Newsletter 6 – April 2018

Content

From the WQN Coordinator…

Dear Partners,

The General Assembly 2017 took place on 13 December in Vienna, Austria. The meeting was hosted by Professor Christoph Winckler and colleagues at the University of Natural Resources and Applied Life Sciences (BOKU). The Welfare Quality Network is still very active and currently consists of 22 partners from 14 European countries. Apart from the usual administrative issues and financial reporting we discussed the activities in the different working groups. These groups are mainly focused on a species and deal with the improvement and upgrading of the various welfare assessment protocols. Several upgrades of these protocols are close to being finalised, and new versions will be published in the coming year.

Every year a member of the Management Team steps down. This year the undersigned stepped down, but I was honoured to be re-elected as a member of the Management Team to serve for another five years. The current members of the MT are, Isabelle Veissier, France, Mara Miele, United Kingdom, Antoni Dalmau, Spain, Bryan Jones, United Kingdom and Harry Blokhuis, Sweden.

It was also decided to aim for a common application for a so-called 'innovative training network' under the European Marie Skłodowska-Curie scheme. The purpose of such a network is to train a new generation of creative, entrepreneurial and innovative early-stage researchers, able to face current and future challenges.

A large part of the meeting was used for two workshops during which we had strategic discussions on two topics:

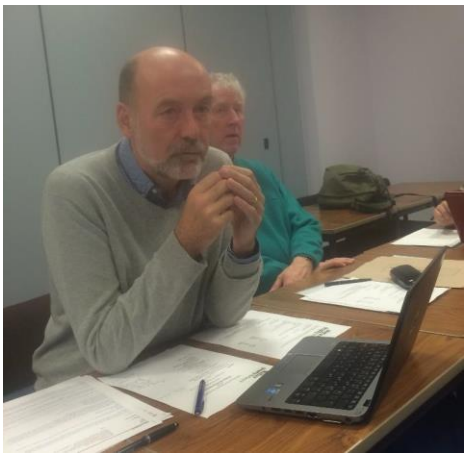
1. The application and use of the Welfare Quality system

   Welfare Quality measures can be used by different (groups) people for example farmers, retailers, consumers, scientists and for different purposes such as on-farm management, marketing, product information and research. These applications have different requirements and need different integration levels. Welfare Quality measures are currently used in various assessment systems and control schemes and in research. Although the application of the Welfare Quality system is time consuming there was consensus that we should keep Welfare Quality as an integral system and not reduce the holistic character just to safe time. Time should be saved by intelligent application of the system and automatisation of measures.

2. The aggregation of data into an overall welfare assessment.

   The methodology of aggregating measures into an overall welfare assessment is much discussed. Some find it difficult to understand, and others criticize the strong contribution of specific measures. These issues were discussed, and a work plan for the evaluation of the methodology and the correction of some procedures was decided.

The day before the General Assembly, the yearly Welfare Quality Network seminar was organized. Ten speakers reported about their work related to the Welfare Quality assessment system. The contributions addressed such diverse topics as practical issues associated with broiler welfare assessment, the development and evaluation of an online training tool for the assessment of animal-based welfare parameters in cattle, development of new protocols for rabbits, sensitivity analysis of the Welfare Quality scoring model and the commercial use of Welfare Quality in a Finnish dairy company.



It was good to see the strong commitment of partners and the enthusiasm to engage in discussions with the aim to improve the Welfare Quality system. It was also encouraging to hear several reports (e.g. from Spain and Finland) about the practical use of the system.

- Harry Blokhuis
Coordinator WQN
Swedish University of Agricultural Sciences

Scoring System of Farm Animal Welfare in Welfare Quality®

One major objective of Welfare Quality® was to propose harmonized methods for the overall assessment of animal welfare on the farm and at slaughter that are science-based and meet societal concerns. Still not everybody feels confident with the scoring system developed in Welfare Quality®. The text below is an attempt to explain briefly and as simply as possible the principles of the scoring model of Welfare Quality®.

Welfare Quality® developed an innovative system based on 4 welfare principles (good feeding, good housing, good health, appropriate behaviour) divided Into 12 criteria (absence of prolonged hunger (Criterion 1) ; absence of prolonged thirst (2); comfort around resting (3); thermal comfort (4); ease of movement (5); absence of injuries / disease / Painful management procedures (6-8); expression of social and other behaviours (9-10); good human-animal relationship (11); positive emotional state (12) to get a holistic view of animal welfare. It incorporates 30-50 welfare measures per species (pig, cattle, poultry) to check compliance of animal units (farms or slaughter plants) with these criteria.

The data produced by these measures must be integrated to produce an overall welfare assessment of the farm or the slaughter plant. This exercise is by nature bound to ethical questions, e.g. should we consider the average state of animals vs the worst ones, should we consider that welfare criteria can compensate each other.

Welfare Quality® designed the hierarchical evaluation model shown below (Figure 1). This progresses from the 30-50 measures, through their integration into scores for each criterion and each principle (good feeding, good housing, good health, and appropriate behaviour), to the final step where the scores for the principles are integrated into an overall assessment. The model was then fine-tuned according to expert opinion.

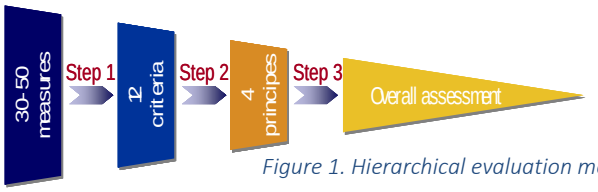


Figure 1. Hierarchical evaluation model

In Step 1, the results from the 30-50 measures are transformed into scores on a value scale to reflect the compliance of a given farm or slaughter plant with welfare criteria (0- worst; 100-best).

Consultation with animal scientists enabled us to design the appropriate transformation of data into scores. An example is shown in Figure 2 where the proportion of lame cows is valued regarding the absence of injuries. In this example, it is clear that the worse off animals (i.e. lame cows) count more than the animals in good condition: only 7% of lame cows results in a score of 50.

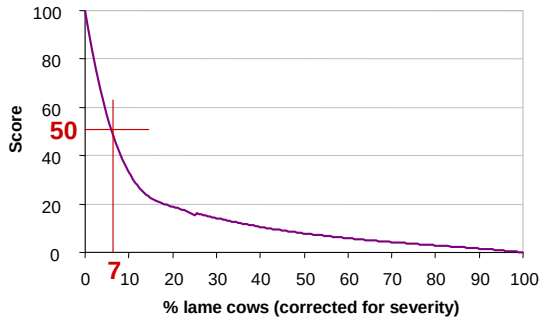


Figure 2. Proportion of lame cows as a value judgment of 'absence of injuries'.

In Step 2, criterion-scores are combined to form principle-scores, e.g. the scores for the absence of hunger and absence of thirst are combined to reflect compliance with the principle 'good feeding'. It was now important to decide if compensation between scores should be allowed. Consultation with animal and social scientists revealed that some criteria were considered more important than others (e.g. absence of thirst is more crucial than absence of hunger) but only limited

compensation between scores was accepted (e.g. absence of thirst does not fully compensate for hunger and vice versa). A specific technique is used to take this reasoning into account and, as shown in Table 1, the fact that scores obtained at principle-level are below the average of scores obtained at criterion-level demonstrates only minimal compensation.

Criteria		Principle
Absence of hunger	Absence of thirst	Good Feeding
25	75	**39**
40	60	**45**
50	50	**50**
60	40	**42**
75	25	**31**

Table 1: Examples of principle scores according to combinations of criterion scores

Step 3 was to be designed to guarantee that farms or slaughter plants realise a certain level of welfare for their animals. Four categories are thus distinguished to meet stakeholders' requirements, i.e. animal units with a) excellent welfare, b) enhanced welfare, c) acceptable welfare, or d) units that are not classified. Here, it is important to consider both societal aspirations for high welfare levels and the realistic achievements of such levels in practice. Scores of 80, 55, 20 are set for aspiration levels of the first three categories respectively.

An animal unit is then considered excellent if it scores more than 55 on all principles and more than 80 on two of them, it is enhanced if it scores more than 20 on all principles and more than 55 on two of them, it is acceptable if it scores more than 20 on three principles, otherwise it is not classified (Figure 3).

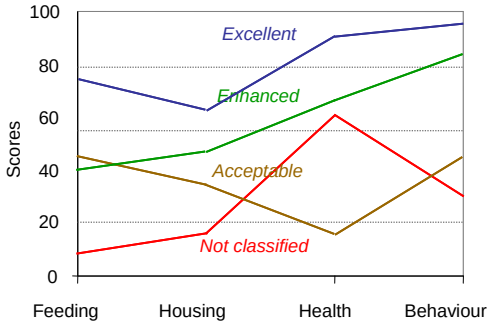


Figure 3: Example of animal units falling in the four welfare categories

The four categories allow a range of possible results from very poor to excellent welfare. The scoring system can provide farmers or slaughter plants' managers with a broad picture of the welfare status of their animals while identifying specific aspects requiring their attention. It can also help stakeholders to certify farms, e.g. to keep only enhanced farms for a general quality label or only excellent farms for a niche market, and in turn, allow consumers to be informed and make an informed purchasing choice.

Update of the scoring model for fattening cattle

The equations to calculate the score for lameness in fattening cattle have been updated (within criterion C6 - Absence of injuries). The equations that appeared in the protocol did not match the figure showing the score according to the percentage of lame animals. We re-estimated the equations and corrected the simulator WAFA. This results in better scores for farms with less than 22% lame animals and lower ones for farms with more than 22% lame animals. The exact parameters of the equations can be found on the WAFA website (click on fattening cattle at the bottom of the page). Those who already loaded data in WAFA will find the new scores on their dedicated results page in WAFA. We also solved a bug in the WAFA simulator for fattening cattle, which did not account adequately for the number of days at pasture. Now higher welfare scores are obtained by farms where the animals have access to pasture.

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Welfare Quality protocols as a tool for certification in Spain

This history begins in 2013, when in a very short period of time three different certification companies contacted with IRTA in Spain to develop any certification schema on animal welfare. Instead of offering different models of certification to each company, we decided to offer them the same model, the Welfare Quality protocols. Not an adaptation of the WQ protocols, not some measures of the WQ protocols, just the Welfare Quality protocols as they are on the website. We asked as well to have some control over the process at the beginning, as we were walking on unknown terrain so that IRTA would be part of this certification schema during the first years.

One of the companies considered inapplicable the WQ protocols due to their length and added costs for their clients. A second company was not comfortable with sharing the schema with IRTA, and they asked just permission for using the IRTA's name in the schema but without any real implication of the institution after the training of their auditors. The third company, AENOR considered the offer of IRTA as suitable and proposed to do a pilot project with one of their clients.

Figure 4. Example of AENOR packaging. Eggs.

This pilot was performed in 2014 with a small dairy cattle company, named ATO, which collects milk from 7 farms allocated in Catalonia. As it was a pilot project, we asked permission to the WQ network to use the sentence: "based on Welfare Quality" instead of using the Welfare Quality logo.

From 2014 until now, all the farms of this company have been audited with the WQ once a year by experts trained by Christoph Winckler under the mentioned conditions. In 2016, some of these auditors were the first in passing the theoretical and practical exam of WQ In 2015, other two companies asked for the certification based on WQ. One of these companies was rearing and fattening cattle farm (http://xesmogal.com/), and another company was a slaughterhouse for pigs and cattle. Then, we detected two limitations in the use of the WQprotocols. First, the animals used for meat production does not have at the moment the possibility of auditing the whole chain just with the protocols we have in the web. In fact, cattle, pigs and poultry do not have final calculations for the protocols used at the slaughterhouse. We decided then that we could provide these calculations as IRTA (we did it) waiting for the finalization of the WQ protocols in a future. This was solving one of the

limitations, but was producing a second one. Actually, for meat species we have the limitation that we could talk (in an hypothetical label) only about a certification based on Welfare Quality for a long time due to the calculations. In consequence, although the dairy cattle company (after the pilot done in 2014) was ready for asking officially to the WQnetwork for the use of the logo, the certification company agreed with IRTA that it has few sense to use a logo only in dairy cattle and not in other production systems. Therefore, the certification used in Spain will be for some time just "based on welfare quality" without the logo.

What happened the next years? In 2016, a second small dairy company was added to the schema. However, with similar litres produced per year than ATO, this company have three times more farms (small farms). So, it was decided to do a sampling per year with the objective of auditing all the farms in a period of three years as the results obtained with ATO was demonstrating the high stability of the scores year to year. Also, it was added another pig slaughterhouse and a company producing Iberian pig in extensive conditions.

In 2017, the tool finally arrived in big companies. The second and third pig producer in Spain asked for this certification. This represents 1400 farms in total. Therefore, it appeared another limitation. How to assess 1400 farms using the WQ? The certification company proposed then the formula they use in other cases: To ask for an internal program of audits that can be audited by the certification company and, at the same time, to assess every year the root square of the farms in specific geographical areas or type of farms (sows or growing pigs) using the WQ. In total, in 2017, in pigs, there were audited five pig producers companies and four slaughterhouses. In dairy cattle, to the two companies audited in previous years, there were added two of the main producers in Spain (more than 500 farms) under the same model than explained for pigs. In beef cattle, the main retailer of Spain is promoting a pilot project in 2018 to encourage their providers for using the WQ protocols.

In laying hens, the main retailer in Spain and the fourth one encouraged their providers the use of the WQ protocols, so an important percentage of the eggs produced in Spain will be audited with this schema soon. In poultry, the main producer in Spain did just a pilot in 2017 with the farms in one specific area (more than 400).

This increase in the use of the certification schema based on Welfare Quality produced a high interest as well in other certification companies. In January 2018, additional two certification companies were trained by Andy Butterworth in the poultry protocols. They have the intention to develop too their certification schema based on WQ, but in this case without the involvement of IRTA.

Also, nowadays, there are more than 40 people in Spain asking for a training course on WQ for dairy cattle that will be addressed during the next months. Finally, in 2018 it will be incorporated into the schema the Awin protocols in sheep using the collaboration with Neiker-tecnalia, one of the partners of this European project. A protocol based on the WQ principles and criteria has also been developed for rabbits, so in a next future we expect to have this schema working for dairy and beef cattle; sows, piglets and growing pigs at farm and at the slaughterhouse; chicken and turkeys at farm and at the slaughterhouse; laying hens at farm; and does, bucks and growing rabbits at farm and at the slaughterhouse.

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Implementation of the Welfare Quality protocol at Finnish dairy farms

Finnish consumers are more concerned about animal welfare than ever before. Looking at the Eurobarometer survey regarding animal welfare, which was published in 2016, 90 % of the Finns say that farm animals should be protected to a higher standard than what they are at the moment. Ten years ago that same figure was merely 67 %. There are no welfare labels on the Finnish market even though marketing claims that rely on animal welfare have increased. Hence consumer influencing is practically impossible and obtaining reliable information regarding farm conditions is very difficult.

While a national welfare labelling system is being researched at the moment in Finland, some food companies are already taking first steps towards market-driven animal welfare. Armenta Benessi Ltd. (see editors' note) was hired by a dairy company (Juustoportti Ltd.) to gather information about international animal welfare programs into which they might be able to integrate into. Finally, Welfare Quality was selected by the company due to its scientific background, clear auditing protocol and its focus on animal-based measurements. After following the steps of "Roadmap towards implementation of Welfare Quality® assessment systems" Armenta Benessi and Juustoportti launched the WQ-auditing process at the farm level.

The pilot audits of Juustoportti's contract farms were completed in August 2017, and the rest of the farms were audited by the end of February 2018. For the next five years the auditing program, which was pre-agreed with the WQ Committee, will be followed. Auditing frequency is determined by farm's auditing result: the lower the score, the more frequent the audits.

During Juustoportti's pilot audits another dairy company, Maitomaa, contacted Armenta Benessi looking to follow Juustoportti's example. Their market segment differs from Juustoportti, and they are geographically located in Eastern Finland whereas Juustoportti operated in the west. It was quite clear that cooperating with Maitomaa as well would not cause competitive market but instead maximise the use of Welfare Quality system to the benefit of animals and consumers. The pilot audits of Maitomaa's contract farms were completed in October 2017, and Armenta Benessi is currently auditing the rest of the farms.

Figure 5 Essi Wallenius. CEO of Armenta Benessi Ltd. during the audits.

In total these two dairies have approximately 250 dairy farms, both loose housed and tie-stall barns. Farm size varies from 12 cows to over 600 cows, the average herd size in Finland being 36 cows per farm. So far approximately 43 % of all farms have gained acceptable-score, 56 % have gained enhanced, and 1.2 % have gained excellent or not classified. Approximately half of the results of set 250 farms have been calculated so far. The strengths of the farms have been in good feeding and water provision, low incidence of clinical signs and infrequent agonistic behaviour. The main places for improvement have been integuments, laying comfort, QBA and outdoors access opportunities. Integuments appear to be most commonly influenced by poor cubicle design, and hence it is likely that improving laying comfort would also improve skin alteration scores. Both dairies have additional animal welfare requirements to their farms and training is provided when necessary to target set improvement points.

The feedback from the farms regarding the WQ-audits has been very positive. Welfare Quality protocol has been praised for being useful to the farms. More specifically, farmers feel they gain information regarding their animals that other inspections cannot provide. Farmers have appreciated improvements that can be done without major investments, for example sometimes laying comfort can be significantly improved by slightly moving a cubicle rail. Most criticism is directed towards the overall inspection load that farms face and the uncertainty of the purpose of such audit. The duration of the audit has been an issue to some farms, which is understandable.

Juustoportti, now being finished with the first round of audits, launched the WQ-logo in their product line called Free Cow's Milk (see figure 7). In order to remain in the Free Cow's Milk concept, farms have to gain enhanced-score from WQ-audit, they have to be loose house farms, they must participate in a preventative bovine health care system in which a vet visit the farm once a year, disbudding may only be done under sedation and local anaesthetic and cows must have all-year-around outdoors access. WQ-logo on the Free Cow's Milk package is now the first animal welfare label in the Finnish market. Companies hope that the WQ-system remains credible in the future with continuous research and they hope that more effort would be put into the marketing side of WQ, such as logo development, retail marketing and certification process.

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Figure 6 Free Cow's Milk product line by Juustoportti.

Editors Note:

Armenta Benessi Ltd. is a Finnish auditing and consulting company specialized in animal welfare. It currently uses WQ-protocol and ISO-9000 (quality management system) for auditing projects. The founder and CEO of Armenta Benessi, Essi Wallenius, is a certified WQ-auditor for dairy cattle, has a Lead auditor-qualification (certificate by Bureau Veritas) and a MSc Animal Science. She has previously worked as a dairy farm advisor and is currently working on her PhD at the University of Helsinki regarding the animal welfare subsidy systems. Armenta Benessi also employs Mikaela Mughal who is also a certified WQ-auditor and is currently working on her PhD regarding the Welfare Quality-system in the University of Eastern Finland.

Abstracts from Welfare Quality Network Seminar

12.12.2017
University of Natural Resources and Life Sciences,(BOKU), Vienna, Austria

Practical issues associated with using the welfare quality broiler assessment to assess welfare in multi-tier cell production systems

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Visits to multi-tier cell production systems took place in the summer between May 2017 and September 2017. The birds were assessed at the time of final loading. Each production row consisted of 6 identical tiers on top of each other, equipped with feed, water and litter, and houses contained approximately 4000 birds per cell. Environmental measures were collected (temperature, humidity and sound levels) for each cell, and temperature data loggers were placed at various locations throughout the shed during the observation period. Bird measures assessed, derived from the Welfare Quality® protocols, included; panting, vocalisations, wingflapping, discomfort/escape behaviours and incidences of trapped/injured birds. The practical limitations of applying the welfare quality protocol in this setting included; it was not always possible to collect birds from the 'layers' within the tier system, and many birds for assessment had to be taken from the belt at depopulation, head torches were necessary to observe the birds, and were used by researchers across all visits, but even with light sources, observation of the birds was 'not easy'. Issues associated with conditions encountered by researchers as the birds were assessed at the time of depopulation were; dark, noisy, dusty, and with a high speed of handling.

Validation of the EBENE method's measures for standard broiler

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The objective of the welfare project EBENE (Evaluation du BiEN-Etre animal) is to provide the French poultry and rabbit industries with a shared and practical method to assess animal welfare. This study aimed to validate the practicability (simple and under 1 hour) and the scientific reliability of the method for the indoor broiler production system. Two assessors carried out the measures on seven broiler farms, initially together on the same population sample and then a second time. After collecting general information about

the flock, behavioral measures (e.g. proportion of foraging birds) were conducted on two areas of the building (4m²/ area). Then sanitary measures (e.g. proportion of lame birds) were assessed on three transects, allowing observation of around 45% of the birds. The total duration of the assessment was calculated and correlation tests were run to evaluate the repeatability of the measured indicators. A lower total duration than required in the objectives (26±5 min for the collection of behavioral data and 24±5 min for the collection of sanitary data) confirmed the practicability of the method. Intra and inter assessor repeatability were validated for the sanitary measures, except for the "dead" indicator. However, improvements were still needed for the repeatability of the behavioral measures (e.g.more accurate definitions). Following validation, a smartphone application will be developed in 2018 to facilitate use of the methods.

Reliability of the multi-criteria aggregation system of the Welfare Quality® welfare assessment for growing pigs

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As animal welfare is a multidimensional concept, multiple indicators are needed for a welfare assessment. Thus, for an overall evaluation of a farm an aggregation system is needed to convert these multiple indicators into one comprehensible result. Such an aggregation system was included in the Welfare Quality® protocol welfare assessment protocol for growing pigs. This study analysed interobserver and testretest reliability of the multi-criteria evaluation model based on 144 protocol assessments on 24 growing pig farms. Hence, the results of two trained observers, assessing the same animals at the same time (interobserver) and repeated visits ofthe same observers on the same farms to different points of time (test-retest reliability) were compared. Moreover, the influence of indicators in the aggregation steps was analysed by partial least squares (PLS) modeling. While interobserver reliability was in general acceptable, this was not the case for test-retest reliability. This shows that the aggregation was not capable of diminishing effects due to unreliable assessment at indicator level on-farm. PLS modeling revealed unexpected influences of variables that were not theoretically dedicated in the calculation. Thus, double counting of variables is present. However, the results of the PLS modeling revealed that some indicators have the potential as iceberg indicators as they have multiple influences on different welfare aspects. In the future, an adaptation of the aggregation system will be needed based on these insights. The tool "AniFair" can helpwith the improvement.

Sensitivity analysis of the Welfare Quality scoring model

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A revision of the Welfare Quality scoring model for dairy cattle seems necessarybecause some criteria affect the results more than expected by experts (De Graaf et al 2017). Before changing any parameters in the calculation, we need to perform a sensitivity analysis to understand which are the most influent measures. A previous study (De Graaf et al (subm)) looked at the sensitivity of the model to extreme changes (i.e. shifts to the worst or best possible value from a set of observed farms).

We performed a more comprehensive study, looking at "local" changes using the Morris method (Morris 1991). This method gives information of sensitivity through two indices: the overall influence of a variable and the non-linearity and interactions with other variables. We applied the method on all measures used in the scoring model for cows. At first, for each variable, we simply used a Uniform distribution based on theoretical values, which gives us information on sensitivity for the whole range of possible input values. We plan to run the same analysis on an observed distribution of input variables (i.e. data collected on a population of farms). This will tell us what is more likely to affect the scoring in practice. Next, we will consult experts to refine the scoring so that it matches better their opinion. Last, we will perform again the sensitivity analysis on the amended Welfare Quality scoring model to check that the new behaviour of the model is compliant with what is expected.

New consultation of experts to refine the Welfare Quality Scoring model

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It is now nearly 10 years that the Welfare Quality® scoring model was designed, based on extensive experts' consultations. The authors of the model argued that the model should be revised after some years of use and – hopefully – improvements of the animal welfare situation in Europe. On a set of 491 farms, De Graaf et al. (2017) observed that some measures do not have an impact on the scoring of these farms although they are highly valued by experts (e.g., lameness, injuries). In addition, the experts consulted by De Graaf et al. (2017) were more severe than Welfare Quality® for some criteria (absence of injuries, absence of pain induced by management, procedures, expression of social behavior, and good human–animal relationship) but less severe for absence of thirst. We suspect that the discrepancy between the importance given to some criteria by Welfare Quality® and that attributed by experts comes from the severity by which measures are computed into criterion-scores rather than an intrinsic value of the criteria attributed by Welfare quality® when they are aggregated. To correct this, we propose a new set of questions to experts.

"AniFair" – a tool for assessing animal welfare using multi-criteria analysis

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In assessing animal welfare, observers gather multiple indicators which are measured in different units and need to be converted into an objective overall welfare score to provide comparable classification of farms. Studies have proved, that with the current aggregation system, some indicators affect more than one category and are, thus weighted stronger in the calculation of the welfare score. Furthermore, effects of unreliable on-farm assessments are not diminished by the aggregation. As adaptions of the aggregation system have been discussed, the multi-criteria decision analysis (MCDA) software "AiniFair" is developed. The user inserts criteria and a list of objectives that need to be evaluated. Via graphical user interface (GUI) the user is then invited to provide referential information, i.e. to give qualitative judgement about differences of attractiveness between levels of the criteria.

For all criteria pre-cardinal scales are calculated which are not based on fixed weights but on the user's decisions. Also, comparability between criteria is ensured. "AniFair" visualizes the suggested scale, to allow adaption of the scale before the aggregation step is initiated. For the aggregation the information on how the objects were scored regarding the criteria can either be uploaded from file or manually inserted via GUI. "AniFair" calculates overall scores based on the Choquet integral, whereby a GUI is provided to define additional constraints with regard to the relative importance of and interaction between criteria. Thus, "AniFair" is a flexible MCDA toll to aggregate the welfare indicators.

Development and evaluation of an online training-tool for the assessment of animal-based welfare parameters in cattle

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Self-evaluation of animal welfare by farmers has recently been encouraged, e.g. by the Austrian organic farming association BIO AUSTRIA. However, rather little is known how a resource-efficient training of a large number of farmers could take place an which level of agreement might be achieved. For this purpose, in the present study, an online training-tool for the assessment of 10 animal-based parameters of dairy cattle welfare was established. This tool included online quizzes containing pictures or video clips of selected animal-based parameters which had to be assessed by the test persons. IOR as compared to a gold standard (calculated as Cohen's Kappa □) was investigated. Furthermore, it was of interest whether practice in terms of repeated trials leads to improvement. In total, 938 □ values from 111 users were obtained from the 10 different quizzes. The average agreement per quiz in round 1 reached values of □ □ 0.40 (n = 58–100 users). For the parameters cleanliness and diarrhoea, □ exceeded 0.40 for all test persons in round 1. Agreement was lowest for the parameters body condition, hairless patches and lameness. Retaking the quizzes (round 2, n = 14–24) led to significant improvement of agreement for all parameters, except for hairless patches and lameness. In conclusion, the results of this study are promising as regards the intended use of the training-tool. However, its potential to improve reliability of live on-farm assessments needs to be further investigated, e.g. with regard to transferability to live observations.

Finnish dairy company obtains Welfare Quality certificate - the Juustoportti case

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Juustoportti is a Finnish dairy company. They are the first company in the world to integrate Welfare Quality audits to all their contract farms. Juustoportti has introduced three tiers into which their producers can engage. The tiers have increasing demands with regards to animal keeping as well as to the level the farm must receive in the Welfare Quality assessment. The presentation will describe the auditing and certification process in which Juustoportti has enrolled in as well as the pilot audit WQ-results. The presentation will also discuss

their reasons for engaging in such process, their future aims and potential limitations to the implementation plan.

The Welfare Quality concept in certification: Strengths and weakness, incorporation of Awin protocols and development of new protocols for rabbits

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The use of the Welfare Quality protocols for certification purposes has received an important impulse the last year due to the interest of two of the most important retailers in Spain in this concept. The main strength of the system by part of theretailers is the European reputation it has and the support from NGO's and scientists.The time needed to have an assessment is not seen as a problem for small companies but need of a method based on samplings for the big ones in a model named multisite assessment. The main weakness for the companies are the difficulties in understanding how whole the system works and how to estimate the result or state of a farm before entering in a certification schema. Another problem for the certification companies is the limitation of the welfare quality to three species (chickens, cattle and pigs), when the demand is on most of the species used for consumption. One solution was to take the protocols developed in the Awin project and try to adapt the final output to a similar schema to those used for the Welfare Quality protocols. Finally, in some cases, such as rabbits, the development of new protocols were needed. It will be presented a summarized version of a protocol to assess welfare of does and bucks at farm based on more than 30 measures structured under the 12 criteria and 4 principles of the Welfare Quality.

Colophon

WQNews is the electronic newsletter of the Welfare Quality Network project.
This is a European network of researchers focusing on the updating, implementation and communication about the Welfare Quality® project's results. Twenty-six institutes and universities, representing thirteen European countries and four Latin American countries, participate in this network. Welfare Quality Network has been endorsed by the European Commission (DG Sanco), and has received financial support from the Swedish Government and the Dutch Government.

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