

Validation and Quality Assurance of Welfare Recordings in Swine Herds

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BACKGROUND

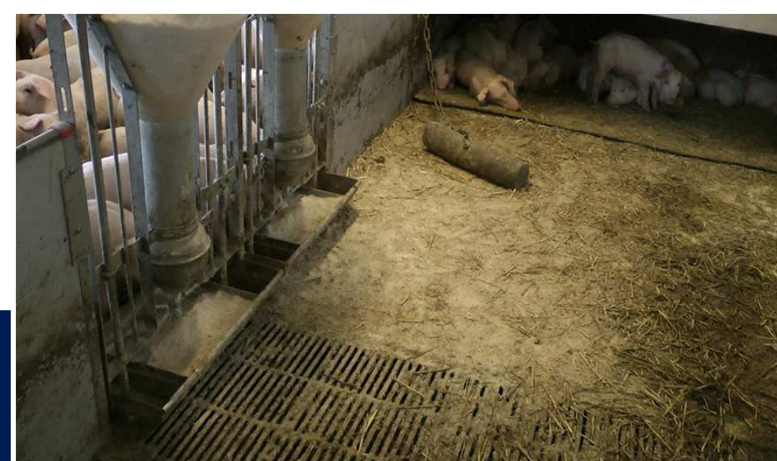
- Comparison of results of different welfare inspections requires known accuracy of the welfare inspectors
- There is a wish to monitor the true level of violations of welfare legislation
- A repository of situations to be assessed by current and future welfare inspectors in order to assess their accuracy is needed

OBJECTIVES

- To establish a video and image repository of cases with potential violations of welfare legislation in Danish Swine herds
- Estimate the accuracy of current welfare inspectors and assess potential systematic differences

MATERIALS and METHODS

Video & images



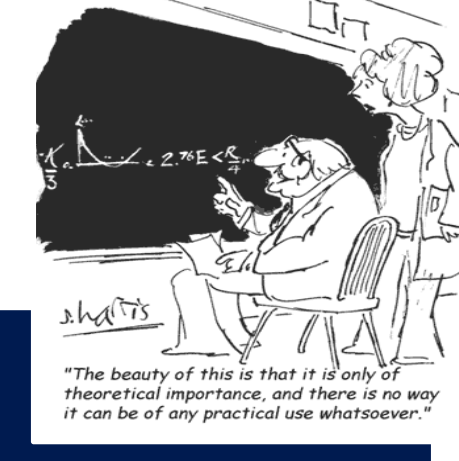
- Recorded during control visits
- 3 categories:
 - Animals (63 cases)
 - Housing and lying area (74 cases)
 - Rooting and enrichment materials (29 cases)

Workshops



- Materials judged by technicians and veterinarians from the welfare control
- Assessments and consequences evaluated according to current instructions

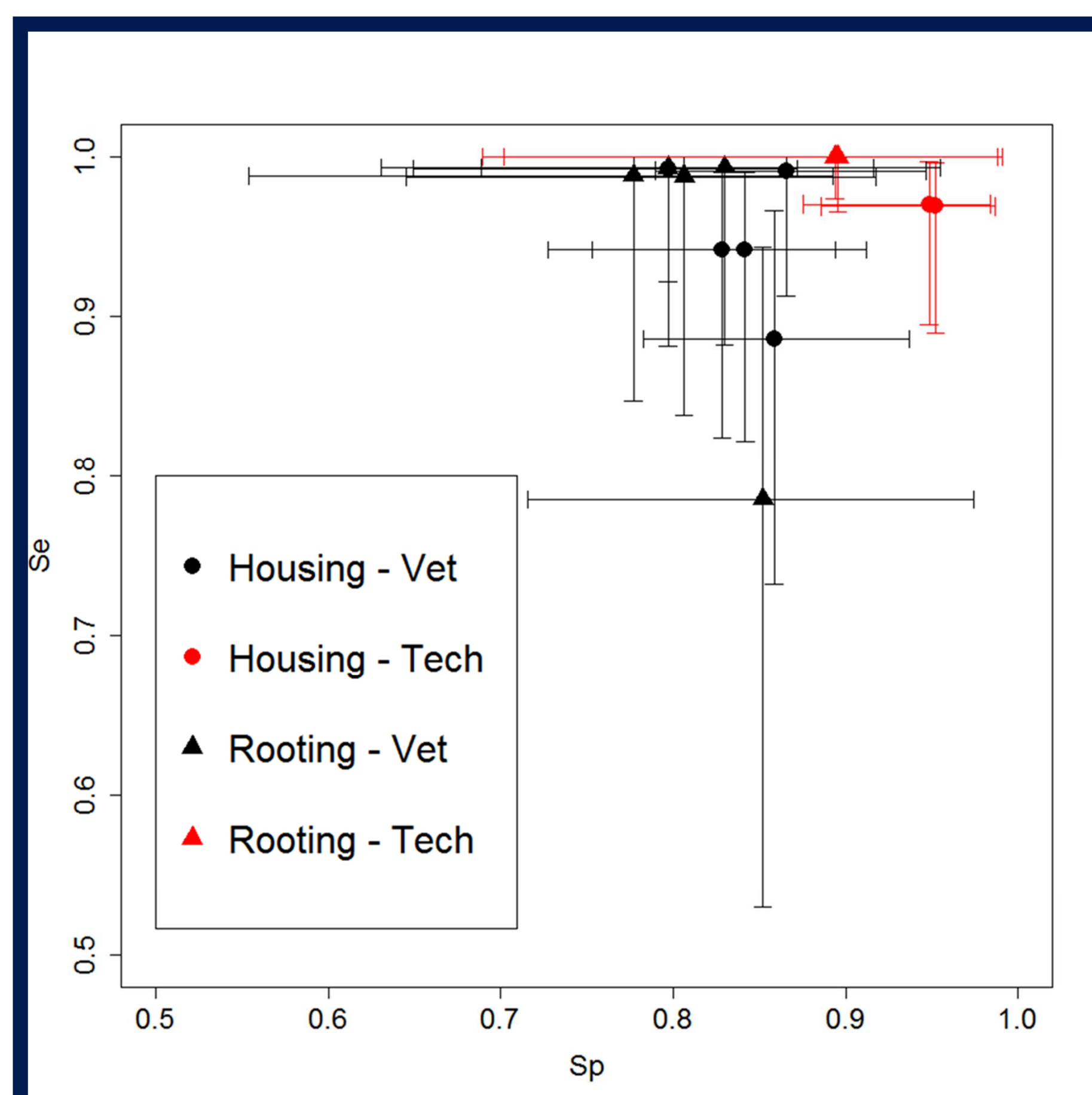
Models



- Assessments dichotomized
- Latent class model to estimate Se and Sp of observers
- Random effect of observer type

RESULTS

- At the first workshop 5 veterinarians (vet) and 2 technicians (tech) scored 74 cases for Housing and lying area and 29 cases for Rooting and enrichment materials
- The analysis suggests that the 2 technicians performed differently from the 5 veterinarians
- For housing, Se was similar for tech and vet, but Sp was highest for tech



- For rooting materials, Se and Sp was highest for tech
- The standard deviation of the random effects for vet was twice as high as for tech, whether that is due to more heterogeneity or just a bigger sample is uncertain and will be explored when the results of additional workshops are available
- Feedback from the participants in the first workshop suggests that some adjustment of the format is needed