A Usable Definition of Animal Welfare

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Abstract. A definition of the welfare of an animal which can be used in scientific studies, legislation and other practical work is: the welfare of an individual is its state as regards its attempts to cope with its environment. A variety of measurements can be used to pinpoint the individual’s state on a continuum from very good to very poor welfare. Welfare can be poor because the individual is having difficulty in coping or because of failure to cope. Poor welfare includes stress, which is defined as an environmental effect on an individual which overtaxes its control systems and thus reduces its fitness or appears likely to do so. It also includes situations in which behavioural, physiological or immunological measures indicate that coping is difficult even if biological fitness is not reduced. Suffering is an important aspect of poor welfare. While much of poor welfare involves suffering, examples are given of situations in which welfare is poor in the absence of suffering. If suffering occurs in addition to injury or immunosuppression, then welfare is even poorer. Scientific studies of welfare should include direct measures of poor welfare as well as measures of the strength of preferences and aversions. Measurements should be carried out in an objective way and moral judgements about what is tolerable should be made afterwards.

Keywords: animal welfare, stress, suffering, pain, adrenal function, immunosuppression, abnormal behaviour, animal production.

Introduction

A definition of animal welfare is needed for scientific study, for legislation and for practical use. This definition must refer to a characteristic of an individual which is measurable. The measurement should be separate from any judgement which is made concerning what is morally acceptable. Almost all possible measurements will involve variation over a range rather than something which exists or does not exist. Such variation is assumed in normal usage of the term welfare and in its origin: how
THE WHOLE IS CONCEIVED IN RELATION TO MEANING FROM THE POOR...
Weathers and Suffering

Recurrent measures of weather

Years

1960
1970
1980

Figure 1. An index of the annual mortality rate of English dairy cows of Holstein breed.

Note: All years of the annual mortality rate of English dairy cows were obtained from the literature.

Figure 2. The possible influence of the weather condition on the retention rate of some cattle.
Assessing Good Welfare

The assessment of good welfare is crucial in ensuring the ethical treatment of animals. Welfare is a complex concept that encompasses various aspects of an animal's well-being, including physical, mental, and social health. It is essential to consider the animal's environmental conditions, social interactions, and overall well-being. The following are some of the key indicators of good welfare in animals:

1. Physical Health: The animal should have access to nutritious food and clean water, and be free from physical injuries or illnesses.
2. Mental Health: The animal should be able to express natural behaviors and be free from stress or anxiety.
3. Social Interaction: The animal should have opportunities to interact with other animals of its species, if that is natural for them.
4. Environmental Conditions: The animal should have a comfortable and safe environment, free from overcrowding or harsh conditions.

By continuous monitoring and evaluation, measures can be taken to improve the welfare conditions of animals, ensuring they live in a manner that is consistent with their natural needs and capacities.

References

Acknowledgments

Possibilities mentioned about water and its effects on ecosystems in different environments are crucial to understanding the broader implications of water usage and preservation. Further research in this area is needed to fully grasp the complexities involved.

Using the Concepts of Water

Understanding water levels can lead to better management of aquatic resources, ensuring sustainable use. It is important to consider the implications of water conservation strategies and their impact on ecosystems.