

# EiKoTiGer: Eigenkontrolle Tiergerechtigkeit

– Feasibility of animal welfare indicators in on-farm self-assessment, development of a framework with reference values and technical implementation in digital applications –

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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 guidelines was developed to allow a reliable assessment of the animal welfare indicators.
- An Excel® 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 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 Tiergerechtigkeit (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 guidelines for on-farm self-assessment were developed in previous working groups 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. The guideline was investigated regarding feasibility and reliability within the project ‘EiKoTiGer’ on 44 cattle farms and amended based on the results. An online training courses on the contents of the guidelines was developed to allow a reliable assessment of the animal welfare indicators. This also includes an online test to check the success of the training. An Excel® application and data record sheets facilitates data collection. Involving numerous experts, reference values were elaborated 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 work documents addressing livestock keepers. It supports farmers to carry out self-responsible and systematic inspections of the welfare status of their cattle. The guideline contain 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 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**

The Excel® based tool 'Animal Welfare Indicators Recording' was developed. It can be used to record the indicators in a digital way. The tool provides an automated calculation and 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, data record sheets were developed 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\\_Milchkuh.pdf](https://www.ktbl.de/fileadmin/user_upload/Allgemeines/Download/Tierwohl/LF_Anhang_Erhebungsbogen_Milchkuh.pdf)

### **Data record sheets for calves**

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

### **Data record sheets for beef cattle**

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

### **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 necessary.

The proposed reference values are freely available at:

### **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**

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

### **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 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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[www.ktbl.de/themen/tierwohlbewertung](http://www.ktbl.de/themen/tierwohlbewertung)

### **Partner Institutes**

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Friedrich-Loeffler Institute, Animal Welfare & Animal Husbandry  
University of Kassel, Farm Animal Behaviour & Husbandry

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