

Elevated Platforms to Support the Walking Ability of Broilers

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Intro Good Practice

Optimising the birds' ability to move is essential to meet their basic needs. In recent years, the occurrence of lameness has been reduced through genetic selection. However, problems with the ability to walk can still be found on farms. There are various approaches in practice that can be used to prevent these problems, e.g. elevated platforms (Fig. 1). By offering elevated platforms, additional structures can be created in the environment, which, promotes exploratory behaviour through the use of the third dimension.

Young chickens are particularly active and, therefore, get more opportunities to discover their housing environment, which supports locomotion. Furthermore, compared to resting places in the litter area, the use of elevated resting places promotes natural behaviour such as perching and allows for undisturbed resting. The provision of elevated platforms can thus improve animal health and welfare.



Figure 1 Grid surface as an option for an elevated platform.

Background & challenges

- By using elevated levels, movement activity can be increased and the muscle-bone system strengthened and stabilized.
- A good balance of the muscle-bone system can have a positive effect on walking ability.
- The following points must be taken into account and not all platforms are suitable:
 - Material (plastic, metal)
 - Surface texture: perforated or closed
 - Space requirement
 - Height (considering genetics or animal control)
 - Access options (number of ramps, material, angle)
 - Position in the barn
 - General construction
- Take note of the mesh size when using perforated platforms, as large meshes could pose a risk of injury



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Practical example

- Details involved in offering elevated platforms (Fig. 2):
 - Height: 0.5 m
 - Width: 1 m
 - Length: 80 m
 - Material: closed surface (metal) scattered with spelt pellets
 - Ramps: every 4 meters along the length on one side
 - Frame on legs + suspension unit on wire ropes (can be pulled up to the ceiling for removal and cleaning)
 - Space: $\approx 8\%$ of the barn floor area
- Platforms can remain in the barn for approx. 5 years - then they may need replacing.
- It is possible to replace individual elements.

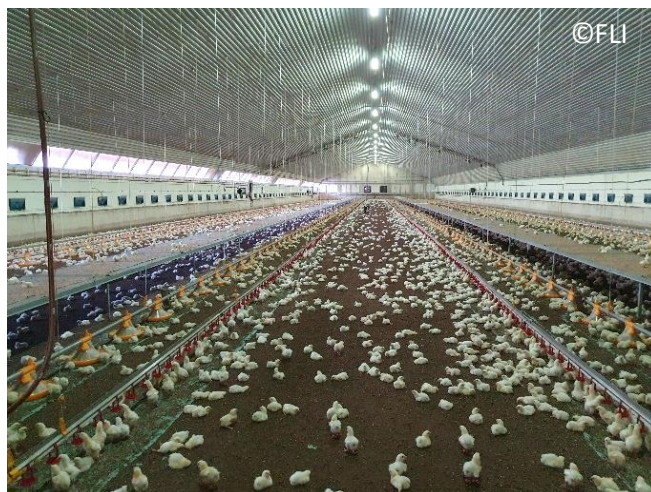


Figure 2 Provision of elevated platforms in 2 lanes over the entire length of a barn with approx. 36,000 broilers.

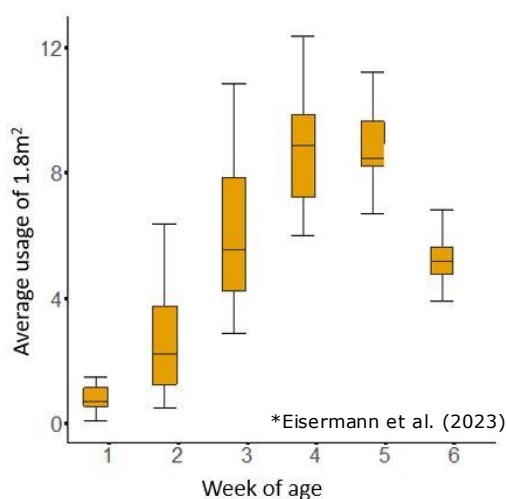


Figure 3 Average bird usage of a defined area (1.8m²) on an elevated platform over the entire fattening phase of fast-growing broiler chickens throughout the day.

Benefits

- Elevated platforms provide a darker area underneath the platform, which is also used as a resting area by the birds.
- In Germany, enclosed and littered elevated levels can also be counted as barn floor area up to 10% → Reduction of stocking density.
- Reducing stocking density leads to more space per bird, which increases freedom of movement in the litter area → Supporting the exercise of comfort behaviour, which can increase animal welfare.
- Improved foot pad health, as both the litter on the floor and the birds' feet get a chance to dry when the broilers are on the elevated platform.
- Enrichment of the housing environment that the birds use the entire fattening phase (Fig. 3).



Video on 'Elevated platforms in broilers' by Netzwerk Fokus Tierwohl:

<https://www.youtube.com/watch?v=uNtQ0JG2HHE>

You can find more videos on this topic here: <https://www.fokus-tierwohl.de/de/gefluegel/fachinformationen-masthuehner/erhoehte-ebenen>

* Eisermann, J., Malchow, J., Schrader, L. (2023). Erhöhte Ebenen bei Masthühnern – perforierte oder geschlossene Oberfläche? in: Aktuelle Arbeiten zur artgemäßen Tierhaltung 2023:KTBL-Schrift

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