

Welfare Protocols for Rabbits

An Overview and Critical Analysis

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PhD



Introduction

Background

- Extensive work with rabbits in research facilities and farms.
- Need to understand how research is developing in response to welfare reports.
- Multiplication of animal welfare assessments in a wide range of situations.

Aims

- Analyzing and comparing protocol proposals recently designed for rabbit production (until 2023).

Welfare Protocols Overview

Definition

Animal welfare protocols are a set of guidelines and regulations designed to ensure that farms meet the Five Domains in various settings, including farms, laboratories, and zoos.



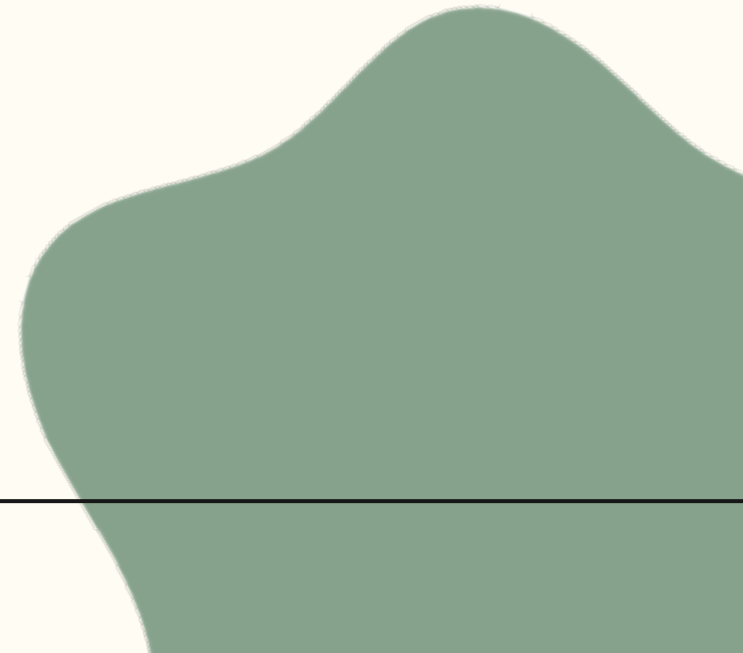
Comparison of Studies and Protocols

Dalmau *et al* (2020)

- based on de Jong *et al.* (2011);
- Adaption of language following criteria and principles of Welfare Quality protocols - Welfair Certification.
- Improved feasibility (Example: “respiration rate” to “panting”);
- Decreased indicators on appropriate behaviour.

Botelho (2020) – Portugal and Spain

- Reduced the number of indicators in general.

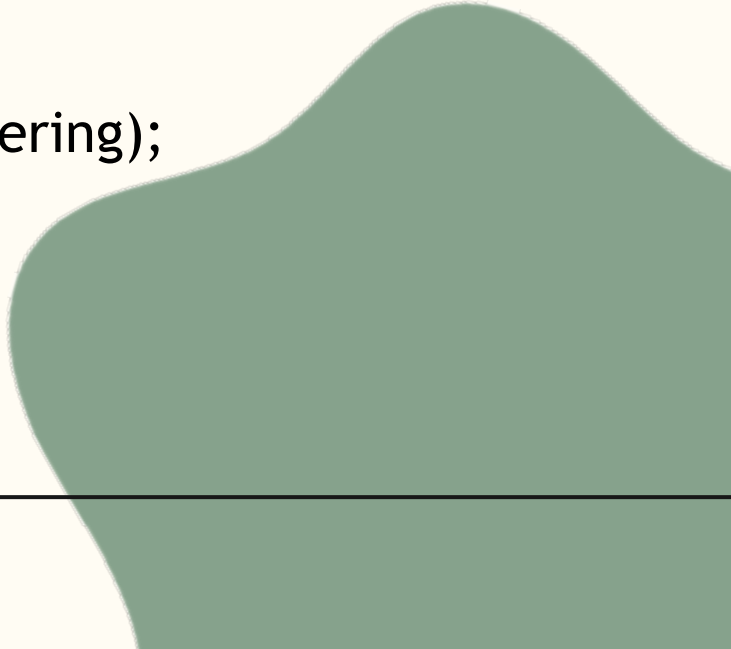


Comparison of Studies and Protocols

da Silva (2022) – Brazil

- Maintains indicators proposed by Dalmau *et al.* (2020) and Botelho *et al.* (2020)

Trocino *et al.* (2022) – Italy

- Evaluation of different housing systems;
 - Proposes duplication of visits (pre-weaning and pre-slaughtering);
 - Considers genotype and NH₃ and CO₂ concentrations.
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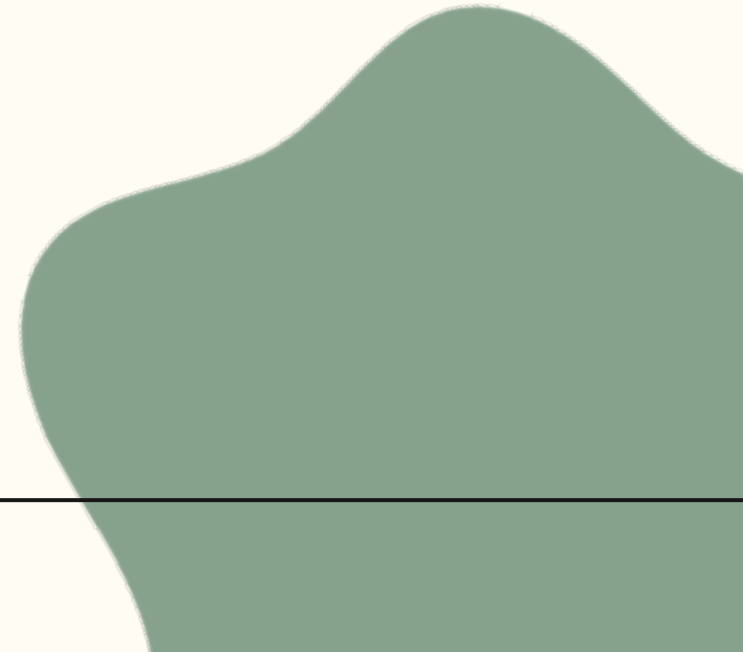
Comparison of Studies and Protocols

Ebene® Welfare Assessment Measures For Rabbits (ITAVI, 2018)

- Very practical;
- Fast application due to reduction of indicators;
- Provides simple visuals and seems more intuitive;
- Presents at least one study on feasibility and repeatability (Warin *et al.*, 2021).

Classyfarm (2022) – Italy

- Focused on ABMs - animal-based measures.



Applicability and Limitations

- Adaptation of indicators to local conditions and production systems;
- The frequent modification of protocols reflects the need for continual refinement to maintain relevance and practicality;
- Time constraints are a major limitation;
- Some indicators (BCS and cleanliness) are more easily measured than others (behavioral indicators) - more subjective and challenging to standardize.

Applicability and Limitations

- Little focus on validation of results and protocols;
- Severe decrease in behavioral assessments;
- ABMs and resource and management-based indicators as behaviour indicators;
- Lack of consistency between protocols - not a problem just for rabbits.

Conclusions

- Increase in publications concerning rabbit welfare in the last years
- Development of several welfare assessment protocols all over Europe

} Clear signs of change

The authors of the presented protocols propose indicators that cover a wide range of animal welfare domains.
Efforts to standardize.

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Thank you for your attention!



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Veterinary Care of Farm Rabbits

A Complete Practice Guide to Rabbit
Medicine and Production



MOREMEDIA 

 Springer

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