# Categories of housing systems for laying hens

## Th.G.C.M. Fiks-van Niekerk & H.A. Elson

#### Introduction

Council Directive 1999/74/EC laying down minimum standards for housing of laying hens, defines three major categories of housing system: alternative systems, unenriched cage systems and enriched cage systems. In time unenriched cages are due to be phased out, leaving only two categories of housing system. Both categories however comprise a wide variety of different models, making it hard to draw conclusions on bird welfare in these systems. A better indication of welfare in relation to housing system can be made by using sub-categories of housing system.

# What is a cage?

Cage systems = operated from outside Non-cage systems = operated from inside

# **Furnished cages**

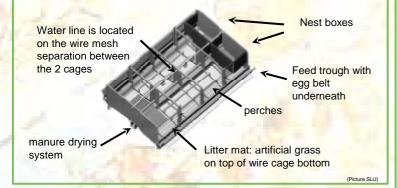
Large group cages medium group cages small group cages

- (= enriched cages)

  → up to 60 or more hens
- → 15 30 hens
- → up to 15 hens
- nest boxes
- perches
- litter area



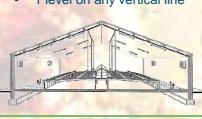




# Single tiered non-cage system

(= alternative system)

1 level on any vertical line



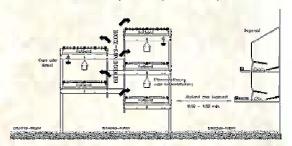


# Multi tiered non-cage system

(= alternative system)

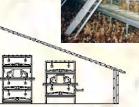
### Aviaries with non-integrated nest boxes

 several levels of perforated floors with manure belts under them and separate (stacks of) nest boxes



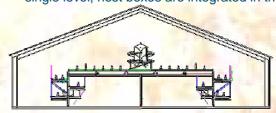
### **Aviaries with integrated nest boxes**

 nest boxes are integrated in the same tier as the perforated floors and feeders



### **Portal systems**

elevated perforated floors, the top tier of which is a single level; nest boxes are integrated in the system



**Animal Sciences Group** 

P.O.Box 65, 8200 AB Lelystad, The Netherlands
Phone +31 (0)320 - 238 238 - Fax +31 (0)320 - 238 050

E-mail: thea.fiks@wur.nl - www.asg.wur.nl/ar