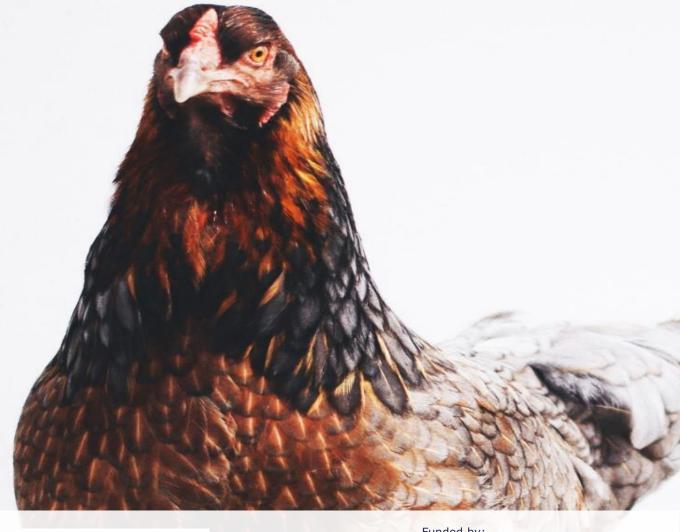


Elevated platform for broiler chickens: automatic detection of animal welfare problems



JULIA MALCHOW LARS SCHRADER

Institute of Animal Welfare and Animal Husbandry Friedrich-Loeffler-Institut, Celle, Germany









- Barren environment without any structures
- No possibility to perch on elevated sites
- Health problems (e.g. infections) affect many birds within large flocks and within short incubation times



www.pruellage.de



Suggested solution

Combining elevated platforms with weighing beams to

- Enable perching behaviour
- Automatically record changes in birds' activity as an indicator for health problems



4 single load cells in between 2 steel frames and transmitterbox



Experimental set up



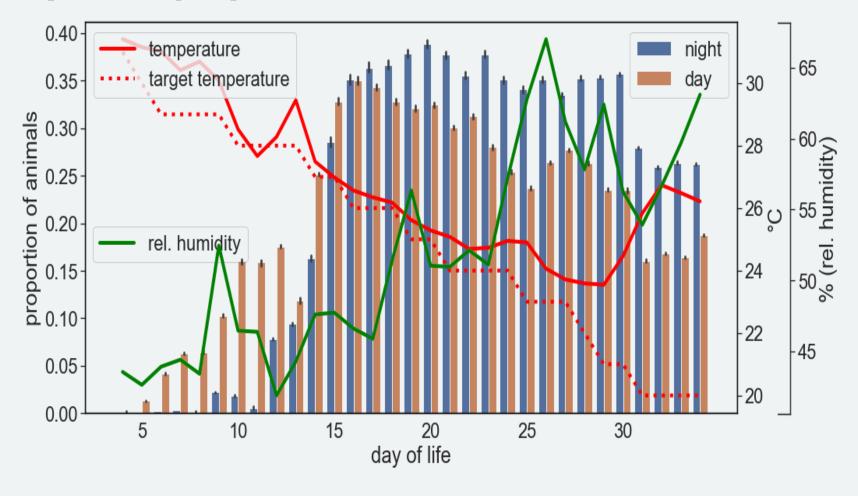
On-farm set up





Results

Usage of platforms in relation to ambient temperatures (accidentally example)







- 95% of chickens use the elevated platform, on average 18% during daytime and 22% during night (from d15)
- Differences between flocks in the usage of platforms
- Algorithms for continuous recording of usage, mean weight, changes on and from platform and activity on platform are developed
- Thresholds for detection of specific health problems still to be developed
- Technical improvements should be done by professional companies
- Technical construction plans and algorithms of the prototype can be obtained for the development of a commercial product





Thank you!