



## WHAT IS ANIMAL WELFARE?

X. MANTECA, E. MAINAU, D. TEMPLE

The concept of animal welfare includes three elements: The animal's normal biological functioning (which, among other things, means ensuring that the animal is healthy and well-nourished), its emotional state (including the absence of negative emotions, such as pain and chronic fear), and its ability to express certain normal behaviours (Fraser et al., 1997). This notwithstanding, not all behaviours are equally important in terms of animal welfare. From a practical standpoint, the clearest indication that a given behaviour is important is whether the animal shows a stress response or exhibits abnormal behaviour when prevented from performing it. A sow's prepartum nesting behaviour or the foraging behaviour of pigs are examples of such important behaviours. These three principles do not necessarily contradict one another; indeed, they are often complementary (Mendl, 2001).

### ANIMAL WELFARE USES A MULTIDIMENSIONAL APPROACH

All three of the aforementioned principles are included in multiple 'official' definitions of animal welfare. Thus, for example, the World Organisation for Animal Health considers an animal to be in a good state of welfare if it is healthy, comfortable, well-nourished and able to express innate behaviour and not suffering from pain, fear or distress (WOAH, 2008).

In accordance with the 'Five Freedoms' principle, an animal's welfare is ensured when the following five conditions are met (FAWC, 1992; 1993):

#### THE FIVE FREEDOMS

- The animal is free from hunger, thirst and malnutrition, because it has ready access to drinking water and a suitable diet.
- The animal is free from physical and thermal discomfort, because it has access to shelter from the elements and a comfortable resting area.
- The animal is free from pain, injury and disease, thanks to suitable prevention and/or rapid diagnosis and treatment.
- The animal is able to express most of its normal behavioural patterns, because it has sufficient space, proper facilities and the company of other animals of its kind.
- The animal does not experience fear or distress, because the conditions needed to prevent mental suffering have been ensured.

The 'Five Freedoms' principle offers a very useful and practical approach to the study of welfare and, especially, to its assessment on livestock farms and during the transport and slaughter of farm animals. It has moreover served as the basis for many animal protection laws in the European Union and other parts of the world. However, despite its clear usefulness, it has two shortcomings. First, it is sometimes too generic. Second, there is a certain overlap between some of the five freedoms.

To remedy these problems, slightly different approaches based on the same concepts have been proposed. Of particular note is the Welfare Quality® project's proposal for assessing animal welfare. The Welfare Quality® project was a five year European Union research project launched in May 2004 and involving more than 40 scientific institutions from 15 different countries. One of its objectives was to develop European standards for animal welfare assessment. Unlike other protocols, which mainly use environment-based parameters, the protocols of the Welfare Quality® project are primarily founded on animal-based measures.

### ASSESSMENT OF OVERALL ANIMAL WELFARE

According to Welfare Quality® protocols, animal welfare assessments must take four questions into account:

- Are the animals properly fed?
- Are the animals properly housed?
- Are the animals healthy?
- Does the behaviour of the animals reflect optimised emotional states?



Housing pigs on straw bedding allows them to express their natural foraging behaviour.

This last question may be the most innovative and controversial aspect. Simply put, it refers to the fact that animals should not experience fear, pain, frustration or any other negative emotional state, at least in a chronic or very intense way.

These four questions give rise to a set of 12 criteria on which any welfare assessment system should be based. These criteria, grouped in accordance with the four questions, are as follows:

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## PRINCIPLES AND CRITERIA FROM THE WELFARE QUALITY® PROTOCOLS:

### GOOD FEEDING

- Absence of prolonged hunger.
- Absence of prolonged thirst.

### GOOD HOUSING

- Comfort around resting.
- Thermal comfort.
- Ease of movement.

### GOOD HEALTH

- Absence of injuries.
- Absence of disease.
- Absence of pain induced by management procedures, such as castration, tail docking, dehorning, etc.

### APPROPRIATE BEHAVIOUR

- Expression of appropriate social behaviour, such that there is a balance between negative aspects (e.g., aggressiveness) and positive ones.
- Appropriate expression of other behaviours, such that there is a proper balance between negative aspects (e.g., stereotyped behaviour) and positive ones.
- Good human-animal relationships, such that the animals do not fear humans.
- Positive emotional state.

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***“The term welfare refers to the state of an individual in relation to its environment, and this can be measured.”***

*Donald Broom, animal welfare scientist*

## SUMMARY

In summary, the following ideas should be kept in mind:

- Animal suffering is inarguably a key issue in the debate on animal welfare. Therefore, situations that cause suffering –such as pain or fear– are welfare problems.
- An animal’s inability to adapt to an environment causes suffering. Consequently, examining parameters that make it possible to quantify how well an animal has adapted provides useful information about its welfare.
- Certain ‘natural’ behaviours are intrinsically important. Animals must thus be kept in environments where they can express these behaviours.
- Welfare is not synonymous with health. While good health is critical to welfare, the concept of welfare is much broader and encompasses other aspects as well.

## REFERENCES

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Animal-based indicators allow us to assess animal welfare in both intensive and extensive production systems.



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