

Foraging of broilers in outdoor areas

Problem

Access to outdoor areas is mandatory in organic poultry production. Stimulating organic broilers to use outdoor areas can be a challenge if there is only sparse vegetation without trees and bushes outside the houses.

Solution

Establishing attractive areas is necessary to increase the number of broilers going outside. A combination of smaller open areas with grass and herbs as well as areas with different bushes and trees, where the broilers can feel safe, will stimulate the chickens to use a larger part of the outdoor areas (see figure 1). Choice of genotypes can be important, as some genotypes are more active than others.

Benefits

Having access to an attractive outdoor area will stimulate the broilers to be more active and forage, which contributes to a more natural behaviour. Active broilers are expected to have fewer food pad lesions, which is important for the birds' welfare. In addition to higher activity, grass, herbs and/or crops in the outdoor area can provide the birds with nutrients.

Practical recommendation

- Select plant species that are robust and adjusted to the climate such as caraway (*Carum carvi*), red clover (*Trifolium pratense*), chicory (*Cichorium intybus*), plantain (*Plantago major (broadleaf)/Plantago lanceolata (lancetleaf)*), ryegrass (*Lolium perenne*), selfheal (*Prunella vulgaris*), birdsfoot trefoil (*Lotus corniculatus*), lucerne/alfalfa (*Medicago sativa*).



Figure 1: An protective environment encourages the birds to use the outside area. Photo: Sanna Steinfeldt, Aarhus University



Figure 2: Planting some trees in rows from the broiler houses will encourage the birds to leave the house and spread far into the outdoor areas. Photo: Sanna Steinfeldt, Aarhus University

Applicability box

Theme

Broilers, feeding and ration planning

Geographical coverage

Global

Application time

Outdoor areas can be used all year round; however, in a colder climate, winter periods can be difficult and winter gardens are recommended.

Required time

Planting outdoor areas takes time and new bushes and trees as well as grass/herbs have to be protected from birds for 1 to 2 years.

Period of impact

The planting period is critical. Newly planted trees or bushes can be protected by fencing.

Equipment

Equipment for planting trees and bushes, movable fences

Best in

Slow-growing trees, e.g. fruit trees, can be sheltered by fast-growing nurse trees, e.g. willow or poplar. Planting time will depend on climate and weather conditions.

- Fencing off part of the plants might be necessary until they have reached a size that makes them less vulnerable to birds eating leaves and smaller branches.
- Planting some trees in rows from the broiler houses will encourage the birds to leave the house and spread far into the outdoor areas (see figure 2).
- Combine trees and bushes with smaller open areas with grass/herbs or even crops that encourage foraging activity and other natural behaviour such as dustbathing, which is good for animal welfare.
- Choice of genotype is important. Very fast growing genotypes are not suitable for establishing a population with active animals.
- During cold winter periods, broilers are less motivated to go outside; a veranda system (winter garden), where silage can be provided, is recommended.

Further information

Further reading

- Steinfeldt, Sanna (2014) Chickens foraging in the woods. DCA's monthly external newsletter, June 2014, Available at <http://orgprints.org/28724/1/28724.pdf>
- Steinfeldt, Sanna Diversitet og integritet i økologisk slagtefjerkræproduktion- MultiChick, Aarhus Universitet. Available at http://icrofs.dk/fileadmin/icrofs/Nyheder_Pdf/MultiChick/MultiChick_folder_Final.pdf
- Almeida, G. et al. (2012) Feed intake and activity level of two broiler genotypes foraging different types of vegetation in the finishing period. Poultry Science 91(9):2105-13. DOI:10.3382/ps.2012-02187

Weblinks

- Check the Organic Farm Knowledge platform for more [practical recommendations on animal husbandry](#).

About this practice abstract and OK-Net EcoFeed

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