

# Project *brief*

Thünen Institute of Organic Farming

2021/33a

## On-farm self-assessment of animal welfare

Feasibility of animal welfare indicators in on-farm self-assessment, development of a framework with reference values and technical implementation in digital applications (project 'EiKoTiGer')

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- Since 2014 German livestock farmers are required to carry out on-farm self-assessments of animal welfare by law.
- The guideline 'Animal Welfare Indicators: Practical Guide – Dairy Cows/ Calves/ Beef Cattle' enables livestock farmers to systematically assess animal welfare on their farms.
- A freely available online training courses on the contents of the guideline was developed to allow a reliable assessment of the animal welfare indicators.
- An Excel<sup>®</sup> application and record sheets for data collection in the stable were developed and are available as a free download.
- Involving numerous experts, reference values were elaborated in a multi-stage process. Livestock farmers can compare and classify their results and thereby determine, if action to improve animal welfare on their farms is needed.

### Background and objectives

Since February 2014, in addition to daily routine inspections, livestock farmers should check the welfare status of their animals regularly and systematically within the framework of on-farm self-assessment (Animal Welfare Act § 11(8)). Therefore they have to use animal-based indicators (termed 'Animal Welfare Indicators'). This should ensure, that the requirements of § 2 Animal Welfare Act are met. The aim of the project 'Eigenkontrolle Tiergerechtheit (EiKoTiGer)' was to test the feasibility of the guideline for on-farm self-assessment (dairy cows, calves and beef cattle), published in 2016, furthermore to develop an online training course, assessment tools for data recording and reference values, which helps to classify the results.

### Procedure

The guideline for on-farm self-assessment was developed in a previous working group and by a team of authors. This includes the identification of indicators for on-farm self-assessment, which are suitable to detect relevant animal welfare issues as well as the description of the methods. Within the project 'EiKoTiGer' we investigated the feasibility and reliability of the guideline on 44 cattle farms. Based on the results and farmers' detailed feedback we amended the guidelines. Furthermore, we developed an online training course on the contents of the guideline to allow a reliable assessment of the Animal Welfare Indicators.

The course includes an online test to check the success of the training. An Excel application and data record sheets facilitates data collection. Involving numerous experts, we elaborated reference values in a multi-stage process by means of a Delphi survey, literature review and expert panels.

### Results

#### Guideline for self-assessment

The guideline for dairy cows, calves and beef cattle is a working document addressing livestock keepers. It supports farmers to carry out self-responsible and systematic inspections of the welfare status of their cattle. The guideline contains method descriptions including illustrated classification tables for each indicator and a flow chart for each animal species. Within the project, farmers rated the guideline as largely self-explanatory.



The updated edition (published 2020) is available with washable pages and robust ring binding (suitable for the use in the stable) or as a free download:

#### Animal Welfare Indicators for dairy cows



<https://www.ktbl.de/themen/tierschutzindikatoren-milchrinder>



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/Leitfaden2020\\_Milchkuehe.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/Leitfaden2020_Milchkuehe.pdf)

#### Animal Welfare Indicators for calves



<https://www.ktbl.de/themen/tierschutzindikatoren-aufzuchtkaelber>



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/Leitfaden2020\\_Aufzuchtkaelber.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/Leitfaden2020_Aufzuchtkaelber.pdf)

#### Animal Welfare Indicators for beef cattle



<https://www.ktbl.de/themen/tierschutzindikatoren-mastrinder>



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/Leitfaden2020\\_Mastrinder.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/Leitfaden2020_Mastrinder.pdf)

#### Online training course

The online training course 'Animal Welfare Indicators' teaches the assessment of animal-based indicators on the content of the guideline. The aim of the course is to learn to use the indicators in a standardised way and to enable participants to apply them in the stable. The course includes exercises with an integrated feedback function and an online test. Obtaining a certificate is possible with a positive test result. The updated training course is freely available at:



<https://tierschutzindikatoren-schulung.ktbl.de>

#### Excel Application/ Data record sheets

To support data recording in a digital way, we developed the Excel based tool 'Animal Welfare Indicators Recording'. The tool provides an automated calculation and a summary of the results at farm level.

The application is freely available at:



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/KTBLTierschutzindikatoren-Erhebung\\_V0201.xlsm](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/KTBLTierschutzindikatoren-Erhebung_V0201.xlsm)

In addition, we developed data record sheets for a paper-based recording in the stable.

#### Data record sheets for dairy cows



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/LF\\_Anhang\\_Erhebungsbogen\\_Milchkuehe.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/LF_Anhang_Erhebungsbogen_Milchkuehe.pdf)

#### Data record sheets for calves



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#### Data record sheets for beef cattle



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#### Reference values

For dairy cows, calves and beef cattle a framework with reference values based on expert opinions are available. Farmers can compare their results with target and alarm values and thereby determine, if action to improve animal welfare on their farm is needed.

#### Reference values for dairy cows



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/KTBL-TI-Tierschutzindikatoren\\_Zielwerte\\_Milchkuehe.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/KTBL-TI-Tierschutzindikatoren_Zielwerte_Milchkuehe.pdf)

#### Reference values for calves



[https://www.ktbl.de/fileadmin/user\\_upload/Allgemeines/Download/Tierwohl/KTBL-TI-Tierschutzindikatoren\\_Zielwerte\\_Aufzuchtkaelber.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/KTBL-TI-Tierschutzindikatoren_Zielwerte_Aufzuchtkaelber.pdf)

#### Reference values for beef cattle



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#### Conclusion

The tools presented (guideline, online training course, Excel application, data record sheets, reference values) are intended to support livestock farmers to carry out systematic assessments of animal welfare in their herds. The concept also helps to identify deficiencies and to improve welfare at an early stage. A widespread use of the tools in practice and advisory services is highly desirable. It ensures a herd management based on the regular assessment of reliable and objective animal welfare indicators.

## Further Information

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### Partner Institutes

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University of Kassel, Farm Animal Behaviour and Husbandry Section

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