Needs, Freedoms and the Assessment of Welfare

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The ideas expressed at this Workshop have had a long gestation period during which there have been some advances in our knowledge about animal welfare and an increasing awareness in our concepts of motivation. Nevertheless, the issues aired then will continue to be discussed for many years to come. Legislation which refers to behavioural needs must still be interpreted, and scientific evidence about animal welfare must be taken into account when new legislation is being prepared. This is not a summary of the views expressed at the symposium, but is a personal view of some of the issues.

In this discussion, the welfare of an animal is defined as its state with regard to its attempts to cope with its environment (Broom, 1986). Hence welfare can be measured and can vary from poor to good, as stated by Baxter.

Animals have a repertoire of behaviour which fulfils a variety of functions, as explained by Fraser, and one possible cause for concern about an animal's condition concerns situations where some of these behaviours cannot be shown. Most people would agree that a system is poor if an animal cannot stand or groom itself, but it is difficult to decide on the necessity for courtship displays in the absence of a potential mate, or for specialised escape responses of a kind occurring only in the presence of a rare predator. As Baxter points out, the occurrence of a behaviour in the wild does not mean that the ability to perform this behaviour is essential for good welfare, although this may be seen to be the case when the effects of being prevented from showing the activity are assessed precisely. A confusion, when the range of possible behaviours has been considered, is the extent of influence on the development of a behaviour of genetic or environmental factors. In my view, the origins of a behaviour or structure in an individual are irrelevant to questions of welfare, for it is the importance of that behaviour or structure at the time of welfare assessment which must be considered.

A refinement of the behavioural repertoire approach, which also takes into account other physiological functioning of the animal, is the concept of fundamental freedoms, as expounded in the Brambell Report in 1966. The five freedoms quoted by Webster et al. (1986) as being necessary to avoid welfare problems are freedom from hunger and malnutrition, freedom from thermal or physical distress, freedom from disease and injury, freedom to express most
normal behaviour, and freedom from fear. These concepts are also incorpo-
rated in the 1983 editions of the welfare codes for certain farm animals which
were produced by the Ministry of Agriculture in the U.K. These categories
differ in breadth, and are chosen because they can be applied to various species.
As a general guide they are useful, but data from studies of the effects of ap-
parent inadequacies in freedom are necessary before precise advice can be given
on the conditions which lead to good or poor welfare.

The idea of "freedoms" for animals carries an implication of moral obliga-
tion towards that animal. The term "need", whilst referring to the same char-
acteristics of life, implies the expression of a mechanism which exists within
the animal, irrespective of its interactions with man or any other species.

Two different approaches to questions about welfare are apparent when the
term "need" is used. A need is regarded by some people as something which is
satisfied by what an animal does when it has free choice, and by others as
something which, if not satisfied, leads to a reduction in individual fitness or
to suffering, i.e. to poor welfare. Studies of what animals choose to do provide
useful ideas about what housing conditions to try out in an attempt to improve
welfare. Such studies are much more meaningful if the importance of any par-
ticular choice to the animal can be assessed. In some circumstances the pos-
sibility that the animal will not choose what is best for it is a problem. Once
preference tests have indicated what system to design, or how to improve an
existing system, the new system can be compared with the old and indicators
of poor welfare measured.

The other concept of needs has been discussed extensively in the Workshop.
The need is present when the animal has a certain range of motivational states
and these are affected especially by the levels of certain causal factors which
may be of external or internal origin (Broom, 1981; Toates, 1986). Various
methods can be used to investigate motivational state, and such work is clearly
of great importance in obtaining evidence relevant to our understanding of
welfare. Studies of this kind have been carried out by Duncan, Hughes, Wiek-
kema, Dawkins and others. The method of recognising that something is wrong
with the conditions in which an animal lives is the measurement of some ab-
normality of production, or physiology, or health, or behaviour, or several of
these. The need is defined retrospectively as pertaining to that aspect of the
environment whose lack led to the problem. Although the recognition of poor
welfare is the scientific method which leads to the most convincing pronounce-
ments on welfare issues at present, it would also be valuable to be able to iden-
tify good welfare effectively. People often ask if animals are happy, but it is
difficult to answer this question. Studies of choices and of pleasure centres in
the brain may be useful, but we have much to discover in this area. The as-
seessment of welfare is discussed in volumes edited by Smidt (1983) and Wiek-
kema and van Adrichem (1987).
REFERENCES