BroilerNet Factsheet AW1-C2-2

Use of elevated platforms in broiler chicken barns

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Intro to Good Practice

Providing broiler farms with elevated platforms is a good practice to improve bird welfare. These platforms help the birds to perform their natural resting behaviour on elevated areas, but also help to mitigate the occurrence of leg injuries resulting from rapid growth due to genetic selection. The rapid and massive growth of their breast and thighs causes them to spend long periods of rest and their inactivity increases even more with age.

Broilers are highly motivated to use platforms from the first week of life. Therefore, these platforms should be easily accessible to the birds at all stages of their growth. Elevated platforms not only provide additional locomotion possibilities for broilers, but are also known to reduce the prevalence and severity of lameness, foot pad dermatitis and hock burns.

The left-hand chicken is a breed from 1957. The middle chicken is a breed from 1978. The right-hand one is a breed from 2005. They were all raised in the same manner and were photographed at the same age. Source: Zuidhof et al. (2014).

Background & challenges

- Due to genetic selection and diet, modern farmed meat chickens grow much faster than in the late 1950s (see picture on the left).
- However, this efficient growth has led to welfare problems in broilers, including leg disorders and bone deformations, causing leg weakness, impaired walking ability and extended periods spent sitting or lying, which can further cause footpad dermatitis and hock burns.
- Broiler chickens are kept in low-stimulus floor housing with only food, water and litter provided. Species-specific behavior such as perching cannot be performed in this way.
- Good practices aimed at improving fast-growing chickens' welfare are needed (e.g., provision of elevated platforms)

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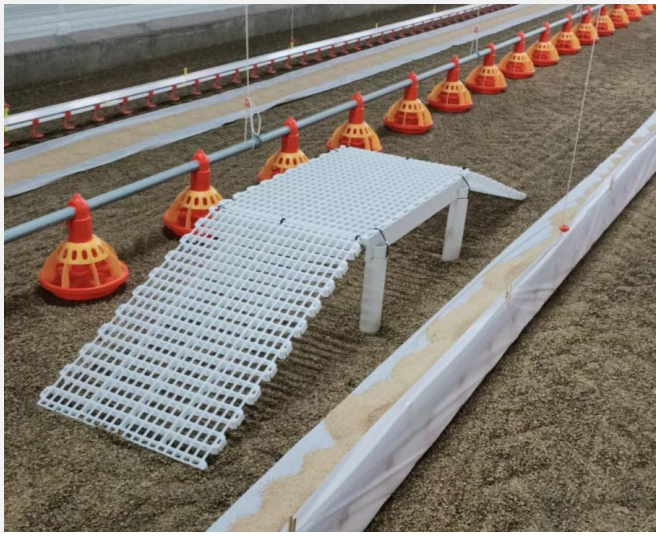
Additional information

- This platform (see picture on the right) is just one example of enrichment in broiler farms. Platforms can vary in the material used, length, weight, etc.
- The platforms are made of plastic material using old slats from laying hens farms.
- Their size is approximately 3 m × 0.70 m, and the ratio is 0.3m^2/1000 chickens.
- The platforms are incorporated into the farms before the arrival of the chicks, and it is immediately observed that they climb onto them.
- Platforms are more suitable for fast-growing broiler chickens than perches.



Elevated platform in a broiler barn

Benefits

Based on expert estimations and for a typical model farm, the BroilerNet cost-benefit analysis revealed that implementing elevated platforms increases the production costs by 0.85 %, whereas the average net gain appears to be 0.01 €/broiler.

Furthermore, scientific literature suggests that providing elevated platforms to broiler chickens have multiple benefits for welfare. For instance:

- Allows natural resting behaviour.
- Provide additional possibilities for locomotion.
- Reduce the prevalence and severity of:
  - Lameness,
  - Dyschondroplasia,
  - Footpad dermatitis,
  - Hock burns.

Usage of elevated platform of broiler chickens at 5 weeks of age

Literature of interest:

Mocz F *et al.* 2022. Positive effects of elevated platforms and straw bales on the welfare of fast-growing broiler chickens reared at two different stocking densities. *Animals* 12(5), 542.

Riber AB *et al.* 2018. Review of environmental enrichment for broiler chickens. *Poult Sci.,* 97(2):378–396.

Zuidhof MJ *et al.* 2014. Growth, efficiency, and yield of commercial broilers from 1957, 1978, and 2005. *Poult. Sci.,* 93:2970-2982.

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