

Developments in Livestock Welfare science

Hans Spoolder

Wageningen University & Research





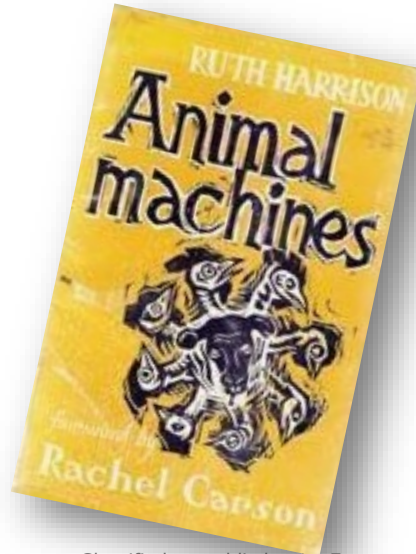
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“To explore the potential of nature, to improve the quality of life”

A (very) brief history of animal welfare

- First legislative act to protect animals: “The Cruel Treatment of Cattle Act” in 1822 in the United Kingdom, proposed by Richard Martin
- He also co-initiated the world's first animal welfare organization: the Society for the Prevention of Cruelty to Animals (SPCA) in 1824.
From 1840: ‘RSPCA’.

- Ruth Harrison:
Animal Machines (1964)

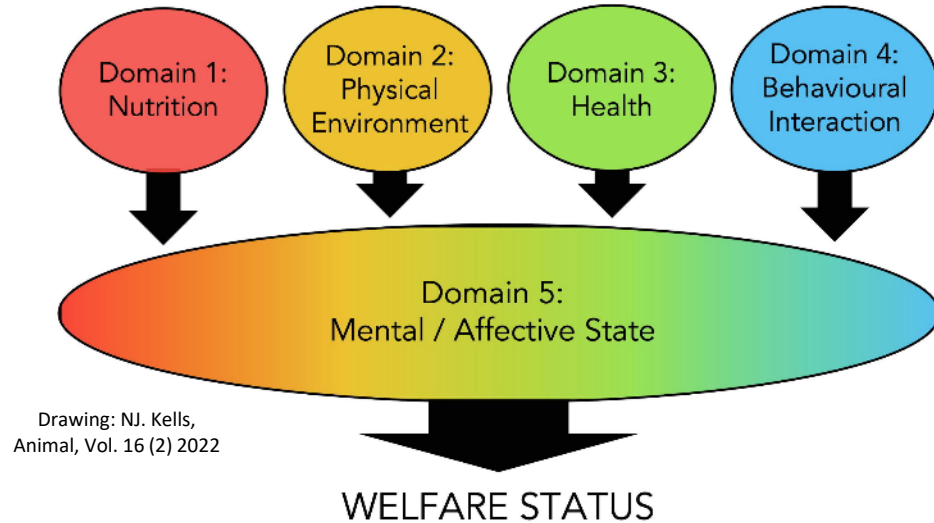


A (very) brief history of animal welfare

- The Brambell Report (1965) provided the foundation for “The Five Freedoms”



A (very) brief history of animal welfare



David Mellor's **Five Domains** model:
From reducing suffering, to '**a Life Worth Living**'

Assessment techniques develop rapidly

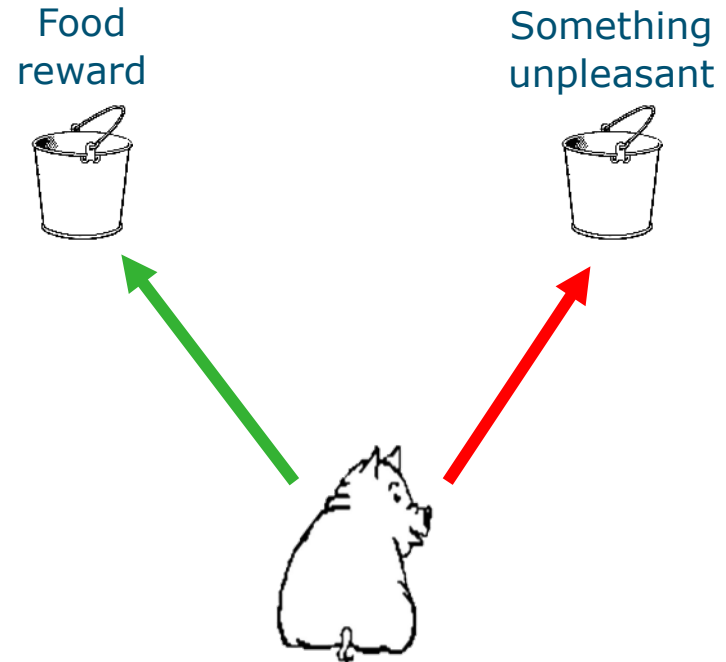


Source: I. van Dixhoorn. Wageningen Livestock Research, 2015.



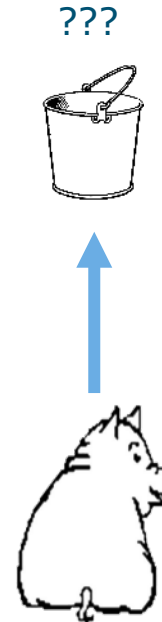
How to assess emotional state?

'Cognitive bias' research



How to assess 'emotional state'?

Research suggests that animal choices are affected by their mental state.

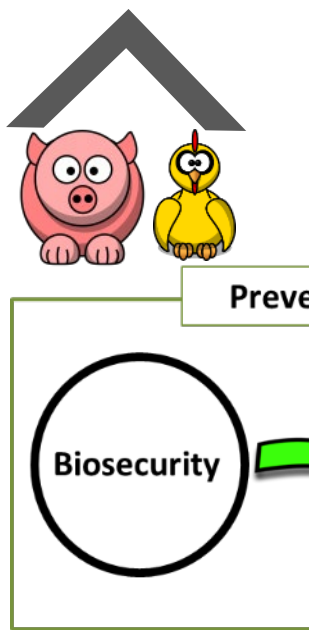


Mendl, Burman, Parker, Paul, 2009. Applied Animal Behaviour Science, 118 (3-4).

Animal Health \neq Animal Welfare



Health & Welfare science should work together: e.g. to reduce antimicrobial use



Good housing promotes resilience



Enriched housing
before and after
weaning

..versus a barren
environment

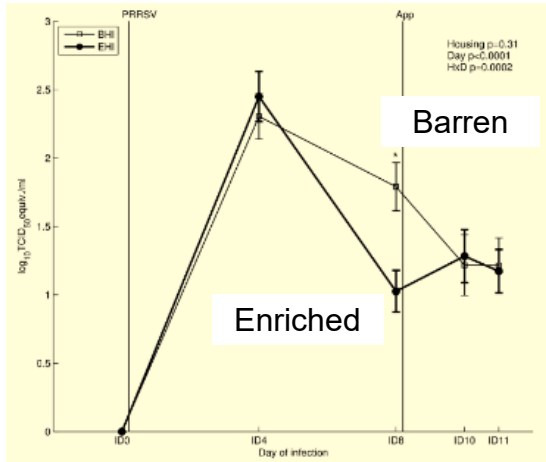


Disease challenges:

PRRSv: Porcine Reproductive and Respiratory Syndrome virus

APP: Actinobacillus Pleuropneumoniae

Good housing promotes resilience



Viral clearance: PRRSV qRT-PCR serum in Barren and Enriched pigs (Averages \pm SEM).

Bacterial infection

	Barren (%)	Enrich (%)	p- value ¹
Pigs with lung lesions	57.1	7.1	<0.05
re-isolated A. pp	35.7	7.1	NS



Important development 1: New welfare legislation



END THE **CAGE AGE**

OUR CAMPAIGN

OUR NETWORK

WHAT NEXT?

Hundreds of millions of EU farm **animals are kept in cages** for most of their lives, causing great suffering. We call on the European Commission to end this inhumane treatment of farm animals.

Cages inflict suffering on enormous numbers of farm animals every year. They are **cruel and unnecessary**, as higher-welfare cage-free systems are viable. The Commission is therefore invited to propose legislation to **prohibit the use of:**

- **cages** for laying hens, rabbits, pullets, broiler breeders, layer breeders, quail, ducks and geese;
- farrowing crates for sows;
- sow stalls, where not already prohibited
- individual calf pens, where not already prohibited

END THE CAGE AGE

COMPASSION
in world farming

- 1.5 million signatures in a few months' time
- This forced the EU Commission to respond

Welfare in the **European Green Deal**

Farm-to-Fork strategy



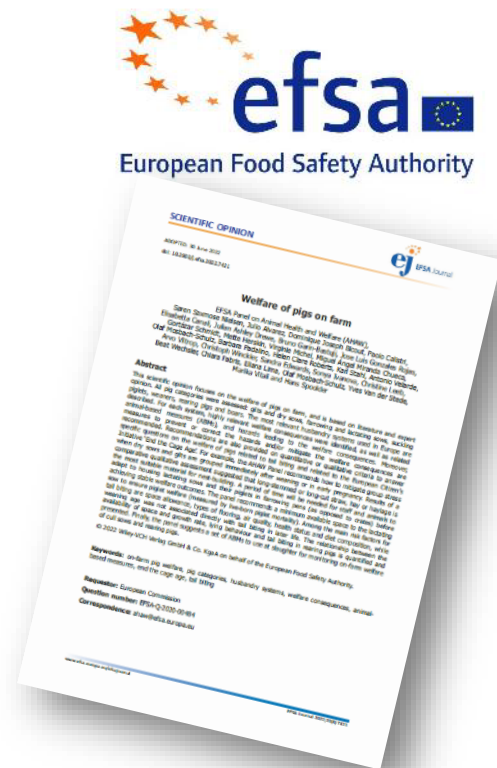
- **Evaluation and revision of the existing animal welfare legislation**, including on animal transport and slaughter of animals (Q4, 2023)
- (second priority: investigate **labelling systems** for Animal Welfare in Europe)

Most recent EU Legislation on Animal Welfare

- Dir 1998/58/EC concerning the protection of **animals kept for farming purposes**;
- Dir 1999/74/EC laying down minimum standards for the protection of **laying hens**
- Reg (EC) 1/2005 on the protection of animals **during transport**
- Dir 2007/43/EC laying down minimum rules for the protection of **chickens kept for meat production**
- Dir 2008/119/EC laying down minimum standards for the protection of **calves**
- Dir 2008/120/EC laying down minimum standards for the protection of **pigs**
- Reg (EC) 1099/2009 on the protection of animals **at the time of killing**

Risk assessment

- Animal Health & Welfare panel



- Space allowances, free farrowing systems, max transport durations, environmental enrichment, veal calf housing, castration, group housing of sows, access to (swimming) water.....

Welfare in the **European Green Deal**

Farm-to-Fork strategy: new welfare legislation

- EFSA opinions on the 'animal perspective' published (2022)
- Impact assessments by the EC and various other bodies (2022+2023)
- **Proposal** legislative changes **Sep – Oct 2023?**
- Member State consultation
- Implementation in 2027?

Important development 2:

European Union Partnership Animal Health & Welfare

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European Union Partnership Animal Health & Welfare

- Proposal in response to EC invitation (April 2023)
- Invited for Grant Preparation
- 56 Research Performing Org.
- 30 Funding Organisations
- 24 EU and non-EU countries



European Union Partnership Animal Health & Welfare

- Current grant application: 120 M Euro for 5 years
- Potential total budget over 10 years: 360 M Euro

Research and innovation through

- **Internal activities:** partners join forces in project teams
(They pay 50% themselves. EC pays the rest)
- **External research calls:** external parties join partnership
(Funding Organisations pay for the projects)



17 'Internal Activities' will start in January 2024

1. Wildlife network - mammals and birds
2. Wildlife network - aquatic
3. **Surveillance of AMR** in animal pathogens
4. Knowledge platform on animal welfare
5. Rapid Risk Assessment
6. Basic knowledge on priority pathogens and infectious diseases
7. Better **tools for the diagnosis of infectious diseases**
8. Assessment of **positive welfare**; defining animal-based measures
9. Improved **assessment of consciousness and death**
10. Biosecurity measures
11. Reinforcement of **animal resilience**
12. Animal welfare & sustainability
13. Pathogen-microbiome interactions, immune system & mechanisms of AMR
14. The role of the immune system of food producing animals
15. Tools such as vaccine platforms, expression systems, etc.
16. **New antimicrobial and antiparasitic drugs & tools** for assessing their efficacy and safety
17. Assess the economic and societal burden of selected priority diseases



Please take home

- Times are changing
- We are slowly moving from “reducing suffering” to “a life worth living”
- New EU Welfare Legislation to be proposed in 2023, to start in 2027
- Welfare labelling of products will increase in the EU
- Animal Health and Animal Welfare experts still have a lot to learn from each other
- The EU will support research through a 360M euro Partnership on Animal Health & Welfare

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