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Number 84

September 1989



# Farm Animal Welfare, January 1979-April 1989





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# Farm Animal Welfare, January 1979-April 1989

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## INTRODUCTION

The citations in this bibliography are selected from works by U.S. and foreign authors on all aspects of farm animal welfare as it relates to behavior and a wide variety of environmental variables. All citations are derived from the database AGRICOLA (AGRICultural OnLine Access), a database compiled by the National Agricultural Library (NAL) and its cooperators, and are a part of the NAL collection.

Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is provided in the publication.

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ANBEA. Duncan, I.J.H. Kite, V.G. London : Bailliere Tindall. Domestic hens, Gallus gallus domesticus, prefer to lay in nests containing loose material which can be both moulded by their body and feet movements and manipulated with their beaks during nest building. This study attempted to define which of these two functions the hen regards as more important. When given a choice, hens opted for nests that could be moulded by body and feet movements but could not be manipulated with the beak rather than nests that could not be moulded but could be manipulated. When the importance of loose material was assessed independently of whether the nest could be moulded or not, hens did not seem to regard its presence as essential. These findings suggest that it is more important for hens to have a nesting site with a substrate that can be moulded with the body and feet than one that can be manipulated with the beak. The study then attempted to elucidate whether it is the performance of nest-building motor patterns or the attainment of the final moulded nest that hens find rewarding. When given a choice between pre-moulded nests and mouldable nests, hens opted for the premoulded ones. The frequencies of nest-building activities performed in both nest types, however, were no different. These findings suggest that the hen

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**The notion of ethological 'need', models of motivation and animal welfare.**

ANBEA. Hughes, B.O. Duncan, I.J.H. London : Bailliere Tindall. The increasingly widespread use of the term ethological 'need', implying that the welfare of animals in intensive husbandry systems will suffer if they are unable to express a normal range of behaviour patterns, has been criticized on the grounds that the term has not been clearly defined nor does it rest on a solid scientific foundation. In this critical review, evidence is presented

which is consistent with the idea that there are cases in which the performance of behaviour itself does not motivationally significant consequences which are not necessarily related to functional requirements. For example, hens go through nest-building sequences during pre-laying behaviour, even though the nest they created previously is still available. This kind of finding is difficult to explain without involving the concept of ethological 'need'. Existing models of motivation are shown to be inadequate in explaining much of the behaviour seen in barren or impoverished environments, or when the animals are highly motivated in situations where consummatory behaviour is difficult to carry out. A modified model which can account for the occurrence of these stereotyped, abnormal and repetitive behaviour patterns is presented. The problems raised by equating the term 'need' with 'necessity' are discussed, particularly in the context of intensive environments where animals are faced with the task of occupying long periods of time with a limited range of behaviour patterns; the authors agree with Dawkins that one solution is its replacement by the concept of 'elasticity', but argue that the notion of 'necessity' may need to be broadened. Animal behaviour. Nov/Dec 1988. v. 36 (6). p. 1696-1707. Includes references. (NAL Call No.: DNAL 410 B77).

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**Observations on the effects of stocking rate on the performance of gilts and boars to bacon weight (Housing, temperature).**  
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