



**UDFASNING AF  
BURÆG:  
UDFORDRINGER  
OG LØSNINGER**

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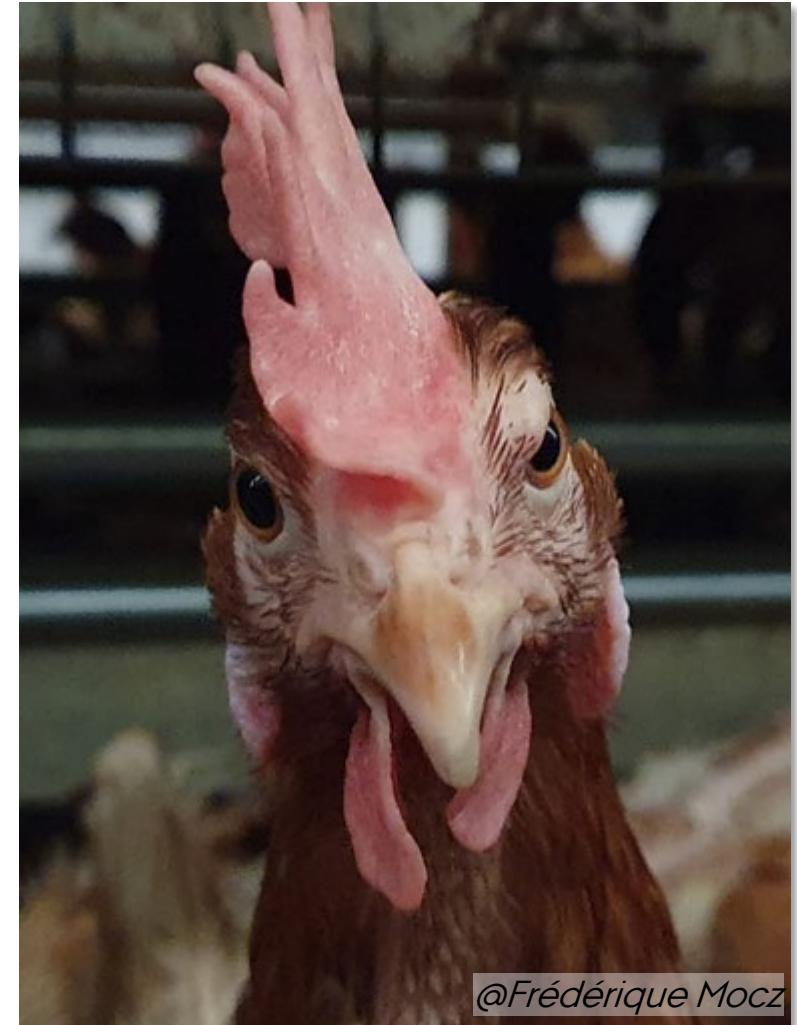
AARHUS  
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DEPARTMENT OF ANIMAL AND VETERINARY SCIENCES



# INDHOLD

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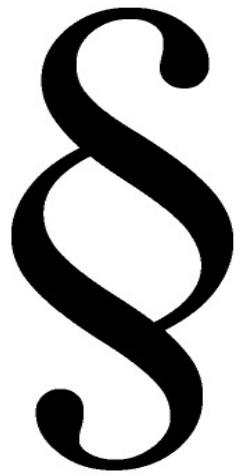
- Dansk øgproduktion de sidste 25 år:
  - Lovgivning
  - Detailhandlen
  - Udvikling i produktion
- Velfærdsmaessige konsekvenser ved overgangen fra bur til alternative systemer
  - For producenten
  - For dyrene
- Udfordringer og løsninger
  - Best Practice Hens og EFSA Scientific opinion
  - Fokus: Management, Belægningsgrad, Fjerpilning
- Opsummering



# DANSK ÆGPRODUKTION DE SIDSTE 25 ÅR: LOVGIVNING

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- I 1999 kom en EU lovgivning for hold af æglæggere -> udfasning af konventionelle bure inden 2012.
  - Frem til 2012 blev konventionelle bure udskiftet til enten berigede bure eller alternative systemer.
- I 2020 kom et forbud mod hold af burhøns i berigede bure i DK, med udfasning af eksisterende bedrifter senest 2035.
- I 2020 modtog EU et European Citizen Initiative, kaldet End of Cage Age
  - *"Commission commits to table, by the end of 2023, a legislative proposal to phase out, and finally prohibit, the use of cage systems for all animals mentioned in the Initiative."*



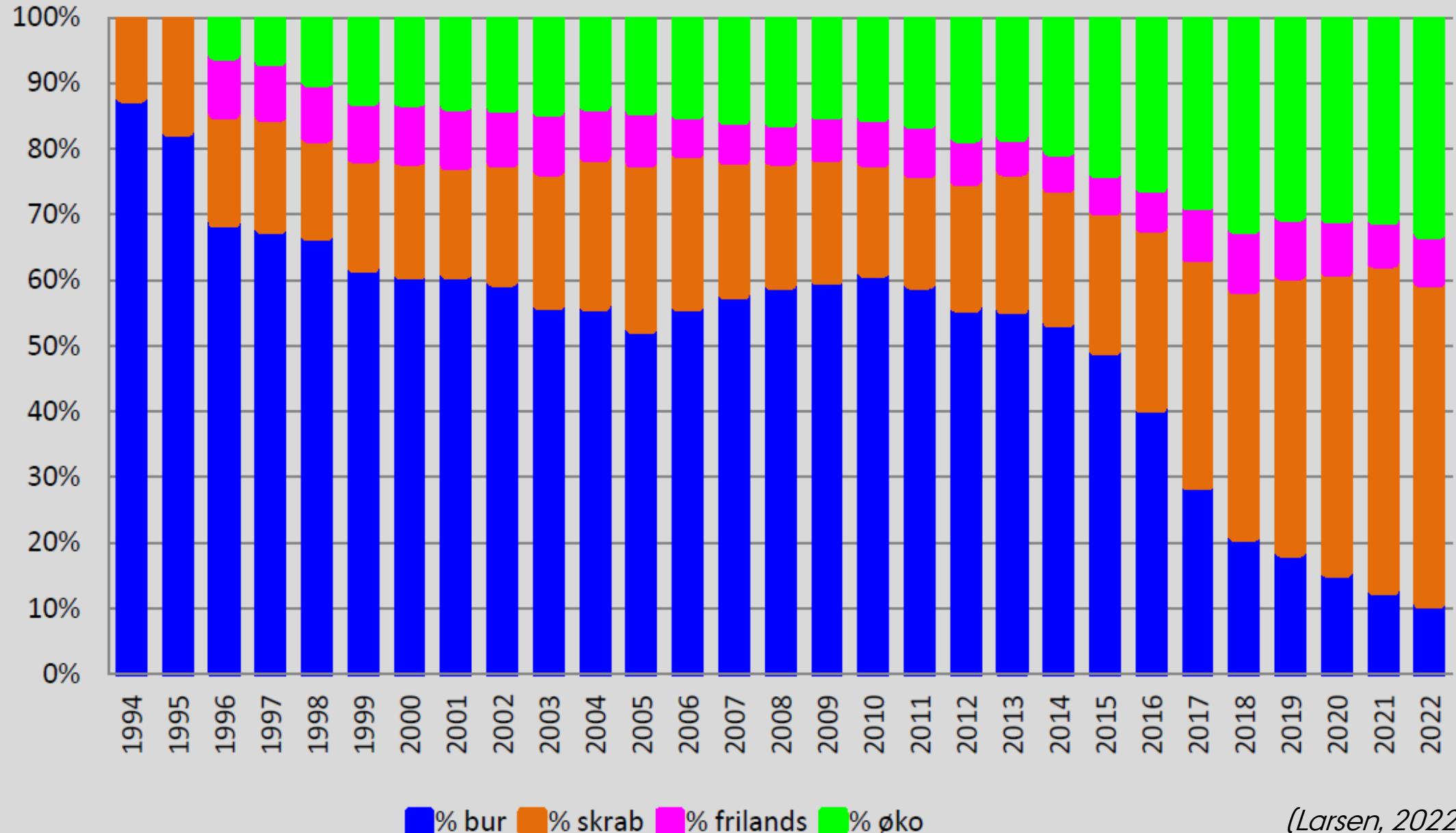
# DANSK ÆGPRODUKTION DE SIDSTE 25 ÅR: DETAILHANDLEN

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- I 1994 stoppede IRMA salg af skalæg fra bur.
- Kvickly fulgte efter i 2013.
- COOP meldte ud i 2017 at hele kæden ville være buræg-fri i 2020.
- I 2017 meldte Dansk Supermarked ud, at skalæg fra bur blev fjernet ultimo 2017 og buræg i andre fødevarer blev udfaset inden udgangen af 2019.



# Æg-Indvejninger i Danmark (procentvis fordeling)



# VELFÆRDSMÆSSIGE KONSEKVENSER VED OVERGANGEN FRA BUR TIL ALTERNATIVE SYSTEMER

# FOR PRODUCENTEN: STØRRE GLÆDE OG FAGLIG STOLTHED

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Kan du nævne de tre mest signifikante ændringer, som fugte med overgangen?

- "Det var spændende at lukke hønerne ud af burene".
- "Glæden ved at passe æglæggere er steget".
- "Landmændene er blevet mere fagligt stolte".

*(fra interviews med ægproducenter og  
konsulenter, Best Practice Hens, 2021)*



# FOR DYRENE: TIDS BUDGET

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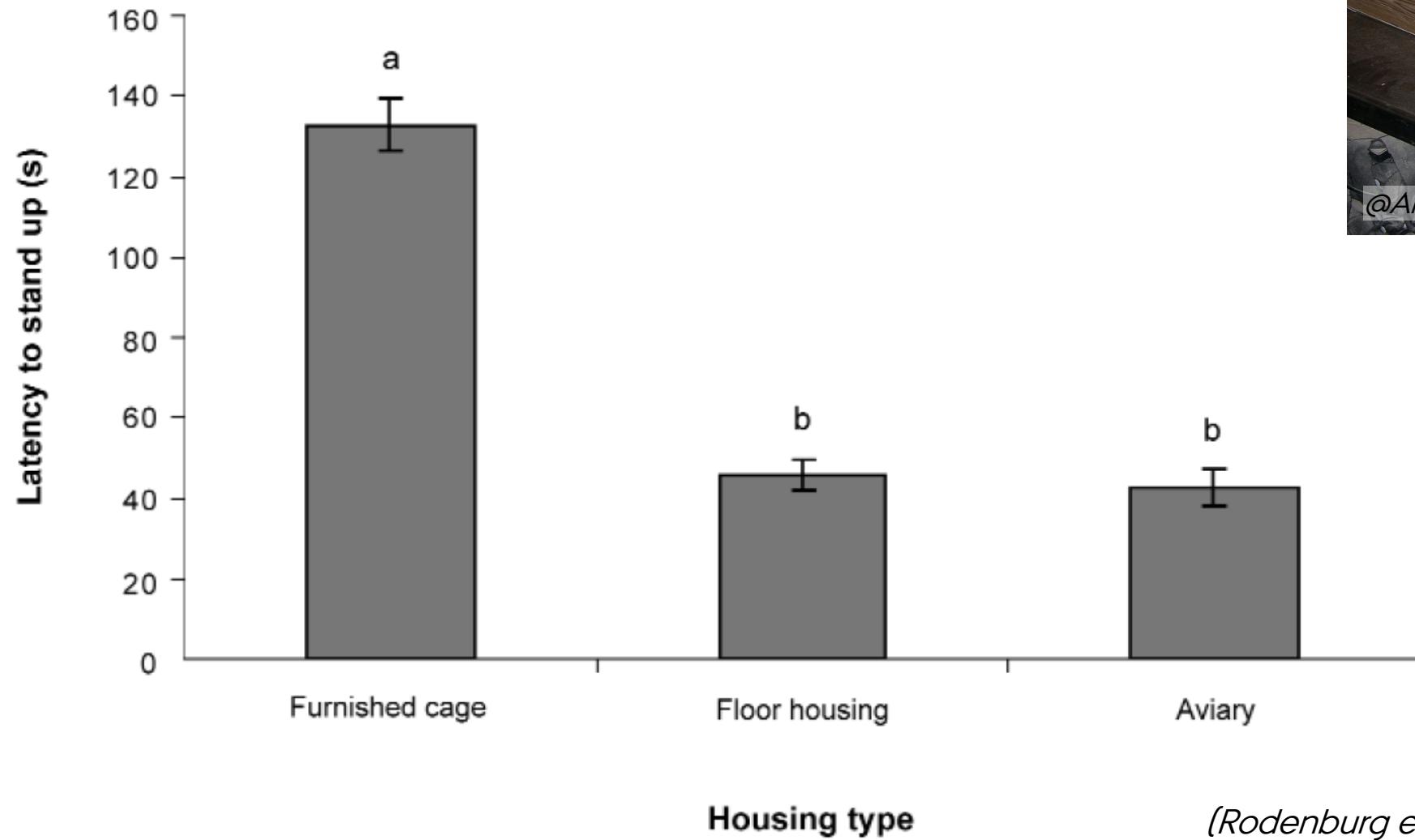
**Table 4 Percentages of foraging, preening, dust bathing, walking, standing and sitting in furnished cages (n = 6) and in floor housing and aviary systems (n = 7) and the level of significance for each comparison.**

	Furnished cage	Floor housing	Aviary	Level of significance
Foraging	5.4 ± 2.6 <sup>a</sup>	16.6 ± 6.0 <sup>b</sup>	16.6 ± 2.2 <sup>b</sup>	P < 0.05
Preening	7.0 ± 1.5	6.1 ± 1.0	6.2 ± 2.8	ns
Dust bathing	2.5 ± 0.9	3.3 ± 1.5	5.0 ± 1.2	ns
Walking	3.5 ± 1.3 <sup>a</sup>	15.9 ± 3.5 <sup>b</sup>	16.4 ± 1.5 <sup>b</sup>	P < 0.001
Standing	73.3 ± 3.1 <sup>a</sup>	57.9 ± 8.7 <sup>b</sup>	54.7 ± 2.0 <sup>b</sup>	P < 0.05
Sitting	7.7 ± 3.3 <sup>a</sup>	0.0 ± 0.0 <sup>b</sup>	0.7 ± 0.7 <sup>b</sup>	P < 0.05

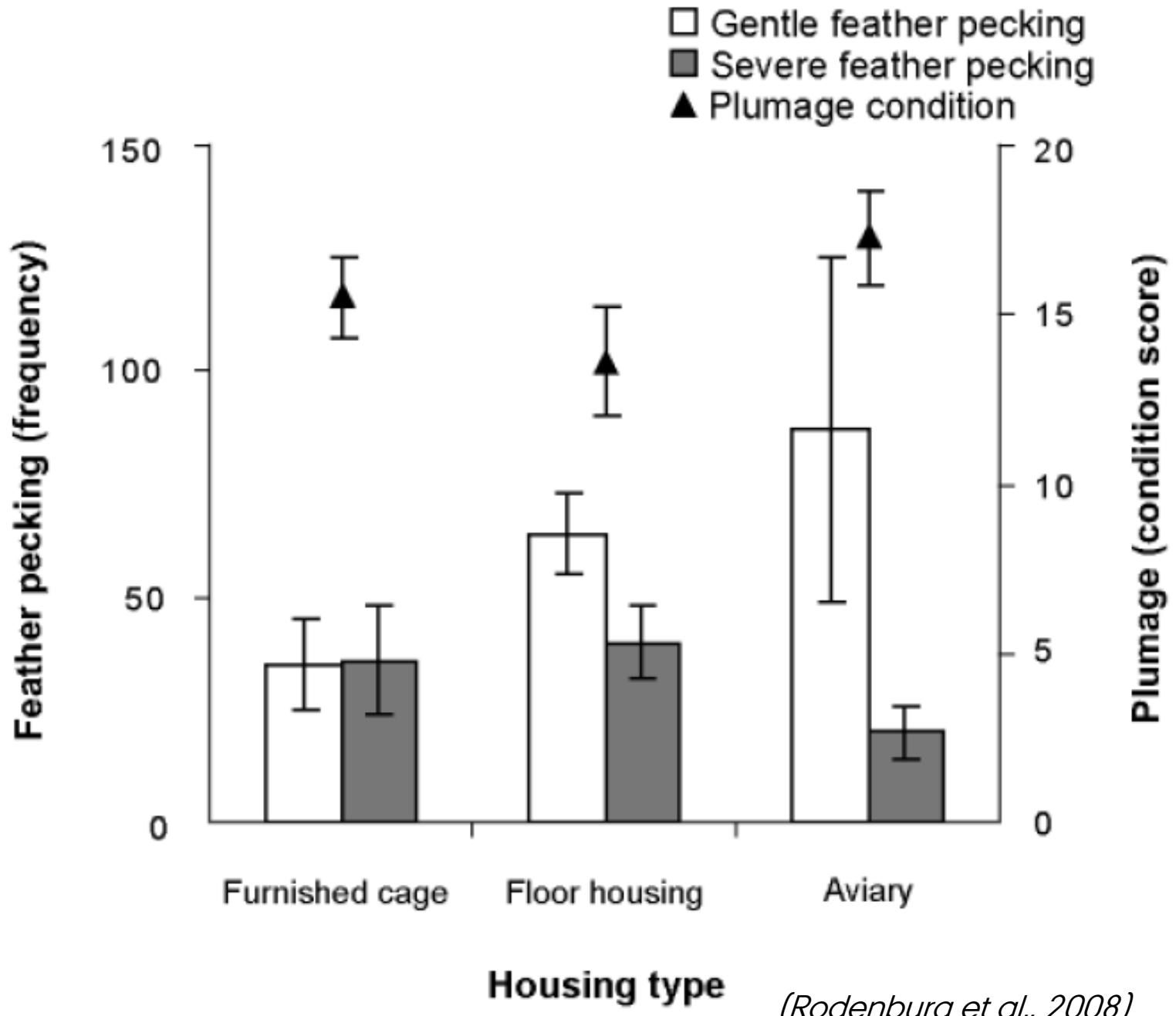
Superscripts differ significantly.

(Rodenburg et al., 2008)

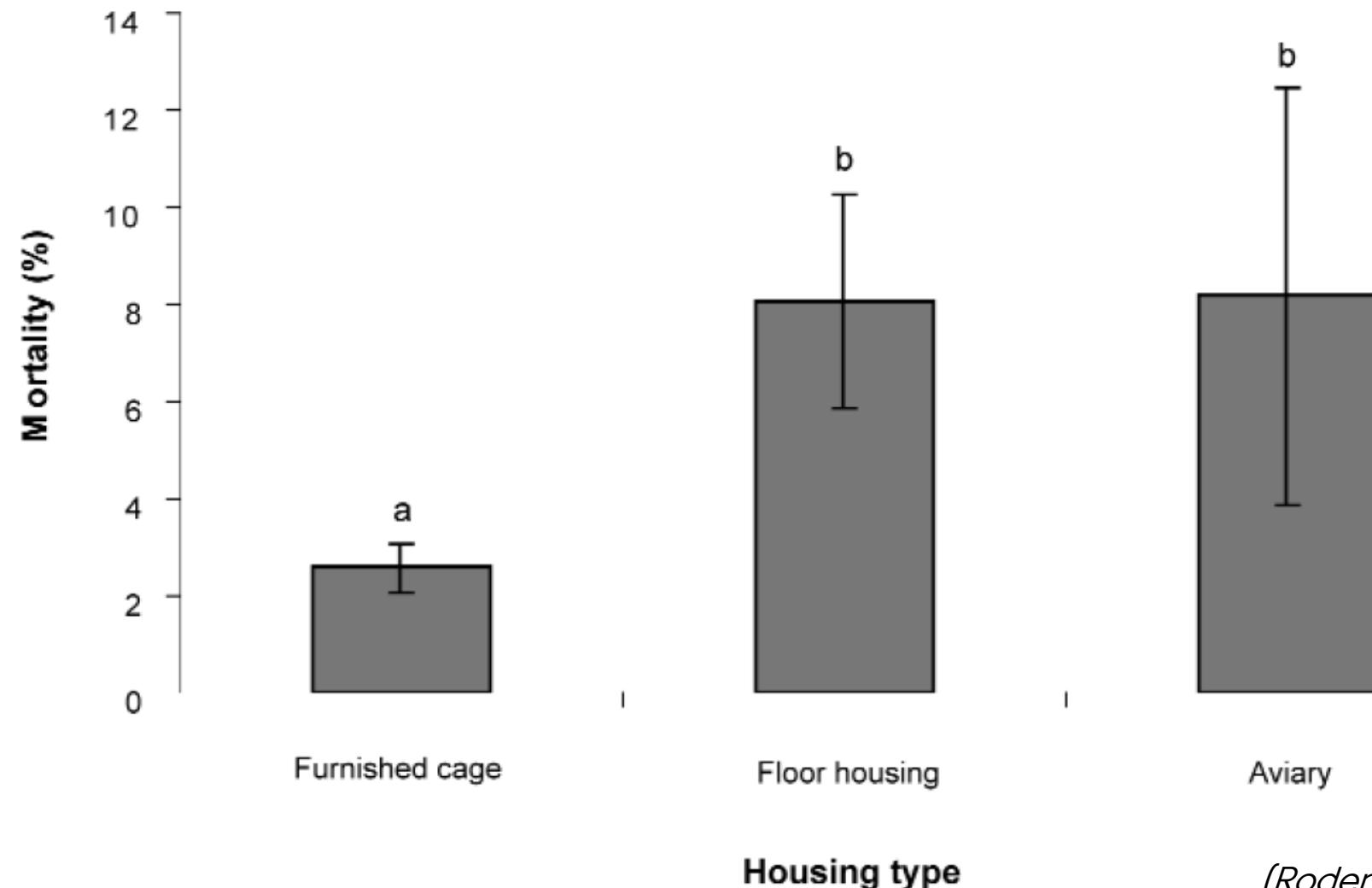
# FOR DYRENE: FRYGT



# FOR DYRENE: FJERPILNING OG SKADER PÅ FJERDRAGTEN



# FOR DYRENE: DØDELIGHED



# UDFORDRINGER OG LØSNINGER

# PROJEKTER SØSAT AF EU: EFSA OPINION OG BEST PRACTICE HENS

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## EFSA Scientific Opinion: Welfare of laying hens on farm (2020-2023)

- Formål: At give en uafhængig gennemgang af beskyttelsen af øeglæggere gennem de forskellige produktionsfaser.
- At beskrive de nuværende indhusningssystemer og procedurer i forhold til velfærdskonsekvenser, velfærdsindikatorer og risikofaktorer.
- At give anbefalinger til forebyggelse af velfærdskonsekvenser.

Særlig fokus på bur

### SCIENTIFIC OPINION

ADOPTED: 14 December 2022

doi: 10.2903/j.efsa.2023.7789



### Welfare of laying hens on farm

EFSA Panel on Animal Health and Animal Welfare (AHAW),  
Søren Saxmose Nielsen, Julio Alvarez, Dominique Joseph Bicout, Paolo Calistri,  
Elisabetta Canali, Julian Ashley Drewe, Bruno Garin-Bastují, Jose Luis Gonzales Rojas,  
Christian Gortázar Schmidt, Mette Herskin, Miguel Ángel Miranda Chueca, Barbara Padalino,  
Paolo Pasquali, Helen Clare Roberts, Hans Spoolder, Karl Stahl, Antonio Velarde, Arvo Viltrop,  
Christoph Windeler, Inmaculada Estevez, Maryse Guinebretière, Bas Rodenburg,  
Lars Schrader, Inga Tiemann, Thea Van Niekerk, Michele Ardizzone, Sean Ashe,  
Michaela Hempel, Olaf Mosbach-Schulz, Cristina Rojo Gimeno, Yves Van der Stede,  
Marika Vitali and Virginie Michel

### Abstract

This scientific opinion focuses on the welfare of laying hens, pullets and layer breeders on farm. The most relevant husbandry systems used in Europe are described. For each system, highly relevant welfare consequences were identified, as well as related animal-based measures (ABMs), and hazards leading to the welfare consequences. Moreover, measures to prevent or correct the hazards and/or mitigate the welfare consequences are recommended. The highly relevant welfare consequences based on severity, duration and frequency of occurrence are bone lesions, group stress, inability to avoid unwanted sexual behaviour, inability to perform comfort behaviour, inability to perform exploratory or foraging behaviour, isolation stress, predation stress, resting problems, restriction of movement, skin disorders and soft tissue lesions and integument damage. The welfare consequences of non-cage compared to cage systems for laying hens are described and minimum enclosure characteristics are described for laying hens, pullets and layer breeders. Beak trimming, which causes negative welfare consequences and is conducted to reduce the prevalence and severity of pecking, is described as well as the risks associated with rearing of non-beak-trimmed flocks. Alternatives to reduce sharpness of the beak without trimming are suggested. Finally, total mortality, plumage damage, wounds, keel bone fractures and carcass condemnations are the most promising ABMs for collection at slaughterhouses to monitor the level of laying hen welfare on farm. Main recommendations include housing all birds in non-cage systems with easily accessible, elevated platforms and provision of dry and friable litter and access to a covered veranda. It is further recommended to implement protocols to define welfare trait information to encourage progress in genetic selection, implement measures to prevent injurious pecking, rear pullets with dark brooders and reduce male aggression in layer breeders.

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**Keywords:** laying hens, on-farm welfare, husbandry systems, welfare consequences, animal-based measures, end the cage age, beak trimming

**Requestor:** European Commission

**Question number:** EFSA-Q-2020-00483

**Correspondence:** ahaw@efsa.europa.eu

# PROJEKTER SØSAT AF EU: EFSA OPINION OG BEST PRACTICE HENS

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## Best Practice Hens (2021-2023)

- Formål: at hjælpe opdrætter og producenter med omlægning fra bur->ikke-bur.
- Kortlægning af udfordringer og løsninger (Best Practices).
- Facilitere flow af viden fra lande langt i processen til lande, der ikke var så langt.
- Viderefomidling af viden på en letforståelig måde (seminarer og faktaark).



# UDFORDRING: MANAGEMENT

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”Før pakkede man æg,  
nu passer man høner.

- ÆGPRODUCENT (Best Practice Hens, 2021)  
*(om overgangen fra bur til alternative systemer)*

# LØSNING: VIDENSDELING

- Informationsmateriale, fx:
  - Best Practice Hens: 31 faktaark, letforståelige og oversat til forskellige sprog.
  - Tjeklister fra Poultry Signals: "look, think and act".
- Erfaringsudveksling med andre producenter.
- Træning/undervisning (særligt af nye medarbejdere):
  - "Føl-metoden"/sidemandsoplæring
  - Alle basale ting skal man vide inden man starter.
  - Systematik ("De første 7-9 hold gøres efter en plan").
- Tæt samarbejde med konsulenter/rådgivere/dyr læger.

Training for farmers and staff to handle and care for hens in cage-free housing systems

## Problem

The care for pullets and laying hens in cage-free housing systems places high demands on farmers and staff. Caretakers who have only experience with managing hens in cages are often not sufficiently trained for this new task. Therefore, problems may arise particularly during the transition from cages to cage-free systems.

## APPLICABILITY BOX

**Theme**  
Training of farmer and staff, animal husbandry



Figure 1: Veterinarian training the Caretakers (Source: Fair Poultry)

## Solution

Farmers and staff having experience with managing pullets and laying hens receive appropriate training on how to handle a cage-free system and a hen.

## Benefits

Competent handling of hens in cage-free systems improves animal health and welfare.

## Practical recommendation

Farmers need to ensure that caretakers receive appropriate training on how to handle laying hens in cage-free systems. This includes management procedures, welfare, including the handling of hens and maintaining by appropriate equipment, organic production, etc.

- How to comply with regulations
- How to recognize signs of stress
- How to quickly take action
- How to seek additional support

## On-farm application

### System approach

- Depending on the local situation, adequate trainings are offered by chambers of agriculture, integrations, breeding- and barn equipment companies, farmers' associations and others. Contact these local organizations for more information.

### Evaluation

- Farmers should keep records of their own training and staff training.
- Make sure everyone is up-to-date trained.

## About this practice abstract and Best Practice Hens

**Publishers:**  
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<https://wwwuu.nl>

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**Editors:** Mariana Y. R. Couto, Angela Morell Pérez, Mona F. Giersberg & T. Bas Rodenburg  
**Project coordinator:** Prof. T. Bas Rodenburg, Utrecht University (UU), Yalelaan 2, 3584 CM Utrecht, [t.b.rodenburg@uu.nl](mailto:t.b.rodenburg@uu.nl)

**Best Practice Hens:** To support egg production in non-cage systems and improve animal welfare, a consortium consisting of 7 partners will develop Best Practices for Non-cage Egg Production Systems as a European Commission DG SANTE pilot project. These Best Practices will provide practical support to egg producers to encourage them to convert from cage to non-cage systems, including organic production.

Project website: [www.bestpracticehens.eu/](http://www.bestpracticehens.eu/)  
Social media: Facebook and LinkedIn (@bestpracticehens) & Twitter (@BestHens) © 2022

(Best Practice Hens, 2021-2023)

Training for farmers and staff to handle and care for hens in cage-free housing systems. Utrecht University, Best Practice Hens.



Funded by  
the European Union

([www.bestpracticehens.eu](http://www.bestpracticehens.eu))

# UDFORDRING: BELÆGNINGSGRAD

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Sidst i opdrætsperioden



Æglægningsperioden



# LØSNING: FÆRRE DYR PER AREALENHED

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COVERED VERANDA

✓ Provide a **covered veranda** for all birds.

- Løsningen er ligetil: Reducer belægningsgraden
  - EFSA anbefaler **4 høner per m<sup>2</sup> og 15 hønnikere per m<sup>2</sup>.**
  - MEN: Dyrt – forbrugerne må betale merudgiften, men er de villige til det?
  - Lovgivning og/eller aftaler med detailkæder er nødvendigt.
- Alternativt: Overdækkede verandaer, der altid er åbne i dagtimerne, kan være en delvis løsning.



# UDFORDRING: FJERPILNING



# LØSNING: MILJØBERIGELSE M.M.

- Fjerpilning er multifaktoriel, så ikke alle tilfælde kan forebygges ved at ændre blot én faktor.
- EFSA anbefaler:



✓ Reduce the **stocking density** to give birds enough space to perform behaviours.



✓ Provide a **covered veranda** for all birds.



✓ Provide **dry and friable litter**, available at all times, supplemented by other enrichments



✓ House flocks with **easily accessible, elevated platforms and/or perches**.

# OPSUMMERING

# OPSUMMERING

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- Dansk øgproduktion har været igennem en betydelig udvikling de sidste 25 år hvad angår lovgivning, detailhandlen og produktionsformer.
- Udfasningen af bure til øglæggere er langt: Bur udgjorde 10% af produktionen i 2022.
- Erfaringer er gjort, som kan komme EU-kollegaer til gavn.
  - Best Practice Hens har lavet praktisk informationsmateriale til producenter der ønsker at omlægge til alternative systemer.
- Alternative systemer løser nogle velfærdsproblemer, men ikke alle.
  - EFSA har udpeget risikofaktorer for velfærdsproblemer og givet anbefalinger til løsninger.
  - Der er løsninger på mange problemer (men det har en pris)



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# SPØRGSMÅL?



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