

Progres report

Management tools in organic egg production, focusing on animal welfare and food security

Name: **Lene Hegelund**
University: KVL
Department: IHH
Supervisors: Hans Ranvig, Jan Tind Sørensen
Timescale: 01102002-31122006
E-mail/phone: lene.hegelund[a]agrsci.dk/8999 1523
Master's degree: Cand. Scient.

Background

During the last couple of years there has been in-creasing public concern about intensive animal productions systems and their consequences for animal welfare, food security and environment. This has among other things led to an increase in organic food production, incl. organic egg production. However, recent figures point to severe problems with increased mortality, feather pecking and cannibalism in organic flocks. Some of these problems could correlate with problems managing large flocks of loose-housed hens. It is therefore necessary to develop advisory tools for organic egg producers, to secure animal health and welfare in the flocks.

The HACCP system is a quality assurance system, which is widely used in the industry, but also recently adapted to animal production. It aims to prevent problems by identifying and monitoring critical control points in the production and suggests proper actions in cases of deficiencies. It is a controle system well suited for authorization. Another approach to improve welfare on farms is via welfare assessment reports, which works as an input for discussing welfare with the farmes and simultaineously gives farmes the opportunity to compare themselves with other farmers and thereby points the attention to problematic areas regarding welfare in their own production.

Objective

The aim of the project is to develop management tools for organic egg producers using the welfare assessment system and HACCP-concept, thereby securing animal health and welfare at the farms and accounting for food security.

Progress - 2006

- The expert panel analysis is concluded (presented at ISVEE 2006)
- A paper regarding the expert panel analysis is in the process of being written
- A paper regarding behavioural fear tests is submitted (results presented at WAFL-05)
- A paper regarding status on welfare and productivity of organic egg producing farms in denmark is submitted and accepted by NJAS (results presentet at workshop in Nijmegen, the Netherlands, 2005)

Plans - 2007

To defend the thesis early 2007

Publications

Hegelund, L.; Sørensen, J.T.; Kjær, J. and Kristensen, I.S. (2005) [Use of the range area i commercial egg production systems: effect of climatic factors, flock size, age and artificial cover](#). In *British Poultry Science*, February, Volume 46, No 1, page pp. 1-8.

Hegelund, L.; Sørensen, J.T. and Johansen, N.F. (2003) [Developing a welfare assessment system for use in commercial organic pig production](#). *Animal Welfare*(12):pp. 649-653.

Hegelund, L. (2006) [Fjerpilning hos økologiske høns](#). In *Økologisk Jordbrug*, March, No 357, page 6.

Hegelund, L.; Hermansen, J.E.; Sørensen, J.T. and Horsted, K. (2006) [Økologisk ægproduktion: Produktion, sundhed, ernæring og næringsstofhusholdning](#). DJF Report no. 71, Department of Animal Health, Welfare and Nutrition, DIAS.

Hermansen, J.E.; Horsted, K.; Hegelund, L.; Frantzen, C. and Johansen, N.F. (2005) [Forbedrede udearealer i økologisk ægproduktion](#). DJF Rapport Husdyrbrug no. 67, Department of animal health, welfare and nutrition, DIAS.*

Hegelund, L.; Sørensen, J.T.; Horsted, K. and Hermansen, J.E. (2004) [Velfærdsvurderingsrapporter, økologisk ægproduktion. Rapport fra afdelingen for Husdyrsundhed og Velfærd](#). Report, DIAS.

Hegelund, L.; Sørensen, J.T.; Horsted, K. and Hermansen, J.E. (2002) [Velfærdsvurderingsrapporter fra økologisk ægproduktion. Rapport fra afdelingen for Husdyrsundhed og Velfærd, Danmarks Jordbrugsforskning](#)

Andersen, D.B.; Hegelund, L. and Sørensen, J.T. (2001) [Faktorer med mulig indflydelse på hønens benyttelse af udearealet i økologisk ægproduktion](#). Report, DIAS.