of approx. -10 to 25°C. If there is enough food available, sheep can tolerate dry cold very well even below -10°C, but they then have a higher energy consumption. In cold, wet weather with strong winds, they prefer protection from the weather or wind, but they can generally be kept outdoors all year round without any problems.

5. Animal mortality

The lambing rate

...is used to categorise lamb losses (5.1 and 5.2). It corresponds to the average number of lambs or kids born dead and alive per lambed ewe or goat and is expressed in lambs or kids per dam. With 6 lambs from 5 ewes, this corresponds to a lambing rate of 1.2. It should be noted that there are breed-related differences in lambing rates and that multiple births (especially triplets and more) lead to more stillbirths and weak lambs, which can die in the first few days of life.

5.1 The still birth rate and mortality in the first 24 h are together less than 20 % (related to all lambs/kids born dead and alive).

Why?

An increased proportion of stillbirths can indicate problems during the birth process (e.g. malposition of the lamb in the birth canal), but also infectious diseases (e.g. chlamydia, listeria, Schmallenberg virus). Breeds or flocks with a high proportion of triplets and quadruplets have a higher risk of stillbirths and lamb losses.

How?

The animals that are born dead and the losses of lambs/kids that occur in the first 24 hours after birth are counted. This also includes euthanised animals. The percentage refers to all lambs/fawns (born alive and stillborn) in the past year (except for the 12-month observation period for follow-up checks, if applicable: Period up to the last inspection).

Analyses are carried out on the basis of the stable book (farm records). Corresponding records must be available (estimates are not sufficient).

The farm manager's comments on losses of young animals due to infections such as Schmallenberg or bluetongue or due to a high proportion of multiple births should be noted.

It is particularly important to specify the lambing rate in the event of deviations.

Recommendations

The causes of an increased stillbirth rate must be investigated on an individual farm basis. Infectious causes of stillbirths can sometimes be reduced by treatments or vaccinations (e.g. chlamydia). The farm vet should be consulted in this regard.

Dams must be adequately nourished, and excessive effort and stress should be avoided in the last weeks of pregnancy. The presence of humans can reduce birth problems through targeted intervention when necessary (assistance at birth, first aid for lambs/kids). Infected afterbirths or stillborn lambs must be disposed of properly.

5.2 The mortality from the second day of life until the age of 3 months is less than 15 % (related to all lambs/kids living on the 2nd day of life).

Why?

Lamb or fawn losses often occur in the first week of life. The causes of rearing losses include too late or insufficient first colostrum intake, diseases of the dam or the lamb or fawn, predators or accidents as well as massive endoparasite infestation.

How?

Losses are counted from the 2nd day after birth until the end of the 3rd month of life (90 days of life). Euthanised animals are also counted.

The percentage refers to the number of lambs born in the past 12 months and still alive on the 3rd day of life.

An evaluation is carried out on the basis of the inventory register (company records). Corresponding records must be available (estimates are not sufficient). Please note that herd book farms report losses up to 42 days of life or older than 42 days of life to the breeding association.

The data on the number of births, average lambing rate, lambs sold and rearing losses should be checked for plausibility and compared with the existing lambs.

In the case of goats, it should be noted that some farms milk the goats throughout the year, which means that not all goats lamb every year. The farm manager's comments on losses of young animals due to infections such as Schmallenberg or bluetongue or due to higher multiple birth rates should be noted.

If deviations are detected, the causes of loss should be specified in the control document.

Recommendations

Frequent presence in the barn during the lambing period can reduce birth problems and improve the starting conditions for small or weak lambs. Within the first two hours after birth, the lamb or fawn must receive colostrum with important immune defence substances from the mother's udder for the first time. If it is too weak or the mother does not accept the lamb or fawn, help must be given to avoid high rearing losses. In extreme cases, the mother and lamb or fawn are separated so that the lamb or fawn can be bottle-fed or raised by a sheep or goat nurse.

If deaths occur frequently, dead lambs should be sent in to clarify the cause. The farm vet is the right person to contact here.

5.3 The mortality after three months of age, including adult animals is in total less than 5 % (related to all young animals and adults from the 4th month of life).

Why?

The proportion of animal losses is strongly influenced by individual farm management. Causes can vary greatly here.

How?

All animals that have died or been euthanised in the past 12 months and were 4 months or older at the time of loss are counted. Animal losses that are proven to have been caused by wolf kills are counted but must be mentioned separately in the deviation report.

The sum of the losses is set in relation to the average population of young animals from the 4th month of life (LM) and adult animals in the past 12 months.

$$Animal\ losses\ from\ 4.month\ [\%] = \frac{number\ of\ losses}{average\ flock\ size\ (animals\ from\ 4\ months\ upwards)}$$

Special case of follow-up checks: If the desired observation period differs from 365 days, the number of losses must be mathematically corrected to 365 days, as an average stock is used as a reference value. (See formula below).

$$Animal\ losses\ from\ 4.month\ \ [\%] = \frac{\frac{number\ of\ losses}{no.\ of\ days\ in\ considered\ period} * 365}{average\ flock\ size\ (all\ from\ 4th\ month\ upwards)}$$

The average flock size can be taken from the obligatory herd register (average of the animal numbers at the beginning and end of the observation period or, in the case of strong seasonal fluctuations, the minimum and maximum).

If deviations are detected, the causes of loss should be specified in the control document.

Recommendations

Causes of loss in adult animals can include accidents, predators, (infectious) diseases or massive parasite infestation. These causes must be identified on an individual farm basis.

Poultry

The inspection points relating to animal losses and carcass protocols can be dealt with in the office before entering the barn.

The best time to observe the animals is during normal barn hours, when care and inspection rounds take place. The barn is entered in the company of a person looking after the animals on the farm.

Before entering a poultry house, it is advisable to knock in order not to frighten the animals unnecessarily. As with other animal species, the inspector enters the stable quietly and stands still for a moment. This gives a first impression of whether the flock is very nervous and shy or rather curious. In poultry houses, it must always be kept in mind that panic can easily occur within the flock, which can lead to the animals to crush each other. Special care must be taken with very anxious animals.

Then the inspector walks slowly and calmly through the barn and visually inspects the general state of plumage and health of the animals. Animals in different areas of the barn should be assessed, including animals in the rear, darker areas or under the aviaries and on the upper perches. Individual laying nests should also be inspected if they are accessible to the animals during the inspection. Sick animals like to retreat there. It is also possible to check whether there are any dead animals there.

When walking through the flock, the animals are inspected as closely as possible. Look for plumage damage, bald patches, broken feathers, soiled body parts - especially in the breast area - and pecking injuries. During the barn tour, the inspector also assess the poultry's ability to walk, whether animals appear apathetic, whether sneezing, diarrhoea or other signs of illness are visible and whether the flock is homogeneous. The litter, the barn equipment and the air in the barn are also recorded at various points during the tour through the stable.

Animals in the hospital pen are taken into account in the assessment. However, they are generally of no significance for compliance with the limit values: for example, in order to exceed the limit value of 5% sick animals, 150 out of 3000 animals would have to be conspicuous. The assessment of hospital pens is therefore usually only important for question 2.7.

For the assessment of keel bones and foot pads in flocks of laying hens individual animals also have to be picked up and examined more closely. For fattening poultry, this is only necessary if there are no carcass protocols containing information on footpad health. If there are several groups with different appearances on the farm, the individual animal assessment is carried out in the most conspicuous group. If the appearance is homogeneous (few differences between the groups), the oldest herd is selected. Catching animals for examination by the inspector is carried out by the person looking after the animals. A catching fence or catching hook is helpful for shy

animals and should be available on the farm for self-inspection. If possible, the chickens are selected from different areas. It should be avoided to catch the animals if this is not possible without panicking the flock. This has to be noted on the checklist (comment field poultry). The individual animal assessment should also be used to check for injuries and ectoparasites. In addition, attention should be paid to other signs of illness or injury, such as cloudy eyes, pale comb colour, injured or missing toes and cloacal discharge. Good instructions for this can be found in the MTool© materials. These and other materials can be downloaded or ordered in printed form from the website MTool für Jung- und Legehennen: MUD animal welfare .

The sample size for individual animal assessment is shown in the following flow chart:

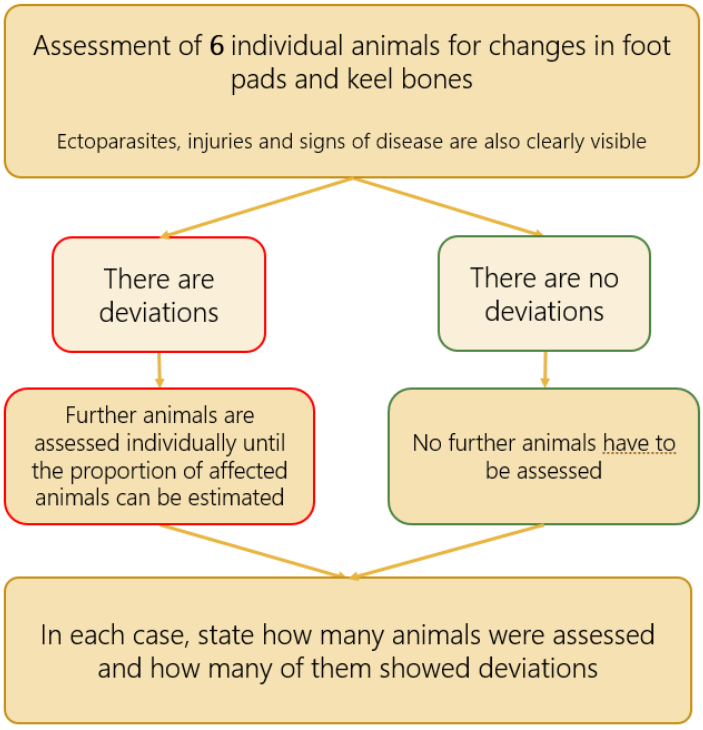


Figure 24: Flow chart for individual animal assessment in poultry

For laying hens the breed and the pullet rearing company of the current flock should also be specified so that this farm can also be considered for QM measures if necessary.

The control time can be reduced

...if the following documents are prepared for the inspection:

- Documentation on losses and numbers of animals bought and sold.
- Carcass protocols of the last batches.

1. Plumage

1.1 Less than 10 % of the laying hens before 50 weeks of age with visible featherless patches at back, neck and belly.

and

1.2 Less than 20 % of the laying hens at 50 weeks of age or older with visible featherless patches at back, neck and belly.

and

1.3 Less than 10 % of the fattening fowl with visible naked (featherless) patches in the last third of life.

Why?

An intact plumage fulfils several functions for birds, such as thermoregulation, protection of the skin from injury and the ability to fly. Feather pecking favours the occurrence of injurious pecking (cannibalism). At the same time, it is often difficult to combat once the animals have learned this behaviour, which can already happen during rearing, and must therefore be detected as early as possible.

How?

Bare patches with a minimum diameter of 5 cm are considered a significant loss of feathers (Figure 25). If bare patches are visible on the back without brushing back the plumage, it can be expected that they are at least 5 cm in size. Therefore, every visible bare spot on the back counts as a significant loss of feathers. In the neck area, where the feathers are shorter, smaller bald patches are already noticeable. Here it is measured or estimated whether they have a minimum diameter of 5 cm and accordingly evaluated as a significant loss of feathers.

Figure 25: Bare patches of at least 5cm in diameter on laying hens on different parts of the body (from left to right: neck from the front, neck from the back, back, cloaca)

Unfeathered areas of the skin to the right and left of the lower keel bone ("brood patch") are normal (varying according to genetics), as the feathers naturally fall out with sexual maturity.

Fattening fowl is preferably assessed at the end of fattening, i.e. in the last third of their life. Due to natural plumage development, it is more difficult to assess younger animals, therefore "not relevant" can also be ticked. The plumage is assessed by carefully walking through the flock and also looking in the rear and darker areas of the barn. It is not necessary to catch individual animals for this purpose. However, if it is unclear for bare spots whether there were naturally no feathers or whether they were caused by feather pecking, it can be helpful to assess individual animals more closely: If the skin is naturally naked, there are no rudiments of feathers present in the skin (Figure 26).

Figure 26: Bare patches on a broiler with a diameter of at least 5 cm on the back, the rudiments of feathers are visible in the skin

If there are any deviations, note where the plumage damage is (back/tail, neck, belly) and how pronounced it is (featherless areas just becoming visible - large bare patches - animals predominantly unfeathered). The age of the animals also always has to be indicated on the checklist. If there is a break in laying (moult), this must be noted. If plumage damage occurs, it must be noted whether the cause is known and whether countermeasures are being taken. For young laying hen flocks, it may also be useful to take a look at the record of delivery; plumage damage from rearing the pullets may already be documented there.

Recommendations

If feather loss occurs, the causes should be sought and remedied as early as possible to prevent feather pecking from developing into cannibalism. Feather loss and especially feather pecking can have many different causes, e.g. nutritional deficiencies, infections, parasites or stress. As an immediate measure, distracting the hens by providing them with more environmental enrichment can be effective. Emergency measures such as darkening the barn should be carried out in consultation with the veterinary.

1.4 Less than 20 % of the poultry with very dirty plumage.

Why?

Dirty plumage often occurs in the breast area of fattening poultry and is associated with high moisture levels in the litter. In addition, the plumage in the cloaca area can be sticky and dirty due to discharge or diarrhoea. In laying hens, soiling can also occur in the back area, which indicates that the perches are unfavourably positioned so that the droppings fall onto other hens.

How?

A deviation is noted if at least 20 % of the animals have at least palm-sized areas of feathers that are sticky, encrusted or caked (Figure 27).

As the chest area is often affected, sitting animals should be carefully encouraged to stand up. The plumage below the cloaca should also be looked at carefully. It is not necessary to catch and assess individual birds.

Figure 27: Broilers with dirty areas at the breast that are the size of the palm of a hand (no need to pick animals up to be visible)

Dusty plumage after a sand bath and, for **waterfowl**, plumage soiling after heavy rainfall are not categorised as dirty plumage.

Recommendations

Depending on where the soiling occurs, there may be various underlying causes. If soiling occurs in the chest area, the litter management (e.g. type and quantity of litter material used) should be questioned. If the faeces is too moist and leads to soiling, it should be checked whether infectious diseases or excessive parasite loads are present.

2. State of health

2.1 Less than 5 % of the animals are lethargic/emaciated or show other signs of sickness (pale comb, dull eyes, ocular discharge, swollen eyelids, sneezing, diarrhoea).

Why?

The symptoms assessed in this checkpoint may indicate various infectious diseases or infestation by parasites.

How?

The state of health can be assessed during the barn tour. The animals must be observed closely and attentively. Changes in the head area are easier to recognise when assessing individual animals. It should also be checked in the rear and darker areas of the barn, on high perches and in individual laying nests to see if chickens have retreated there and are "mourning". Evaluated are e.g:

- Penguin posture, pulling in of the head, slow reaction
- Pale combs -> can have various causes, e.g. anaemia due to heavy mite infestation, very little daylight (the run is not used) or infections.
- Cloacal discharge or diarrhoea
- Sneezing or nasal discharge
- Eyes cloudy, swollen or ocular discharge
- Emaciation: clearly protruding keel bone, animal very lightweight

Recommendations

If the cause of the symptoms is not already known and appropriate measures have been taken to improve the animal's health situation, a veterinarian should be consulted.

2.2 Less than 10 % of the animals have cloacal prolapses, fractures (except keel bone) or at least three pecking wounds or at least one wound with > 1 cm diameter.

Why?

Skin injuries often occur together with feather losses. Feather pecking can develop into cannibalism and lead to losses of animals and reduced performance. Agonistic behaviour can also lead to injuries. Other injuries covered in this checkpoint are broken bones and cloacal prolapse. They can have various causes.

How?

The state of health is assessed during a walk around the stable. Attention should also be paid to the rear and dark areas of the stable, high perches and laying nests. Injured animals often withdraw.

Fresh and older skin injuries are categorised as deviations if there are at least three small pecking injuries or at least one wound with a diameter of more than 1 cm - also e.g. on the comb, snood (turkeys), wattles and legs (Figure 28). They are often caused by cannibalistic or aggressive behaviour. Injuries can also be caused by the claws of other animals, e.g. if the flock is rather nervous and the animals run over each other a lot. Pointed and protruding parts of the stable equipment also possess a risk of injury.

Figure 28: Major injury to the skin of a broiler

Broken bones, such as broken wings, for example, can occur more frequently if the housing equipment is defective or unfavourably arranged. Improper gripping of the animals by the wings can also lead to broken bones.

A **cloacal prolapse** occurs when the cloaca does not fully retract after the eggs have been laid. There are many causes for this, e.g. too low a weight during rearing or an unbalanced diet can play a role.

Toe injuries can be caused by cannibalism. This is a behavioural disorder in which hens peck at the toes of other hens or their own toes. As with cannibalistic behaviour aimed at other parts of the body, a number of possible causes (feeding, lack of environmental enrichment, illness etc.) must be taken into consideration.

If such animals are in the hospital pen and not in the flock, this must be noted down.

Recommendations

Injured animals should be removed from the flock and placed in a hospital pen or, if necessary, professionally emergency killed. If animals with bleeding wounds remain in the flock, cannibalism can easily occur. In the case of cloacal prolapses, the other hens are also encouraged to peck at the shiny tissue.

2.3 Less than 20 % of the laying hens have distinct abnormalities of the keel bone (fracture clearly palpable or deviation from the straight line > 1 cm).

Why?

The keel bone is a medullary bone in which calcium is stored. A lot of calcium is needed for eggshell formation. Because of this and its location in the body, this bone is at increased risk of deformation or fracture in laying hens.

How?

The assessment is carried out by palpating the keel bone. The cartilaginous tip of the keel bone (lower end of the keel bone pointing towards the tail) is not taken into account. Animals must be caught by the person in charge of the animal for assessment (see page Fehler! Textmarke nicht definiert.). There is a distinct abnormality in the keel bone if a **fracture can be clearly felt on the keel bone and/or the keel bone deviates more than 1 cm from the straight line**. The direction of the deviation (inwards or to the side) is irrelevant (Figure 29):

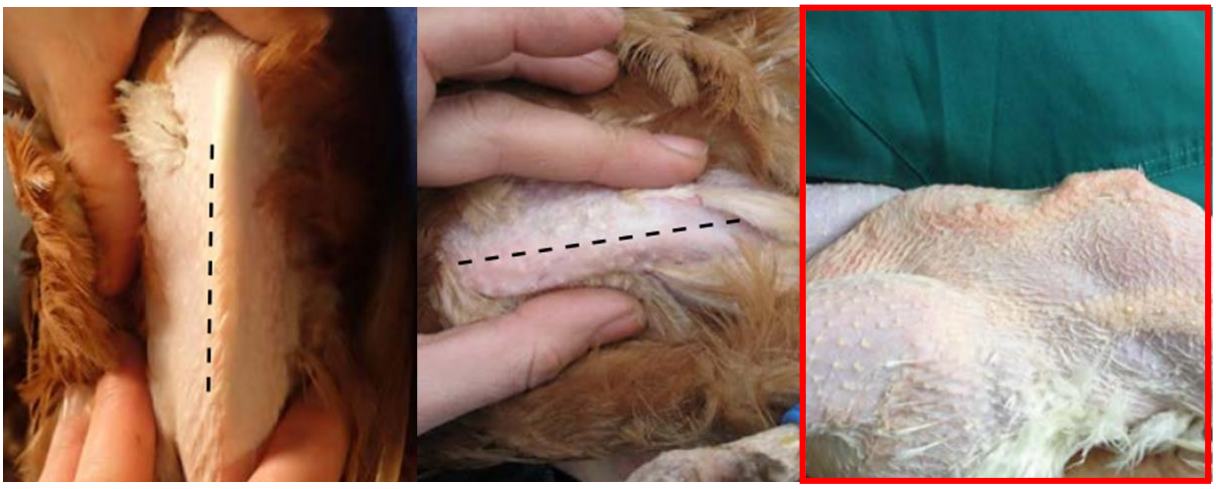


Figure 29: left: straight keel bone, no fracture clearly palpable; centre: slightly curved keel bone, no fracture clearly palpable; right: deviation from the midline > 1cm, obvious fracture

Recommendations

It is important to keep an eye on this problem, even if it is not easy to tackle: Even with good management, keel bone deformities can occur. However, there are approaches that have proven helpful in reducing the risk:

- Good calcium supply through separate supply of lime, if possible in the afternoon, in addition to feeding according to requirements
- Avoid collisions with barn equipment through early access to perches
- Early habituation to humans
- Perches that prevent slipping
- Good lighting conditions
- Suitable arrangement of perches and aviary blocks
- Many ramps as ascent and descent aids over the entire length of the barn

2.4 Less than 20 % of the laying hens have foot pad lesions or deformed toes. Also relevant for fattening fowl if no carcass protocols are available.

Why?

Foot pad lesions can cause pain in the animals and make it difficult for them to move around. Poorer access to food and water can lead to subsequent problems such as insufficient feed intake.

How?

Animals must be caught by the person in charge of the animal for assessment. If necessary, litter and dirt must be removed from the undersides of the feet of the caught animals. Foot ulcers with and without swelling of the foot are considered a deviation (Figure 30).

For fattening fowl, data on footpad health is mostly available from carcass protocols. These should be looked at in checkpoint 6.1. If these are not available, the footpads in the barn should be assessed (Figure 30). Any deviations must be noted, without differentiating according to severity.

Figure 30: Foot pads of broilers a few days before slaughhter (left and centre) and laying hen (right). Left: Footpad in good condition; centre: footpad lesion with sticky crust; right: footpad lesion in a laying hen

Recommendations

While foot pad lesions in fattening fowl are usually directly or indirectly related to the litter used (see page 93) other causes also play a role in laying hens. Perches should be as clean and non-slip as possible and should not harbour any risk of injury (wood splinters). An unfavourable shape of the perches, leading to strong punctual loads, can also cause changes in the hens' foot pads.

2.5 There are no dead animals in the stable except single birds deceased on the day of inspection.

Why?

The death of individual animals in the barn is normal for larger flocks. These should be removed and documented during regular inspections. This ensures that it is noticed if the number increases significantly and, for example, infectious diseases could be in progress. In addition, dead animals are often pecked at by the other animals in the flock. This poses a hygiene risk and can lead to cannibalistic behaviour becoming established in the herd.

How?

You should also look in the rear and darker areas of the barn and in individual laying nests. Dead animals in the wintergarden and run are also taken into account. A maximum of two individual animals per group that died on the day of the inspection are acceptable and should not be counted as a deviation. Older carcasses that have been lying there for more than a day and are, for example, clearly pecked at, mummified or decomposing, as well as the presence of more than two dead animals per group, are to be considered deviations.

In the event of deviations, the number of dead animals must be noted.

Recommendations

There should usually be two inspection rounds per day, during which dead animals are removed. In the event of an increase in deaths, a veterinary may need to be consulted to determine the cause. This is particularly important with regard to the early detection of animal diseases.

2.6 The are less than 5 % of birds with locomotory disorders.

Why?

Movement disorders or lameness have a severe impact on animal welfare: they are usually associated with pain and can have a huge impact on the intake of feed and water as well as performance.

How?

The locomotion behaviour is assessed by walking slowly and carefully through the flock. The animals must be able to stand up and move to avoid the person checking them. Animals that are unable to stand up or immediately sit down again after a few steps should be noted. Animals that are clearly lame should also be recorded. In addition, the movement behaviour of animals that are unable to reach a raised sitting level or perch, i.e. that fly to it in vain or try unsuccessfully to hop onto it, is disturbed. Staggering also counts as disturbed locomotor behaviour.

Recommendations

The rapid growth of fattening poultry can put a lot of strain on the animals' musculoskeletal system. As a result, it is susceptible to disorders and can lead to lameness and restricted movement. This is counteracted by the use of slower-growing genetics, particularly in organic farming. Lameness can also have other causes and can also occur in laying hens (e.g. in connection with the metabolization of calcium). If there is an increased number of animals with disturbed movement behaviour in a flock, they should be inspected more closely to determine the cause. The foot pads should also be examined. An examination of the feed can be useful to rule out nutrient imbalances.

2.7 Sick and injured birds are well taken care of and professionally treated. If necessary, skilful emergency killing takes place immediately.

Why?

Individual animals that are obviously seriously ill or injured must not be left untreated in the flock but should be moved to a hospital pen. This gives them a chance to heal and recover without being disturbed by their conspecifics, e.g. while feeding. If there is no successful prognosis for treatment, "professional treatment" can also mean that the animal must be killed in accordance with animal welfare regulations.

How?

A deviation must be noted if there are animals in the flock that obviously require treatment. The following criteria (summarised from Keppler, Garrelfs, & Spindler (2020)) are helpful in deciding whether individual animals can remain in the flock or must be placed in a hospital pen or emergency killed:

Table 5: Decision criteria for the separation or emergency killing of poultry

Separate	Emergency killing
Weak and underweight, probably neither feed nor water intake in the herd	Significant, unrelievable pain over a longer period of time
Bleeding or major injuries	Serious illness with no prospect of recovery
Cloacal prolapse	Unrecoverable risk of infection for livestock
Heavy discharge/diarrhoea	
Movement problems	

Even if no animal is currently sick or injured, the possibility of separation must be provided. It is therefore also considered a deviation if there is no hospital pen or the possibility of setting one up in a few simple steps. The better the preparation of the hospital pen, the more likely it is to be used, even in marginal cases and under time pressure. It is also considered a deviation if an occupied hospital pen does not have the necessary resources: There must always be a drinking trough, a feeding facility and a scratching/dust bathing facility. For **laying hens,** a nest and raised perch are also strongly recommended in accordance with the Animal Welfare Farming Ordinance. If there are several **laying hens** in a sick compartment, a nest must be provided to prevent cloacal pecking.

Recommendations

Ideally, the location of the hospital pen should be chosen so that the animals remain within sight and hearing distance of the flock and the lighting regime is continued as usual.

A hospital pen can also be easily created in a separate area of the aviary block. A scratching area can be created using cardboard and covering it with litter. A sand bath can be provided using a sand-filled bowl, for example.

3. Shed, feed and water

3.1 There is sufficient litter in the scratching area and winter garden, the litter is loose and covers the floor and the bedding material is identifiable.

Why?

Scratching is one of the natural behaviours of chickens, so this need must be accounted for. Poultry that show less scratching behaviour must also be provided with warm and dry litter padding in the stable.

How?

Litter must be available both in the scratching area and in the winter garden. It must completely cover the floor (floor not visible), be loose and dry so that pecking, scratching and sand bathing are possible. Only for newly housed laying hens, it is acceptable if the floor in the wintergarden is visible under the fresh litter to prevent misplaced eggs. The litter must not be damp, solid or sticky (except in the immediate vicinity of drinking troughs and - in the case of waterfowl - bathing facilities).

Figure 31: If the litter forms plates and is therefor no longer suitable as a scratching material, this must be considered as deviation

The litter is assessed in various areas in the stable or winter garden. Particular attention should be paid to the litter areas around the exits to the winter garden due to the formation of condensation (higher humidity) and the resulting risk of plaque formation. If the litter is lumpy or damp, check whether there is a functioning gutter on the roof above the pop holes to keep this area dry.

Recommendations

Organic substances such as straw or spelt husks and additives such as stone meal or sand can be used as bedding.

3.2 There is sufficient environmental enrichment (structures and occupation) in the scratching area and winter garden (e.g. sand bath, pecking blocks, bales of straw/hay, etc.).

Why?

Regardless of the bedding used (e.g. chopped straw, wood shavings), additional scratching and activity material should be available so that the animals can fulfil their pecking and foraging instincts and their need for hygiene (dust bathing). This reduces the risk of feather pecking.

How?

If additional material is not provided in several places in both the scratching area and the winter garden, this is considered a deviation.

Figure 32: Straw bales as enrichment in the broiler house

In the first few days of a chick's life, it is particularly important that they have sufficient food and water and that they find their way around their housing environment. Therefore, it should not be considered a deviation if no further enrichment material is provided here. Later, however, enrichment material must also be available in the rearing area (Figure 32). This is often already fulfilled by the roughage prescribed by the EU Organic Farming Regulation. Dust baths are also very popular with young animals.

Recommendations

Straw or lucerne bales, sand baths or pecking blocks, for example, are suitable for keeping the animals occupied. Daily widespread provision of grain in the bedding or roughage are also suitable.

3.3 The housing equipment is well maintained and functional.

Why?

There must be no risk of injury to the animals due to non-functional housing equipment. It must also be ensured, for example, that there are sufficient functional perches for all animals.

How?

Random checks are carried out to ensure that ventilation, lighting, flap control etc. are working. Consideration must be given to any damage to housing facilities that could injure the animals (e.g. sharp edges, broken pipes, etc.). A deviation is recorded if there are obvious defects, so that it is doubtful whether sufficient care of the animals is guaranteed, if there is an acute danger to the animals or if the housing facilities have obviously not been cleaned for a long time.

Recommendations

Broken stall equipment must be repaired or replaced as soon as possible, particularly in view of the risk of injury. The stable equipment must be cleaned and disinfected after each batch.

3.4 The feed is of sufficient quality (no rancid, mouldy, bitter smell) and the feeding equipment is well maintained and functional.

Why?

Sufficient feed intake is essential to provide poultry with enough calories and nutrients to meet their maintenance requirements and at the same time achieve good fattening or laying performance.

How?

The feed must not smell spoiled, rotten, mouldy, bitter or rancid or be soiled. The feeding equipment must be free of old feed residues or other prolonged heavy soiling and must be in good working order. If many animals crowd around a feeding place, this may be an indication that the feed in other places is poor or that there is a technical problem. The same applies if they frequently change feeding places during a feeding session.

Recommendations

Continuous monitoring of feed consumption is advisable. Spoilt feed must be disposed of. During regular inspections, the feeding facilities must also be inspected and cleaned if necessary.

3.5 The are enough drinkers (e.g. max. 10 hens per nipple or 15 broilers per nipple)which are clean and fully functional.

Why?

Sufficient water supply and water quality is a basic prerequisite for good livestock farming. A good water supply is crucial for sufficient feed intake.

How?

The drinkers have to be clean. Fresh feed residues and lime residues are not to be regarded as soiling (Figure 33Fehler! Verweisquelle konnte nicht gefunden werden.). Drinkers must be accessible to all animals, the height must be adapted to the animals and they must be able to take up a sufficient amount of water. Drinkers must not lead to large wet areas around the drinker, e.g. due to leaks or constant dripping. If wet areas around drinkers are clearly recognisable, this is considered a deviation.

Figure 33: Clearly soiled drinker

If it is unclear whether a sufficient supply is ensured due to defective drinkers, the following values apply:

- **Laying hens, pullets and broilers:** There is one functional nipple drinker for a maximum of 10 birds or at least 1 metre round drinker for 100 birds.
- **Broilers:** There is a functional nipple drinker for a maximum of 15 animals.
- **Turkeys:** In rearing at least 1 nipple per 150 kg live weight or 1 round drinker per 350 kg. In fattening: min. 1 nipple per 500 kg live weight or 1 round drinker per 2000 kg.
- **Geese:** 1.5 cm per animal at the trough with an immersion depth up to the eyes.
- **Ducks:** 1 cm per animal.

Recommendations

Water consumption should be checked regularly to identify potential problems in the drinking system. Rinsing and cleaning drinking lines counteracts the formation of potentially pathogenic biofilms.

3.6 The air is not irritating and not strikingly dusty.

Why?

High concentrations of harmful gases and dust particles in the barn can lead to irritation of the poultry's respiratory tract. The quality of the air also plays a role when considering the working conditions of the employees in the barn.

How?

The air in the poultry house does not have to smell pleasant. However, if there is a distinct odour of ammonia or the smell is acrid, if the mucous membranes in the eyes or nose burn after a few minutes or if you have to cough, this is considered a deviation. If harmful gases are measured, limit values of 15 ppm ammonia and 3000 ppm carbon dioxide apply. Other signs of poor stable air are wet faeces or wet bedding. Dust levels are assessed by whether you have a clear view when the animals are moving calmly around the barn (not fluttering off in panic at the same time) or whether the view is obstructed. Another possibility is to assess the dust precipitation using a black sheet of paper: If this is placed in the barn building, just outside the area accessible to the birds, at the start of the inspection and is clearly covered with dust when returning (i.e. grey instead of black), the dust level is too high (= deviation).

Recommendations

The ventilation has to be checked regularly and ventilation rates adjusted to the stocking density.

3.7 There is sufficient daylight in the stable as well as in the wintergarden.

Why?

Light is essential for the orientation of animals in their environment. It also has a significant influence on hormone levels and behaviour (e.g. feeding behaviour).

How?

There should be enough daylight so that the floor and litter can be easily recognised when standing. There shouldn't be larger areas that are so dark that the floor and litter are barely recognisable. If a luxmeter is used, the limit value is 20 lux averaged over at least 6 measuring points at different locations. Exceptions apply during moulting. If necessary, deviations for stable and wintergarden must be recorded separately. If the inspection visit takes place before sunrise or after sunset, the question does not need to be answered.

Darkening is only possible as an immediate measure if recommended by the veterinary in the event of acute feather pecking or aggression between the animals. It must not be carried out over a longer period of time or as a precautionary measure.

Recommendations

At over 100 images/second, chickens have a higher optical resolution than humans (50-60 images/second) and can also perceive ultraviolet light. It is therefore essential to ensure that flicker-free lights suitable for chickens are installed that emit light in the full spectrum, including UV-A light. In addition to sufficient lighting during the day, a sufficiently long uninterrupted dark phase, preferably with a twilight phase, is extremely important.

4. Free-range

4.1 It is well kept and mostly covered with plants if seen from above (air perspective). Ponding is prevented in the free-range area in front of the pop holes (e.g. rain gutter).

Why?

The run must be planted in order to reduce the nitrogen input into the soil and increase the attractiveness for the poultry.

How?

All forms of planting are possible, from meadows and annual crops such as maize to hedges, shrubs and trees. An exception is the area immediately next to the barn (up to 30 metres). Hardly any vegetation can be expected there. The formation of mud and puddles must also be prevented, especially in the access area to the barn or wintergarden. The run must be free of rubbish (Figure 34).

Figure 34: Left: Broiler outdoor range, prevention of mud and puddle formation in the area close to the barn using wood chips, the rest of the outdoor run ist covered with grass. Right: Run for laying hens without vegetation and with puddles.

There is a deviation if the area > 30 metres from the barn is without vegetation, if there is rubbish lying around or if there is clear ponding in the area close to the barn. If the vegetation cover and puddle formation cannot be assessed during inspections in winter, this must be noted and this point can be ticked as "not relevant".

Recommendations

In the area close to the barn, pavement or replaceable material (e.g. wood chips) is recommended to prevent excessive nitrogen inputs and for the purpose of parasite management. In order to maintain the vegetation, rotational grazing, grass protection grids at particularly frequented places or irrigation in very dry periods can be useful measures.

4.2 It provides protection (allowed exception: 20 m radius around the stable) and the age-appropriate use of the area is noticeable.

Why?

To ensure that the entire available free-range area can be utilised, it is necessary for the animals to find shade, cover and protection from birds of prey distributed over the entire area.

How?

The following values are recommended as a rough guide: at least 1 m² per 100 - 150 laying hens or per 100 broilers, young ducks/geese (up to 40 days old) or per 30 turkeys. For chickens, the distance between elements offering protection should not exceed 20 metres. If the minimum run area is within a radius of up to 20 metres (small stock),structures for protection in the run are not mandatory.

Some of the poultry should be in the run and also spread out in the area farther away from the barn (laying hens: from 50 m, turkeys: from 80 m, broilers do not have to be in the area farther away from the barn). If there are no animals or only single animals in the area farther away from the barn, utilisation must be checked on the basis of traces of use. Regular use should be recognisable from feathers, droppings and scratch marks. (Figure 35)

Figure 35: Examples of free-range structuring. Left: Trees as protective elements are very well accepted by the animals, evenly distributed "traces of use" of the meadow are recognisable. Right: Shelters made of pallets and newly planted trees.

If no outdoor run is currently accessible (immediately after the service period and housing of a new flock), the outdoor run utilisation cannot be assessed - depending on the period of time since the last use. It is also not always possible to assess outdoor run utilisation when there is snow. This must be noted.

A deviation exists if there are no relatively evenly distributed protective structures in the area further away from the barn or if neither poultry nor traces of use can be seen in the currently accessible run, in the case of turkeys and laying hens also in the area further away from the barn (laying hens: from 50 m, turkeys: from 80 m).

Recommendations

Structuring can for example be achieved through artificial protective structures, conductive hedges, plantings of poplars or willows or grazing animals (cattle, goats).

4.3 It is freely accessible except in exceptional situations.

Why?

Access to the outdoors is one of the most important factors in organic animal husbandry, so it must be ensured that this is actually provided. Once the animals are accustomed to outdoor access, behavioural problems can quickly develop if this is no longer granted.

How?

It has to be checked according to the supervisor, on the basis of the exercise journal or the timer whether access is granted except in exceptional situations. Exceptional situations must be documented and verifiable, for example prolonged heavy rainfall, veterinary orders due to illness or underweight (newly housed laying hens before the start of laying - here the animal weight and the ordered feeding measure should be documented), confinement order due to bird flu or other.

Recommendations

In extreme weather conditions such as thunderstorms or storms, the animals can be kept indoors to protect their health.

5. Animal mortality

5.1 The mortality of the laying hens (without losses due to predation) is below 10 % per year. The losses of the present and the last production cycle should be related to one year. For example 15% losses in 18 months correspond to 10% losses per year.

Why?

Animal losses are not only to be avoided with regard to animal welfare, they also mean economic losses for the farms. In order to have a precise picture of the losses, it is necessary to document them in a comprehensible manner.

How?

The mortalities of the last batch and the current batch are to be determined using the barn documentation. Dead and culled animals are recorded together. Losses due to predators are to be recorded under 5.2. A deviation is counted if the limit value was exceeded in one of the controlled batches. If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation, with a reference to the lack of documentation.

10 % losses per year correspond to losses of the initially housed number of animals of 0.83 % per month or 0.19 % per week.

The following equation can be used to relate the losses for the batch to one year. This applies both to batches with a duration of more than and less than one year:

$$\frac{52 * losses\ throughout\ the\ batch\ in\ \%}{duration\ of\ the\ batch\ in\ weeks} = animal\ mortality\ (without\ predation)\ in\ \%$$

Recommendations

If increased animal losses occur, it is essential to determine the causes. A vet or the advisory service should be consulted if necessary. In addition to various infectious diseases, other possible reasons for high mortality in poultry include crushing, cannibalism, heat stress or very high parasite pressure.

5.2 The losses due to predators (e.g. fox, hawk) are on average below 10 %. This applies per production cycle for fattening poultry and per year for laying hens. Please note down any measures taken against predators.

Why?

Losses due to predators can hardly be completely avoided in organic poultry farming due to the animals' access to the open air. Most losses are caused by foxes or hawks.

How?

The losses due to predators can best be calculated from the difference between the number of animals entering and leaving the stable, minus the losses queried under 5.1 (see previous point) or 5.3 (see following point). In the case of laying hens, the last completed batch is checked, whereby the losses are related to 1 year as described under 5.1. For all other poultry, the average of the completed batches of the last 12 months or the period under review is used, in order to account for seasonal effects such as hawk breeding. If a farm experiences increased losses due to predators, the predator that caused the losses and what measures have already been taken should be noted in the comments field.

Recommendations

The following list provides an overview of measures that can help against predators. Whether they are practicable and promising in the respective situation depends largely on individual farm factors.

- Erection of a fox-proof fence (protected from undermining and current-carrying, it is important that the current flows sufficiently and reliably).
- Ensure that the animals are in the barn at night and that it has no cracks/openings that would allow martens to enter, for example.
- Keeping other animals in the run that keep predators away by their presence, loud noises or by actively chasing them away (e.g. cockerels, guinea fowl, goats, alpacas, livestock guarding dogs).
- For smaller stocks: Netting over the free-range or cords/flutter belts over the free-range.
- Other birds of prey or even crows do not tolerate hawks in their vicinity; it can help if, for example, red kites or buzzards settle close by. This can be supported by suitable perching opportunities, for example.
- Protective structures/planting/shelters in the run. Caution: This can also serve as cover for hawks.
- In the case of foxes: consult the responsible hunter.
- Scarecrows, reflective balls, CDs etc. can help in the short term. However, the birds of prey usually get used to them quickly.

5.3 The average mortality of the fattening fowl and pullets is below 5 % (without losses by predators) per production cycle. The average mortality of turkeys is below 15 %(max. 10 % up to the age of 7 weeks and 5 % in the further fattening period).

Why?

Animal losses are not only to be avoided in terms of animal welfare, they also mean economic losses for the farms. In order to have a precise picture of the losses, it is necessary to document them in a comprehensible manner. Even if the analysis is only carried out after the end of a production cycle, valuable conclusions can be drawn for the next one.

How?

The mortalities of the last batch and the current batch are to be determined using the barn documentation. Dead and culled animals are recorded together. A deviation exists if the respective limit value is exceeded. In the current batch, there is no need to convert to losses per week, so the limit value is used regardless of age. Losses due to predators and carnivores are recorded under 5.2. If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation.

Recommendations

If increased animal losses occur, it is essential to determine the causes. A vet or the advisory service should be consulted if necessary. In addition to various infectious diseases, possible reasons for high mortality in fattening poultry include poor chick quality (many "non-starters"), crushing, cannibalism or heat stress.

6. If carcass protocols are available

6.1 Less than 20 % of the fattening fowl of the last production cycle showed foot pad lesion.

Why?

Foot pad changes can indicate too little or too moist bedding and can sometimes be very painful for the animals. More severe changes can also affect the animals' locomotion and thus their food and water intake.

How?

The proportion of animals with footpad lesions is taken from the carcass protocols. The foot pads are usually assessed according to grades. However, the systems and scales vary between slaughterhouses, so it is not necessary to differentiate according to the severity of the change.

Please enclose a copy or photo of the relevant carcass protocols in case of deviations for better interpretation by QS. If no carcass protocols are available, the foot pads of the animals must be examined in the barn, see page Fehler! Textmarke nicht definiert..

Recommendations

The quality of the bedding is crucial for healthy footpads, above all it must be kept as dry as possible. It is worth taking a critical look at the bedding material and quantity. An even distribution of the animals in the barn, regular checks of the drinking troughs for leaks and a manure consistency that is not too moist help to keep the bedding evenly dry.

6.2 Less than a total of 5 % of the animals of the last cycle showed breast blisters, emaciation or other indications (incl. discarded carcasses).

Why?

Carcass protocols provide important information on health and animal welfare that is difficult or impossible to obtain from live animals. They are very helpful for analysing weak points and making corresponding improvements in animal husbandry.

How?

The percentages of abnormal carcass protocols from different causes (all findings except footpad lesions, which must be assessed in 6.1, see previous point) are added together. If the limit value of 5 % of affected animals is exceeded, a deviation is present.

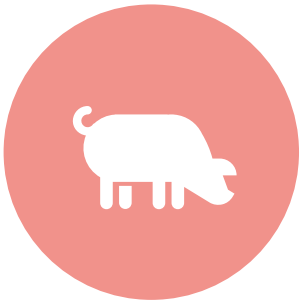
In **laying hens,** severe emaciation, inflammation of the laying apparatus and worming are particularly important.

In fattening poultry, changes to the limbs, breast blisters and worming play a particularly important role.

Recommendations

Findings reported back by the slaughterhouse should be analysed carefully and self-critical questions should be asked about the management measures that can be derived from them. The veterinarian or the advisory service can provide support in interpreting the findings.

Pigs



The inspection points on animal losses and carcass protocols can be dealt with in the office before entering the barn.

The activity and feeding times (morning and afternoon) are best suited for evaluating the animals. The animals rest at midday and at night. The complete pig housing has to be assessed, i.e. each pen or group of animals is at least inspected. If the animals are on pasture, the time required increases. If there are larger groups, which may be widely distributed in the neighbourhood, it is sufficient to inspect only some of the grazing animals. In the case of free-range systems, it is important to carry out the inspection alternately in summer and winter.

If there are different locations with possibly different responsible personnel, each location should be checked, regardless of whether the animals are kept on pasture or in the stable with a run. If the overall impression at the various locations does not appear to differ, it is sufficient to complete just one checklist.

The assessment can be carried out from the stable aisles if the pens can be fully inspected from there. Ideally, the farm management or responsible personnel should be present to enter the pens and, for example, open the lids of the cubicles, check that the drinking troughs are in working order and carefully move lying animals. If the pens are entered by the inspector, the farm management or responsible staff should at least be within calling distance. Particular attention should be paid to pigs that withdrew to the furthest corners of the lying area.

Caution! Caution is advised with boars, depending on their temperament and accustomed human contact, they can be aggressive. Boars are either housed in individual pens (judgement from the aisle is sufficient) or run along in groups of breeding sows. In the latter case, a walk through the group should only take place in the presence of the farm management or the responsible staff.

When checking the percentage values, an **overview assessment** is first carried out to see whether the specified proportion of animals can be found. For example, do you find more than 10 emaciated animals in a group of 100 pigs?

For a more precise evaluation, approx. 50 % of the animals per animal category or age group are assessed (smaller proportions are sufficient for larger herds). The selection of the animals to be assessed depends on the group size. In small groups (≤ 20 animals), several groups or pens are selected at random and all animals are assessed. In large groups (> 20 animals), 20 animals per group or pen are randomly selected and evaluated.

Ideally, assessed animals in the group should be colour-coded so that they are not accidently assessed twice.

If no clear result is reached after assessing the defined number of animals, if anomalies have already been identified during the herd assessment that require a larger random sample, or if there are doubts about the validity of the result, further animals must be assessed.

If only 1 animal leads to a limit value being exceeded, this is not counted as a deviation.

The control time can be reduced

...if the following documents are prepared for the inspection:

- Loss documentation and animal movements
  (Stable book/sow planner/fattening planner)
- Carcass protocols since last inspection
  (ideally summarised)

1. Nutritional state

1.1 Less than 10 % of the animals are emaciated (BCS ≤ 2).

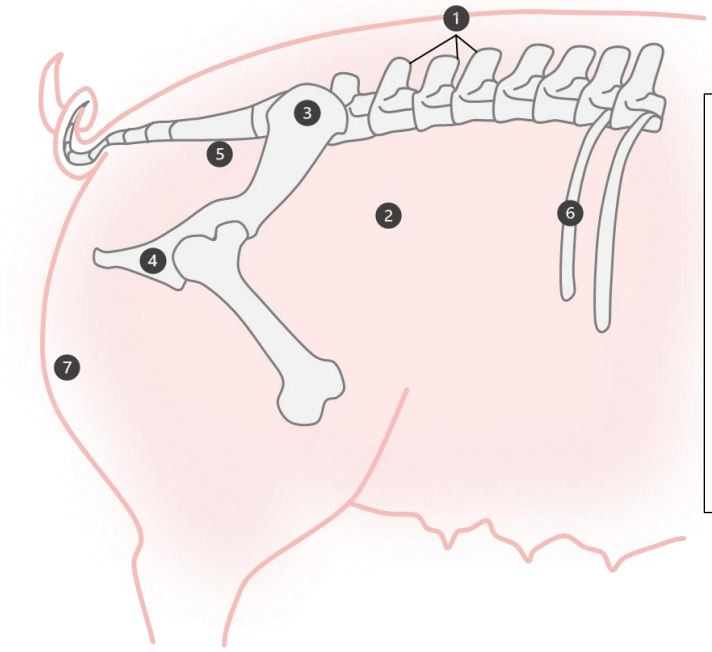
Why?

Nutritional status is a key criterion for animal welfare and is in the responsibility of the caretakers. Malnourished animals are a sign of inappropriate feeding (too little feed, not in line with requirements, too few feeding places), illness or lameness.

How?

The assessment is based on body condition according to the Body Condition Score (BCS). For this purpose, the pigs are assessed from behind and/or from the side. Animals with a score of 2 or less are categorised as significantly emaciated (Figure 37). This can be recognised by the following criteria (Figure 36):

- Spinous processes visible
- Hip bone tuberosity protruding
- Slightly sunken flank
- Tail base slightly sunken
- Ischial tuberosity protruding
- Ribs partially visible
- no ham



1) Spine → spinous processes
2) Flank
3) Pelvis → ischial tuberosity
4) Pelvis → iliac tuberosity
5) Tail base
6) Ribs
7) Ham

Figure 36: Anatomical structures relevant of body condition in pigs

Figure 37: Examples of BCS scores 1 to 5

If there is a deviation, note which animal group is involved (e.g. 3 out of 16 nursing sows = 19 %, 12 out of 100 fattening pigs = 12 %, etc.) and whether countermeasures have already been taken.

Recommendations

The causes of emaciation can vary depending on the age group and production stage. It may be that the ration is not balanced or that individual feed components are not digestible or tasty, in which case it is advisable to have the feed and/or the individual components analysed. There may also be something wrong with the feeding technology (e.g. incorrectly set quantities, blocked pipes).

In the case of heavily weaned sows, it is important that they are fed "to condition" before they are mated: To do this, these animals must have the opportunity to eat their feed separately without disturbance. If a conspicuous number of sows are too thin after the suckling phase, the suckling feed and the feeding strategy and equipment in the farrowing area should also be examined more closely.

The lactating sow and her piglets are directly related. If the sow is not fit and not eating, she will give less or no milk. As a result, the piglets lose weight very quickly, especially in the first few weeks of life, the sow's milk is their main source of nutrition. If necessary, additional milk has to be fed and the piglets have to be transferred to a nurse sow.

Illness or lameness can also lead to emaciation. It is important to place these animals in a sick pen, as they are unable to compete with their pen mates in a weakened state or it hurts the animals to walk to the feeding facility. The animals must be examined and treated by a vet as soon as possible.

Ideally, illnesses, lameness, feeding and technical deficiencies should be recognised before they result in a weight loss of animals: In such cases, it is advisable to intensify animal care and observation, including regular care, e.g. by the veterinary farm practice.

2. Maintenance status

2.1 Less than 20 % of the animals show three-dimensional, thick faecal deposits (more than 30 % of the body surface). Fresh marks from wallowing are excluded.

Why?

Heavy faecal soiling is an indication of poor housing conditions. This includes lying areas that are too small or soiled due to inadequate manure removal or no other way to cool down than wallowing in faeces during heat stress. Sick animals are sometimes pushed into the faeces area, which is also a sign of inadequate care (separation of sick animals!). Dung soiling increases the risk of infection.

How?

A randomly selected side of the body is assessed. Attention should be paid to fresh or thickly encrusted or dried faecal deposits. These indicate that the soiling has accumulated over several days. If more than 30 % of the body surface is affected, this counts as a deviation (Figure 38). The approximate ambient temperature at the time of the inspection must be stated.

Figure 38: Top: less than 30% of the body surface soiled; bottom: more than 30% of the body surface heavily soiled

Fresh thin-layered marks from wallowing are not counted (Figure 39).

Figure 39: Fresh thin-layered wallow mark from an earthern wallow

If the cause is known or clear and measures are planned, this must be noted.

Recommendations

Before effective countermeasures can be taken, the cause of the animals' high faecal staining must first be identified.

A "simple" cause may be that manure is simply not removed frequently enough and the animals have no choice but to stay in areas soiled with faeces. A more frequent manure removal interval can quickly and easily remedy this. In addition to manure removal, drainage must also be considered: If water builds up in the run in the event of rain and everything silts up as a result, this must be optimised. The welfare of the animals should be guaranteed in all weathers, and normal rainfall should be no exception. Also, sufficient bedding must be available in the pen.

If the pens are not clearly structured for the animals, they may not be able to use a defined area for their various natural behaviour patterns. For example, each area may be used both for defecating and lying down, causing them to soil themselves. In this case, the pen structure should be reconsidered.

One of the common causes is the lack of opportunities to cool down on hot days. As pigs cannot sweat, they have to wallow to cool down and, if necessary, they do this in their own faeces and urine. If this is observed, it is essential to create a cooling facility, e.g. by creating wallows in the run or on the pasture, showers, ventilation, planting hedges or trees next to the run or on the pasture, green roofs and walls and insulating the stalls.

3. State of health

3.1 Less than 10 % of the animals have ectoparasites.

Why?

A poor stable climate (damp, warm, stuffy) favours an infestation of the animals with ectoparasites. These can lead to loss of performance, severe itching, irritation, restlessness and pain. Freedom from discomfort and disease is crucial for animal welfare.

How?

The behaviour of the animals and the body surface must be examined.

To assess behaviour, the pigs must be observed for a longer period of time: Are the animals scratching or rubbing themselves repeatedly? Are the animals noticeably restless (shaking, jumping up and down, "harassing" pen mates)? Do the animals allow their pen mates to bite them (relief of itching)? If one question can be answered with "yes", it is an ectoparasitosis.

When assessing the body surface, pay particular attention to reddened and scratched areas (shaggy to hairless), many small red dots, crusty, barky grey skin coverings (especially on the ears, neck and lower legs) or parasites or their eggs (Figure 40).

Figure 40: Top: Beginning mange - reddish, shaggy/ hairless rubbing area (left), small red dots (right), each with itching. Middle: more advanced mange - grey-brown crusty skin covering (left and right). Bottom: Lice (left) and their eggs (right)

For redness, there is a risk of confusion with sunburn (Figure 41): Animals with severe sunburn appear worn out (drooping head, ears and tail), the redness usually extends over the entire body surface, while itching behaviour is shown if the reddened areas are caused by rubbing. These reddened chafed areas are usually limited to the neck or flank. In severely chafed areas, the bristle coat is very shaggy to non-existent or the area is chafed.

Ectoparasite-related skin coverings (primarily mange) can also be confused with zinc deficiency (parakeratosis) or greasy pig disease (Figure 41). Mange is associated with itching, whereas parakeratosis and greasy pig disease are not itchy. Other distinguishing features of mange and parakeratosis are that mange starts at the ear/neck/back and moves down the back, whereas the crusty skin deposits caused by zinc deficiency start at the back of the animal and then move up the back. The crusts caused by zinc deficiency also fall off, whereas this is not the case with the skin deposits caused by mange. Greasy pig disease is caused by the penetration of staphylococci into a wound, e.g. on the face due to mutual biting or abrasions on the carpal joints when pushing at the teats takes place due to a lack of milk of the sow.

Figure 41: Left: Sunburn; centre: greasy pig disease; right: parakeratosis

Sunburn, greasy pig disease, parakeratosis and other skin diseases fall under point 3.5 in the assessment. If there is uncertainty as to whether it is an ectoparasitosis or not, this must nevertheless be ticked as a deviation and the conspicuous behaviour of the animals or the abnormalities on the skin surface must be described and photos attached.

Recommendations

Ectoparasites thrive in a moist environment. This means that to minimise the risk of infection, manure should either be removed more frequently or more bedding should be provided. If wallows are provided, these should be regularly drained or moved. Keeping the housing environment dry is the crucial point here. Furthermore, hygiene measures such as the all-in-all-out- procedure and professional cleaning and disinfection of the stall compartments keep the risk of infection low.

If animals are infested with ectoparasites, the vet should be consulted.

3.2 Less than 10 % of the animals have locomotion disorders.

Why?

Movement disorders and lameness have a major impact on animal welfare: they are usually associated with pain and can have a huge impact on feeding behaviour and performance.

How?

The pigs should be observed for a longer period of time, and lying animals should be induced to move carefully. Deviations include clear movement disorders that are recognisable to everyone. These include animals that are unable to stand up or have difficulty standing up (can manifest in dog-like sitting), staggering or lameness (clear reluctance to put weight on a leg, relief of limbs, extremely "spindly" walking), sitting down or lying down again after a few steps and so-called "straddlers" (especially in suckling piglets).

In the event of a deviation, the type of movement disorder and whether animals are already undergoing treatment should be noted.

Recommendations

Lying surfaces that are too hard, slippery floors, illnesses or very fast growing pigs in combination with a sub-optimal feed supply can be the cause. This can be remedied by providing more bedding, roughening the floor or keeping the housing facility dry (drainage, more frequent cleaning) or by adapting the feed.

In such cases, the vet should be consulted as soon as possible, as lameness clearly indicates pain in the animal.

3.3 Less than 10 % of animals have thickened joints.

Why?

Thickened joints or swellings at the legs are considered to be an indication of very hard lying surfaces. Heavy mechanical stress can lead to the formation of auxiliary bursae (also known as accessory bursae or bursae auxiliares) under the skin in order to distribute the pressure more evenly and prevent damage to the tissue (pathological reaction). Prolonged strain can lead to inflammation (bursitis), which is painful.

Other causes of swollen joints can be of an infectious nature. Such changes can be very painful and associated with lameness.

How?

The joints of the animals, especially the forelimbs and hind limbs, should be examined for assessment. Deviations include swellings or increases in circumference of more than 5 cm (Figure 42).

Circumferential growths of an infectious nature can be found in suckling piglets or rearing piglets in particular, e.g. if they have rubbed their carpal joints when fighting over their mother's milk.

Figure 42: Auxillary bursa on front (left) and hind leg (right)

Recommendations

The most important causes of such circumferential proliferation are injuries, which serve as an entry point for pathogens, and very hard lying surfaces. Both causes can be remedied with more or better suitable bedding. A too small lying area could also be the cause. It is important to remember that more straw bedding in the farrowing pen (especially for the very small suckling piglets) can also be counterproductive and can result in increased crush losses. Instead of straw, it is therefore advisable to use spelt husks, wood shavings or hay, for example.

Affected animals must be separated and treated by a vet if necessary.

3.4 Less than 10 % of the animals show biting wounds, necroses or partial tissue losses (esp. tail and ears).

Why?

Injuries to the skin and body appendages, especially the tail and ears, are painful and can lead to loss of performance, infections and even carcass discarding. They are considered to be indications of various impairments of the biting and bitten animals.

How?

The body appendages (ears, penis, udder, vagina and tail) and the body of the animal should be examined. If there is bleeding, scabbing, inflammation (red, swollen, hot and painful), black discolouration (necrotisation), tissue loss or bite marks on the rump that are larger than the palm of the hand, the number of affected animals is added up and the percentage of affected animals within each animal category (weaned piglets, fattening pigs, etc.) is calculated. (Figure 43)

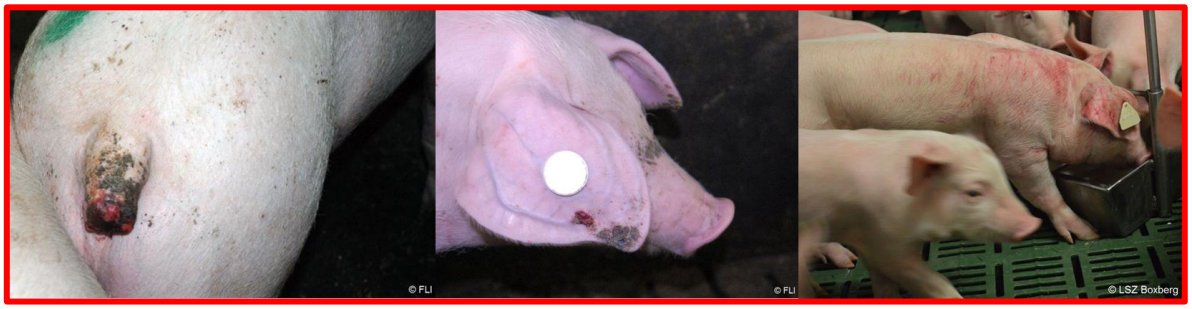


Figure 43: Left: inflamed bloody and scrabbed bite wound on the tail; centre: incipient bloody-scabbed bite wound on the ear; right: bloody bite wound on the trunk of a suckling piglet in an area more than the size of the palm of the hand

Tissue loss refers to missing parts of the body appendages as a result of bite wounds that have already healed (Figure 44).

Figure 44: Left: Tissue loss at the tail; right: tissue loss at the ears

Recommendations

This complex of problems can have a wide variety of causes, some of which are interrelated (feed, water and bedding quality, stable climate, occupation, genetics, SINS, etc.). It is advisable to seek professional advice.

Sometimes the initiator is an individual animal, and removal from the group can sometimes solve the problem. Animals that have been bitten or injured must be treated immediately.

3.5 Less than 10 % of the animals show obvious signs of disease (coughing, diarrhoea, runts) or other severe injuries than in 3.4 or hernias, abscesses etc.

Why?

Signs of illness or other severe injuries can often be traced back to feeding, husbandry or management-related deficiencies.

How?

All deviations from a healthy condition of the animals not mentioned before fall under this inspection point. This includes, for example

- apathetic, reclusivly lying pigs
- emaciated, shaggy, weak animals with retarded body growth and a relatively large head (runts)
- Animals standing crookedly ("sawhorse posture")
- Coughing, sneezing, nasal discharge
- Reddened, swollen conjunctiva, eye discharge
- Panting, strained/pumping breathing, trembling
- Vomiting, diarrhoea (faeces-smeared hindquarters, rectal prolapse)
- red, swollen teats
- Vaginal discharge, vaginal prolapse, uterine prolapse
- Swelling, protrusions or bulges on the head and torso (inguinal hernias, scrotal hernias, umbilical hernias, rectal prolapses, abscesses, haematomas)
- conspicuous paleness (especially in piglets)
- Injured or inflamed claws
- Injuries to carpal joints (especially in suckling piglets)
- Shoulder lesions (especially in breeding animals)

If various signs of illness, pathological changes and injuries are observed, the most common ones should be noted, as well as any measures already taken.

Recommendations

In any case of clear signs of illness, a veterinarian should be consulted. Causes should be sought and eliminated self-critically. It is advisable to seek professional counselling.

3.6 Ill, injured or non-viable individuals are treated competently and with care. If necessary, skilful emergency killing takes place immediately.

Why?

Animal welfare legislation imposes strict requirements on the handling of sick animals, which must be complied with on every farm. The presence of a hospital pen is mandatory.

How?

Responsible and caring handling of sick, injured and weak animals is demonstrated by separating them from the group and immediately providing them with professional treatment and appropriate feeding. If several animals need to be separated, they should be separated into different hospital pens according to age and size. Hospital pens must be generously littered and drinking water should always be available.

If necessary, an immediate professional emergency killing or emergency slaughter is carried out. Professional means that the person carrying out the emergency killing must have a certificate of competence and the animal must be anaesthetised before it is killed (Table 6). In individual cases, the animal keeper or the person responsible for animal husbandry may carry out emergency killing due to a lack of regularity but must have the necessary knowledge and skills (agricultural training). However, in case of doubt, the competent authority may require proof of expertise.

Table 6 : The following table according to große Beilage, et al., (2022) provides an overview of stunning and killing procedures for different age groups in pigs:

Age group	Anaesthesia	Killing
Piglets < 5 kg	Blow on the head	Bleeding
	CO2 anaesthesia	CO2 killing
	Penetrating bolt shot	Bleeding or destruction of the brain and spinal cord
Pigs > 5 kg	Penetrating bolt shot	Bleeding or destruction of the brain and spinal cord
	Electrical anaesthesia (brain perfusion)	Electrocution (cardiac perfusion)

A deviation exists if affected animals are left alone or are not properly cared for and fed appropriately, if proper treatment (e.g. by a vet) is provided too late or not at all, or if necessary killing is not carried out immediately or properly.

Recommendations

If in doubt when dealing with sick and injured pigs, a veterinarian should be contacted.

4. Stable, run, pasture, feed and water supply

4.1 The runs are sealed (except for pasture runs and free-range husbandry) and in good condition.

Why?

Clean runs that can be used normally by the pigs are crucial for animal welfare.

How?

Care should be taken to ensure that runs that are permanently accessible all year round are sealed or consist of partially slatted flooring and are in a well-maintained condition. A good run has recognisable functional areas that are accepted by the animals.

If a run consists of pure soil (without sealing underneath), is completely covered by mud, puddles, old feed residues etc. or functional areas are not recognisable and therefore not accepted by the animals, this is a deviation (Figure 45).

Figure 45: Left: completely soiled/ silted sealed run; right: permanently accessible run without sealing underneath

Additional pasture runs and free-range enclosures are exempt from the requirement of sealing the surface. However, if these are predominantly (more than 50 % of the outdoor area) covered by mud, puddles, old feed residues, etc., this is counted as a deviation.

Recommendations

A more frequent manure removal interval, functional drainage and a clear pen structure for the animals are effective measures to prevent siltation of the paved run. If the minimum dimensions of the EU Organic Farming Regulation are used for the outdoor run, it must be sealed (from a water law and hygiene perspective). In the case of pasture or free-range systems, the animals must be offered larger areas in order to limit the nutrient input on the surface. Siltation of the pasture can be counteracted by moving functional elements, changing pastures and taking breaks.

4.2 The feed is of good quality (not spoilt, sour, mouldy) and the feeding places are clean.

Why?

Feeding is a fundamental part of animal husbandry and is the responsibility of the animal caretaker. Pigs are very clean and sensitive in this respect and show pronounced food envy: good feed quality, as well as cleanliness and sufficient availability of feeding places are crucial to keep illnesses and aggressive behaviour to a minimum.

How?

An olfactory and visual inspection of the basic or concentrated feed is carried out. As a rule, it should smell bread-like/nutty or like sourdough. If in doubt, you can also ask yourself whether you would put the feed in your own cereal bowl. The roughage should also be checked.

If the food is obviously spoilt, mouldy or dirty or smells rancid, musty, rotten or excessively sour (vinegar smell), this is a deviation. If in doubt, the feed storage area can also be inspected: If there are mould nests on grain, straw, hay or silage or if the feed grain is used as a cat or dog litter tray, this should be objected to.

Feeding areas are troughs, racks, automatic feeders and floor feeding areas. These must be free of old feed residues or other old soiling. The number, arrangement and nature of the feeding areas should also ensure that contamination and competition for feed is avoided (Figure 46).

Figure 46: Example from conventional husbandry: Left: animal-feeding place ratio or feeding place arrangement suboptimal; right: Animal-feeding place ratio or feeding place arrangement optimal

Recommendations

Affected feed components must be removed from the feed immediately. Feed logistics and storage should be checked self-critically; it is advisable to carry out feed analyses after each harvest.

The layout, functionality and number of feeding places must be checked. The Animal Welfare Farming Ordinance (TierSchNutztV) must be taken into account. According to this regulation, all pigs must be able to eat at the same time in the case of rationed feeding (animal/feeding place ratio of 1:1). The following feeding space widths apply:

Table 7: Minimum feeding space widths per live weight class according to TierSchNutztV

Live weight	**Minimum feeding place width**
Up to 25 kg	18 cm
26 - 60 kg	27 cm
61 - 120 kg	33 cm
From 120 kg	40 cm

In the case of free feeding (ad libitum), there must be one feeding place for a maximum of 4 pigs (animal feeding place ratio of 4:1). However, this does not apply to on-demand feeding (animal feeding place ratio of 64:1) and feeding with mash feeders (animal feeding place ratio of 8:1).

4.3 There are enough drinkers (1 drinker for 12 pigs), they are clean and functional.

Why?

An optimal water supply is a fundamental component of good animal husbandry.

How?

Drinking troughs include bowl drinkers, nipple drinkers and troughs that are filled with water by means of trough flooding or otherwise. These drinking points must be checked for cleanliness, number, arrangement and condition:

- Is there enough water freely available to the animals at all times?
- Are the drinkers accessible or usable for all animals?
- Are the drinkers clean?
- Do the animals show no competition for the drinkers?
- When randomly checking for functionality: Does the water pressure appear appropriate for the respective age group?

If at least one question can be answered with "no", this is considered a deviation.

Minimal, fresh contamination, e.g. from feed or litter, does not count as a deviation.

Recommendations

If many animals crowd around a drinker, this may mean that the water is worse elsewhere, there is a technical problem or there are too few drinkers. The Animal Welfare Farming Ordinance (TierSchNutztV) must be taken into account. According to this, if self-watering troughs are used, there must be one drinking point for a maximum of 12 pigs.

The following table can be used as a guide for water requirements and flow rates depending on the stage of rearing (modified from DLG Merkblatt 464 – Fütterung und Tierwohl beim Schwein – Wasserversorgung und Futterhygiene).

Table 8: Orientation values for water requirements and flow rates by age group

Animal group		Water requirement in litres per animal per day	Flow rate in l/min
Suckling piglets		1	0,5
Weaned piglets		1 - 3	0,6
Fattening pig	< 50 kg	3 - 6	0,8
	50 - 80 kg	5 - 9	1,0
	> 80 kg	9 - 11	1,7
Dry and pregnant sows		8 - 15	1,7
Lactating sows		15 + 1.5 per piglet	2,8
Boar		12 - 15	1,3

4.4 The barn air is neither irritating nor strikingly dusty.

Why?

High concentrations of harmful gases and dust particles in the barn can lead to irritation of the pigs' respiratory tracts. This promotes the penetration of pathogens. The quality of the air also plays a role when considering the working conditions in the barn.

How?

The air in the barn is sensed, ideally at the level of the pig's nose. If there is a distinct odour of ammonia or the smell is acrid, the mucous membranes in the eyes or nose burn after a few minutes or you have to cough, this is considered a deviation.

If the harmful gases are measured, limit values of 5 ppm sulphur concentration, 15 ppm ammonia and 3000 ppm carbon dioxide apply.

The dust load is assessed by whether you have a clear view when the animals are moving quietly in the barn or whether the view is clouded or obstructed. Another possibility is to assess the dust precipitation using a black sheet of paper: If this is placed in the barn building at the start of the inspection and is clearly covered in dust when you return (i.e. grey instead of black), the dust level is too high.

Recommendations

If the bedding is particularly dusty, the use of dedusted bedding or the purchase of a dedusting system should be considered.

In the case of high concentrations of harmful gases, more frequent manure removal and ensuring drainage (separation of faeces and urine) should provide a remedy.

Optimising the ventilation or ventilation technology can also lead to an improvement in air quality (creating new "openings" in old buildings, ventilation). It is important to ensure that the barn is draught-free at animal level, especially in the lying area. Draught-free microclimate zones can be created by using covers or lids in the lying area. This is particularly recommended for outdoor climate stables.

4.5 The housing equipment is well maintained and functional.

Why?

The animals' immediate environment has a direct impact on their well-being. The functionality of the housing is a basic prerequisite for good husbandry management and the avoidance of technopathies or injuries. The lying areas should be dry and largely clean.

How?

Housing equipment includes all facilities in the stall, run and outdoor area that are used to keep animals. This includes drinking and feeding facilities, pen partitions, stable walls, stable floors, huts, lying areas, etc.

Housing facilities such as feeding stalls, automatic feeders, pen partitions or the floor itself are assessed for risk of injury (e.g. sharp edges, broken, protruding metal bars, damaged or wobbling slatted floor elements, sharp stones on the pasture, dangerous objects/trash). Housing facilities (e.g. heat sources in piglet production, doors to the run, etc.) must be randomly checked for functionality.

The cleanliness and dryness of the laying areas also fall under this checkpoint.

It is a deviation if there is a risk of injury from a (possibly damaged) equipment, if there are dangerous objects or rubbish in the enclosure, if a facility is not functional or if the laying area is wet and dirty and is therefore not accepted as such by the animals.

Recommendations

Sources of danger must be eliminated as quickly as possible. Laying areas must be kept dry and clean. If the pigs use the lying area as a "toilet", the pen must be reorganised. It is often the case that the animals defecate in the lying area in summer because it is too warm. Switching off the heating system, folding up the slats of the lying crates and even folding up the lid of the lying area can quickly and easily counteract this. If underfloor heating is installed, it may be possible to convert it so that it can also be used for cooling. This would allow the animals to accept the lying area despite the bedding.

5. Animal mortality

Why?

Animal losses are involuntary losses and a decisive indicator for assessing the animal welfare status of a farm. They are not only to be avoided for the sake of animal welfare, they also lead to high economic losses.

5.1 The stillbirth rate is below 15 %.

How?

Piglets are counted as stillborn if they were born dead (if the farmer is present at birth) or if they were found dead during the first inspection after birth.

The total number of piglets born dead is set in relation to the total number of piglets born in the reference period. Stable documentation sow planners and/or documents from the rendering plant can be used to determine this.

$$\frac{stillborn\ piglets}{total\ number\ of\ born\ piglets} * 100$$

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation with a reference to the lack of documentation.

The period under review and the calculation, including the underlying figures, should be noted down.

Recommendations

Corresponding to the German law (SchHaltHygV §9), the keeper of a breeding farm with more than three sow places must immediately document the litter size (**total piglets born** per litter, including **stillborn piglets**) for each sow.

The stillbirth rate is an indication of suboptimal sow health or sow feeding (sows that are too fat), inadequate farrowing management (no or little care) or technical deficiencies in the housing conditions.

5.2 Mortality within the first week of piglets born alive is less than 15 %.

How?

The sum of all piglets that died and were emergency killed in the first week of life is set in relation to the number of piglets born alive in the reference period. Stable documentation, sow planners and/or documents from the rendering plant can be used to determine this.

$$\frac{deceased\ and\ emergency\ killed\ piglets\ in\ the\ first\ week\ of\ live}{total\ number\ of\ piglets\ born\ alive} * 100$$

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation with a reference to the lack of documentation.

The period under consideration and the calculation, including the underlying figures, should be noted down. The latter should be taken into account in particular for pig breeds that are categorised as at least "endangered" according to the "Red List" due to small litter sizes (The Red List at a glance (g-e-h.de): Saddleback pig breeds, Leicoma, Bunte Bentheimer).

Recommendations

Corresponding to German Law (SchHaltHygV §8), the livestock owner must determine the cause of the death of the animals by a veterinarian when dead pigs in the barn occur frequently. Furthermore, this law (SchHaltHygV §8 Annex 6 Section I) defines frequent deaths as shown in Table 9.

To make it relatively easy to separate suckling piglet losses into 1st week of life and 2nd week of life onwards in the documentation, the number of live piglets can be counted and noted on the 7th day of life, especially if the piglets are due to be treated on the 7th day of life anyway.

A high suckling piglet mortality rate can be attributed to disease, inadequate housing conditions or sub-optimal genetics (large litters, feet and legs).

Table 9: Definition of „frequent occurring deaths" according to German Law (SchHaltHygV)

Verenden im Abferkelbereich	
First week of life	**After the first week of life (per week)**
15%	5%

5.3 Mortality of suckling piglet from the start of the second week until weaning is less than 10%.

How?

The sum of all dead and emergency-killed piglets from the second week of life is set in relation to the piglets alive at the beginning of the second week of life in the reference period. Stable cards, stable books, sow planners and/or documents from the rendering centre can be used to determine this.

$$\frac{dead\ piglets + \ emergency\ killed\ piglets\ from\ the\ 2nd\ week\ of\ life}{piglets\ alive\ at\ the\ beginning\ of\ the\ 2nd\ week\ of\ life} * 100$$

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation with a reference to the lack of documentation.

The period under consideration and the calculation, including the underlying numbers, should be noted. The latter should be taken into account in particular for pig breeds that are categorised as at least "endangered" according to the "Red List" due to small litter sizes (The Red List at a glance (g-e-h.de): Saddleback pig breeds, Leicoma, Bunte Bentheimer).

Recommendations

Corresponding to German Law (SchHaltHygV §8), the livestock owner must determine the cause of the death of the animals by a veterinarian when dead pigs in the barn occur frequently. Furthermore, this law (SchHaltHygV §8 Annex 6 Section I) defines frequent deaths as shown in Table 9.

As a result, these loss categories should be documented. To make it relatively easy to separate suckling piglet losses into 1st week of life and 2nd week of life onwards in the documentation, the number of live piglets can be counted and noted on the 7th day of life, especially if the piglets are due to be treated on the 7th day of life anyway.

A high suckling piglet mortality rate can be attributed to disease, poor husbandry conditions or sub-optimal genetics (large litters, feet and legs).

5.4 The mortality during rearing period (from weaning until 35 kg live weight) is less than 5 %.

How?

The sum of all dead and emergency-killed rearing piglets is set in relation to the total number of weaned piglets in the reference period. Stable cards, stable books, sow planners and/or documents from the rendering centre can be used to determine this.

$$\frac{dead\ piglets + \ emergency\ killed\ piglets}{weaned\ pigs} * 100$$

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation with a reference to the lack of documentation.

The period under review and the calculation, including the underlying numbers, should be noted.

Recommendations

Corresponding to German Law (SchHaltHygV Annex 2 Section III), the livestock owner must ensure that, in addition to the entry in the herd register, **the number of daily deaths is immediately entered** in herd documentation.

Increased losses during rearing can indicate sub-optimal weaning management, disease incidence or inadequate housing conditions and feeding.

5.5 Mortality during the fattening period (from 35 kg live weight until slaughter) is less than 3 %.

How?

The sum of all dead and emergency-killed fattening pigs is set in relation to the initial livestock and all other fattening piglets stabled in the reference period. Stable cards, stable books, sow planners and/or documents from the rendering centre can be used to determine this.

$$\frac{dead\ pigs + \ emergency\ killed\ pigs}{initial\ livestock + new\ stabled\ piglets} * 100$$

The aim is to record what proportion of the animals that were or are on the farm during the period under review died or were emergency killed.

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation with a reference to the lack of documentation.

The period under review and the calculation, including the underlying numbers, should be noted.

Recommendations

Corresponding to German Law (SchHaltHygV Annex 2 Section III), the livestock owner must ensure that, in addition to the entry in the herd register, **the number of daily deaths is immediately entered** in herd documentation.

Increased losses during fattening can indicate disease or inadequate husbandry conditions and feeding.

5.6 Mortality in breeding animals (gilts, breeding sows and boars) is less than 5 %.

How?

Breeding animals refers to all gilts, old sows, and boars.

The sum of all dead and emergency killed breeding animals is set in relation to the average livestock of breeding animals in the reference period. The simplest method for calculating the average livestock is to calculate the average of the initial and final herd. Stable cards, stable books, sow planners and/or documents from the rendering centre can be used for this purpose.

$$\frac{dead\ breeding\ animals + \ emergency\ killed\ breeding\ animals}{average\ livestock} * 100$$

If the mortalities are not recorded and documented on the farm, but are only estimates by the farm manager, this must be noted as a deviation with a reference to the lack of documentation.

The period under review and the calculation, including the underlying numbers, should be noted.

Recommendations

Corresponding to German Law (SchHaltHygV Annex 2 Section III), the livestock owner must ensure that, in addition to the entry in the herd register, **the number of daily deaths is immediately entered** in herd documentation.

Increased losses in breeding animals can indicate the presence of disease or inadequate housing conditions and feeding.

6. If carcass protocols are available

Why?

Carcass protocols provide important retrospective information on the health and welfare of slaughtered animals. They are very helpful for analysing weaknesses and making corresponding improvements in animal husbandry. An increase in liver discards can be a sign of a pig roundworm infestation in the herd, while lung findings can be a sign of disease in the herd or a sub-optimal housing climate.

Recommendations

According to Commission Implementing Regulation (EU) 2019/627 (Article 39), "the official veterinarian shall record and evaluate the results of the official controls carried out [...]. [...] where inspections reveal the presence of any disease or conditions that might affect human or animal health or compromise animal welfare: the official veterinarian shall inform the slaughterhouse operator; [...] where the problem referred to [...] arose during **primary production [or on the holding of provenance]** and relates to human health, animal health [or] animal welfare [...] [he] shall inform [...] the **food business operator [or the management] responsible for the holding of provenance** [...]".

This means that the official personnel who carry out the carcass inspection are responsible for passing on the carcass protocols to the farm of origin (**obligation to provide**). As the farm management, you have the right to request these.

6.1 Less than 20 % of the slaughtered pigs have liver discards.

How?

The sum of all liver rejections is set in relation to the total number of animals slaughtered in the reference period. For this purpose, the records of all slaughtering in the reference period should be checked.

$$\frac{liver\ rejections}{total\ number\ of\ slaughtered\ animals} * 100$$

If no carcass protocols are available, "n.r." (=not relevant) should be ticked and a comprehensible reason noted.

The period under review and the calculation, including the underlying numbers, should be noted.

6.2 Less than 20 % of slaughtered pigs show lung findings (with more than 10% pathological changes).

How?

The sum of all lung findings with more than 10 % pathological changes is set in relation to the total number of animals slaughtered in the reference period. If there are several categories of findings with more than 10 % pathological changes in the lungs (e.g. finding category "10-30 %" and "> 30 %"), these must be added together. For this purpose, the records of findings from all slaughterings in the reference period should be checked.

$$\frac{lung\ findings\ with\ more\ than\ 10\%\ pathological\ changes}{total\ number\ of\ slaughtered\ animals} * 100$$

If no carcass protocols are available, "n.r." (=not relevant) should be ticked and a comprehensible reason noted.

The period under review and the calculation, including the underlying numbers, should be noted in the comments field.

6.3 Less than a total of 10 % of slaughtered pigs show pericarditis, peritonitis, pleurisy, arthritis or severe tail injuries or abscesses.

How?

The sum of all heart, peritoneum, pleura, joint, abscess and tail findings are set in relation to the total number of animals slaughtered in the reference period. For this purpose, the diagnostic records of all slaughterings in the reference period should be checked.

$$\frac{pericarditis + peritonitis + pleurisy + arthritis + severe\ tail\ injuries + abscesses}{total\ number\ of\ slaughtered\ animals} * 100$$

If no carcass protocols are available, "n.r." (=not relevant) should be ticked and a comprehensible reason noted.

The period under review and the calculation, including the underlying numbers, should be noted in the comments field.

6.4 Less than 1 % of pig carcasses are completely discarded.

How?

The sum of all animals that

- died during transport to the slaughterhouse
- were killed during unloading at the slaughterhouse
- were completely discarded due to abnormal findings

are set in relation to the total number of animals slaughtered in the reference period. For this purpose, the records of all slaughterings in the reference period should be checked.

$$\frac{completely\ discarded\ carcasses}{total\ number\ of\ animals\ transported\ for\ slaughter} * 100$$

If no carcass protocols are available, "n.r." (=not relevant) should be ticked and a comprehensible reason noted.

The period under review and the calculation, including the underlying numbers, should be noted in the comments field.

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Further information

- AWARE: Organic Inspector Trainings for Animal Welfare (organic-animal-welfare.eu)
- http://www.welfarequality.net/en-us/home/
- http://www.assurewel.org/