

Welfare[®]
Quality Science and society improving animal welfare

Practical welfare improvement strategies

Xavier Manteca & Bryan Jones



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Plan of the talk

- Sub-project 3:
 - Objective
 - Problems addressed
 - Approach
- What have we achieved?
- Summary and conclusions

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To define integrated, knowledge-based, practical species-specific strategies to improve farm animal welfare

Problem	Species
Stress and fear caused by handling	Cattle, pigs and chickens
General fear / coping difficulties	Cattle
Lameness	Cattle, pigs and chickens (broilers)
Neonatal mortality	Pigs
Injurious behaviours	Pigs (tail biting) and chickens (laying hens-feather pecking and cannibalism)
Stress and injuries caused by interactions with other animals	Cattle and pigs

Welfare Quality
Assessing and improving animal welfare

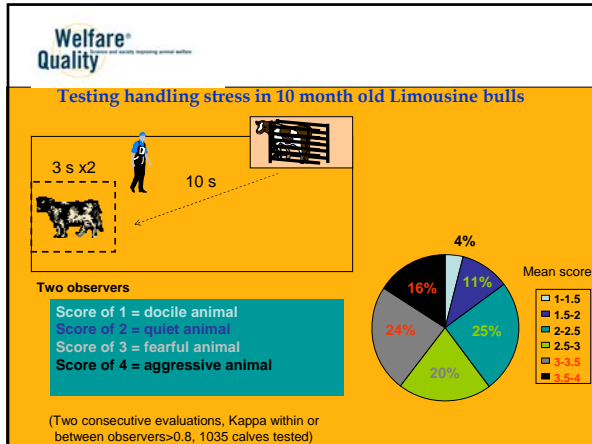
Why did we choose these problems?

- Research could deliver practical strategies within five years
- Problems affect a large number of animals or are severe

Neonatal mortality in pigs: 10% of all born piglets

Lameness in cattle: 20-30% prevalence

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Stress and injuries caused by interactions with other animals	Cattle and pigs



- Welfare Quality**
improving animal welfare and quality
- ### SP3: an integrated approach
- Changes in housing
 - Changes in management / feeding
 - Education of stockpeople
 - Genetic selection

Problem	Strategy
Stress and fear caused by handling	Education of stockpeople
General fear / coping difficulties	Genetic selection
Lameness	Changes in housing, changes in feeding, genetic selection
Neonatal mortality	Genetic selection, changes in management
Injurious behaviours	Changes in management, genetic selection
Stress and injuries caused by interactions with other animals	Changes in husbandry, changes in feeding, genetic selection

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Examples of strategies developed in SP3

- Social stress in cattle
- Social stress in pigs
- Fear and stress caused by handling – all species

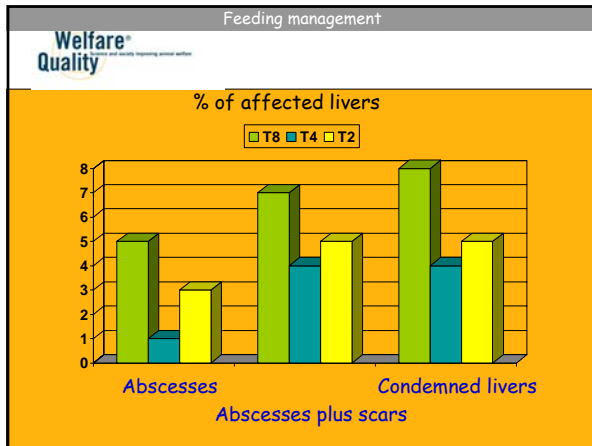
Materials and methods

- 100 Holstein female calves (104.3 d; 102.0 kg)
- Treatments: T8, T4 and T2 (calves per feeding place)

9 pens
8 calves/pen

Low Weight			Medium Weight			High Weight		
T8	T4	T2	T8	T4	T2	T8	T4	T2



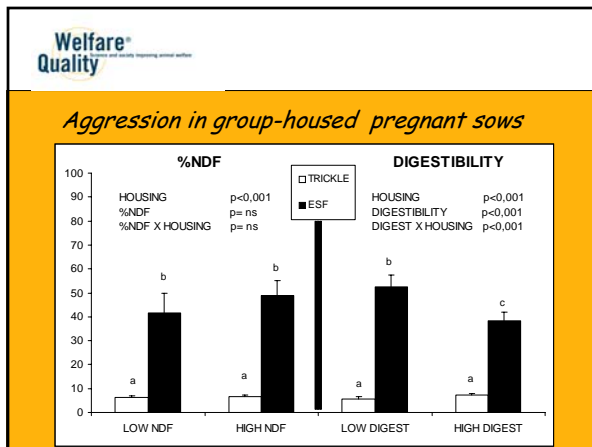


Welfare Quality
 Reducing aggression behaviour in pigs through genetic selection

Methodological difficulties
 Lesions as proxy trait

Feasibility of selection
 It is possible to select for reduced aggression

Correlated changes
 No effect of selection on other production / welfare traits



Education of stockpeople

- Main barriers to good handling were identified
- A training package for each species was developed (with emphasis on the identified barriers)
- The training package was (succesfully) tested

« Quality Handling »

Multimedia training development

- Part 1: Fear of humans and production
- Part 2: Understanding animal fear and behaviour
- Part 3: Understanding human behaviour effects: positive and negative interactions
- Part 4: Human behaviour is determined by beliefs about animals; effect of human behaviour on animal welfare
- Part 5: Aproprate human behaviour and best use of facilities
- Part 6: Maintaining changes in behaviour and how to overcome bad habits

Summary and conclusions

- Several practical, ready-to-use strategies to improve animal welfare have been developed using a multidisciplinary approach
- SP3 is fully integrated in WQ
 - Measures developed in SP2 used in SP3
 - Information Resource (SP4)
- As many of the welfare problems addressed in SP3 have an economic cost, the strategies developed will benefit producers

Acknowledgements

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