Critical welfare issues and possible solutions in layers

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Housing systems

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Cage systems

Conventional cage

Enriched or furnished cage

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Cage systems

Enriched or furnished cage (drawings: Big Dutchman)

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Non-Cage (alternative) systems

1) Single tier systems

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Non-Cage (alternative) systems

2) Multi tier systems (aviaries) – row systems

Vencomatic Bolegg Terrace
Non-Cage (alternative) systems

2) Multi tier systems (aviaries) – row systems

Drawing: Fienhage

Fienhage Easy

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Non-Cage (alternative) systems

2) Multi tier systems (aviaries) – portal systems

Drawing: Big Dutchman

Big Dutchman Natura Grande

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Non-Cage (alternative) systems

3) Free-range (organic)
Non-cage system (single or multi tier) **plus** access to an open range
Beaktrimming, Feather-pecking, Injurious pecking (cannibalism)

Beak trimming

Not trimmed

Heavily trimmed

Trimmed

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Feather Pecking

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Injurious pecking (cannibalism)
Injurious pecking and feather pecking are probably related, but may occur independently. They are not related to aggressive behaviour.

The development of injurious pecking and feather pecking depends on a combination of different influencing factors (multi-factorial origin).

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Factors influencing injurious pecking and feather pecking

• Genetic predisposition
  • Feeding
  • Rearing conditions
• Husbandry conditions on the layer farm
  • Disease
Injurious pecking, feather pecking and beak-trimming in Austrian non-cage flocks 2000-2010

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Welfare Problems (cages)

Photo: EFSA/AHAW report 2005, annex

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Welfare Problems (health)
Liveability in Lohmann brown flocks (n=44, multi-tier)

- Quantile 25
- Median
- Quantile 75
- Lohmann Standard
Liveability (Comparison)

Age (in weeks)

Liveability (%)

- Standard
- Controls (n=36)
- IP Flocks (n=123)
- FP flocks (n=42)

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Free-range

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Human-Animal Relationship
Thank you!